**Internet Advertising:
The Internet as a
Commercial Mass Medium**

by

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ABSTRACT

This thesis attempts to intersect the trajectory of what is described as the ongoing transformation of the Internet from a stateless social medium into a commercial state space. Research incorporated into the discussion includes an examination of the origins of the Internet, theoretical perspectives on the development of an audience commodity for the medium, issues relating to the reception of advertising and divisions between advertising stakeholders, and implications of advertising on user privacy and the future of the Internet.

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Chapter One:

Introduction: Advertising on the Internet

Advertising on the Internet is an application which is still in its developmental stages. While there are many eager participants and while the Internet provides enormous potential as an advertising channel, it has to this point provided an inhospitable environment for growth. Advertising has nevertheless become a significant presence on the medium and is certain to play a large part in the continuing evolution of the Internet as a whole.

The Internet has the potential to take all the guesswork out of selling to a mass audience. Unlike television, magazines or billboards, the Internet provides the means to precisely measure, monitor, record, predict and even stimulate consumer response to commercial messages delivered over the medium. Along with electronic commerce, Internet advertising is intended to serve as a portal to the world of goods and services available both online and off.

Advertisers and publishers have discovered that these expectations are not consistent with the behaviour of Internet users. Even the most optimistic measurements put consumer response to banner ads, the most common form of online advertising, at no more than 0.5% (often much less—see Figure 4.1, p.99). Clearly, there is something wrong. When the audience is given the ability to select among the commercial options available to them as consumers—or, as others might suggest, to cast their vote in the

information marketplace—they choose nothing. While the Internet was supposed to overcome the limits of conventional advertising by making the audience more knowable, it has in fact made the audience less knowable than ever.

This study examines the implications of this disjuncture taking a critical political economic perspective. As an introduction to the questions arising from advertising on the Internet, three questions serve to frame the argument: What is the Internet? What is advertising? And what is Internet advertising?

What is the Internet?

In day-to-day discussions in the media and in the public domain, the Internet is commonly described as a thing—something physical, like a patchwork of cables or the symbols and images it transmits to people's computer screens. As a thing, we often think of the Internet as having its own causality—the Internet creates effects. These could be commercial effects, social effects, industrial and technological effects and so on. But in fact, the Internet is not so much a thing as it is an activity. E-mail, the Word Wide Web, electronic commerce—these are ways in which the Internet is used. They are ways in which the Internet has been given shape. The Internet is not a cause of activity, it is an effect of activities provided by users and the various uses they have brought to life on the medium.

In purely technical terms, the Internet is not a computer network,¹ it is a method of networking which uses a variety of protocols—chiefly the TCP/IP protocol suite—and which is characterized by its distributed and open standards architecture. This makes it different from other communication networks—cable and telecommunications for instance—within which signal transmission is ordered hierarchically along a chain from network-center to end-user. The Internet-system was developed with the intent of circumventing this hierarchical and linear arrangement. This standard only really became a universal standard for inter-networking in the early 1990s after decades of negotiation between technologists, governments, industries and international standards bodies. Regarded in this way, the Internet is the effect of a design philosophy.

As this open-networking system developed, it became apparent that its value was not in connecting users to central computers, but in allowing users to work collaboratively with one another. It magnified social input by limiting constraints on communication. It was a means of producing consistently unanticipated but widely beneficial outputs. The applications designed on the network to maximize its collaborative value are now what we most often think of as the Internet. The most popular of these, the World Wide Web (WWW or the Web) is only one of many. They exhibit the traits of the network itself in that they impose very few non-technical limitations over how information is organized. As a result, the Internet has evolved into

¹The terms “network” and “Internet” are often used interchangeably here and throughout for the sake of convenience. Many different communication networks participate in the Internet. Where a distinction between the Internet and a particular network element is required, it is provided in the text.

its current form due to the maximum social input in its inherently open design.

The purposive channeling of network-user inputs was inherent in the development of its design, either as a tool for research, “survivable” communications for military command and control, or for the commercial purpose of lowering information transaction costs and providing an alternate means of consumer distribution. Applications of the latter variety are nearly as old as electronic computing itself. As a result, it would be incorrect to suggest that commercial participation in the Internet is a recent or unnatural development. For the same reason, it is equally incorrect to regard the Internet as a revolutionary development for commercial enterprise.

The Internet’s demonstrated capacity to maximize user-outputs has led to a variety of commercial approaches to harnessing these outputs. The approaches have been many: content provision on an advertising or subscription subsidy basis; distributed software application service provision with pay-per-use licencing agreements; electronic business to business (B2B) and business to consumer (B2C) product sales; credit and financial transaction brokering; differential service agreements at the network level to charge per bit transmitted according to the type of bit; and the list goes on. Commercial imperatives in the wake of network privatization have come to supplant all others since the widespread popularization of the Internet.

The hype-based predictions of the last decade, however, have for the most part given way in the wake of the high-tech crash. But this has also made it clearer than ever that the primary value of the Internet is its users. At present, the only truly pertinent issues raised by the Internet from a commercial standpoint concern how user-value is best

to be tapped and who will exert the most influence in the process. Advertising is only one of the many approaches: one with its own structural models and attendant stakeholders.

What is advertising?

As with the Internet, there are many ways in which one could regard the practice of advertising. Commonly, we tend to think of it as an activity—as an appeal to consumers by producers of commercial goods and services. But to look at its function within the mass media as a whole, it is the most common subsidy mechanism for content production. It is also a relationship between media, advertisers and the audience. In this sense, advertising is a structure or a thing. Something that fixes and defines audiences for the sake of media operations.

Aside from either larger social functions which the media may arguably fulfill or audience participation in “creating” media, it is an industrial activity like any other. It generates revenues from the production and sale of commodities. While this commodity is commonly regarded as information, according to political economist Dallas Smythe (1981), the commodity of the mass media is its audience which it aggregates and sells to commodity producers in other industrial sectors. The advertising relationship within the mass media then is structured according to the arrangement of media audience producers, commodity producing audience buyers, and the audience commodity itself. Hence, the media has a definite structure, inter-related with the global economic infra-structure as a whole, which shapes the media both in terms of its form and content.

By virtue of the rivalrous buyer-seller relationship between media producers and advertisers, both groups compete over the value of audiences which they measure and define according to their particular subset of interests. According to communications scholar Eileen Meehan (1984), the ratings industry breaks the stalemate between audience buyers and sellers through technological measurement and algorithmic analysis, thereby giving shape to the audience commodity. Mosco (1996) refers to the product evaluation as a *cybernetic commodity* which serves as the basis for decisions made about media form and content.

Sociologist Ien Ang (1991, 1996) contends that the very concept of “audience” is an institutional category which bears little resemblance to the heterogeneous users and uses of commercial media. Media users actively decode, interpret and negotiate with media messages heterogeneously and cannot be regarded as passive media receptors. Hence, decisions made on the basis of the media’s “effective” audience inherently truncate the full range of media usage. Because, as Mosco (1996) points out, the context within which media participation takes place is determined according to conditions external to media usage, and the agency of users is necessarily limited by the commercial structure imposed on the mass media by owners and advertisers.

Attempts to utilize the Internet as a commercial mass media have to date been thwarted by a number of factors; however, while this has meant different things to Internet media producers and Internet advertisers, it has not deflected their common interest to utilize the medium to produce audience commodities. On the contrary, this common interest defines ongoing attempts to impose an advertising structure on the

Internet.

What is Internet Advertising?

It follows from the above that advertising on the Internet represents an active interest on the part of media owners and advertisers to impose a structure on this medium which will direct user-inputs towards producing commercial value. This reveals an arc of trajectory for the medium from a stateless social medium to a commercial state space. To date however, these efforts have proven to be unsuccessful. This is due to a variety of factors.

The first and most significant of these from the present perspective is that users themselves do not participate in effective quantities either to advertising or to other commercial arrangements for the medium. Following from the above, if the Internet provides the means of maximizing user agency within a media environment, and if the structure of the audience commodity relationship is predicated upon institutionally effective preconceptions of audience behaviour, this then reveals a significant disjuncture between users and Internet media. By extension, it follows from this that if, when permitted participation within a stateless media environment, users disregard commercially relevant activity, then the implications of this disjuncture extend beyond the Internet itself and apply to the mass media as a whole.

The second factor in the persistent lack of success of advertising on the Internet is that the mediated balance in the inherent rivalry between audience producers and consumers has shifted to the side of commodity producing advertisers. This shift is evident in competing definitions between publishers and advertisers over the value of

audiences and the best means by which this value is to be extracted and measured. The preference of advertisers for media harmonization and network redevelopment have led to a general advertiser avoidance of the medium to date. The promise of advertiser investment has, however, provided publishers and audience sellers with the incentive to develop and refine the value of its audience commodity through the enhanced user-monitoring capabilities available through the Internet.

The third factor pertains to the structure of the network itself. Underlying the basic premise of advertising is that audience value is derived from audience participation within a prescribed distribution system. An enclosed network structure which limits content consumption is therefore an essential component to audience commodity production. The development of an enclosed network structure for the Internet which limits usage to a fixed set of commercially relevant functions has both precedence in numerous existing Internet-like networks and in ongoing efforts to maximize the value of the Internet. This represents the limits of this research however which seeks only to analyze the role of Internet advertising in the commercial trajectory of the Internet.

This research is organized to present the argument outlined above by investigating the emergence and develop the Internet as an advertising medium.

Chapter One, the introduction, outlines the basis for the argument and situates it within the political economy of mass communications.

Chapter Two traces the history of the Internet from its origins in the computer industries of the 1950s to the widespread collapse of Internet and high-tech markets in 2000-2001. It examines the development of its open design standards which imposed fewer limits on user agency than other media. User development of the medium led to most of the applications we now identify as the Internet. Privatization and commercial media participation led to the "content is king" paradigm which implied the basis of network value from commercial content production and uses. This assumption about audience participation in online commercial activities was internalized into the market itself and led to its ultimate collapse.

Chapter Three presents a political economic perspective on Internet advertising, focusing on the audience commodity thesis of Dallas Smythe—which traces the source of media value to audience participation as opposed to information content; the cybernetic commodity drawn out by Eileen Meehan's analysis of the ratings industry—which implies rivalrous relations between audience buyers and sellers and the need for harmonization to determine audience value; and the effective audience theory of Ien Ang—which describes rivalrous relations between media usage and media production and locates the source of audience valuation in media operations, not audience behaviour or preferences. This is supplemented by parallel research from the field of marketing which demonstrates the institutional "ideological" frame within which consumers (i.e. audiences) and consumer markets are constructed.

Chapter Four picks up from the themes developed in chapters One and Two. It identifies a dual divide between audiences and Internet advertising and between audience

buyers and sellers on the medium. The first divide is developed in the discussion of the emergence of advertising into the medium and user response. It is further suggested that it was user response—specifically to advertising—which led to the market collapse. The chapter then goes on to explore the conflicting interests of media owners and advertisers, highlighted by the various positions adopted towards interactive media by Proctor & Gamble, one of the biggest media advertisers in the world. The two main areas of cleavage between advertisers and publishers are: a) whether the publisher value should come from information or audience commodities; and b) whether the medium should be used as a direct sales marketing medium or for product exposure and branding. Each of these considerations have an impact on competing values assigned to the audience. These competing interests are reflected in ongoing efforts to craft a measurement system which will provide a revenue split from audience production satisfying to both publishers and advertisers.

Chapter Five takes a closer look at the makeup of the advertising industry itself which is at present characterized by a high degree of convergence. A minority of publishers represent the majority of advertising revenues thus concentrating and focusing publisher interests. Major advertisers remain unimpressed with the opportunities of the Internet, investing little in content production and approaching the medium as a means to develop their own direct marketing functions. Nevertheless, fewer publishers mean greater audience share and fewer stakeholders in ongoing negotiations over audience value. Developments in the ratings market are particularly significant as Nielsen//Netratings (a spin off of media ratings firm A.C. Nielsen) has emerged as the

leader through market convergence. The chapter then goes on to examine some of the methods employed in Internet advertising, revealing that advertiser investment seems to be heading away from existing formats towards those which push greater amounts of information at users or those which pull more information from them.

Chapter Six examines the larger impact of Internet advertising on definitions of personal privacy on the Internet by inquiring into the business of online advertising agency DoubleClick which specializes in providing advertisers with targeted advertising. Consumer profiling is the single greatest advantage of the Internet for advertisers. The chapter describes privacy controversies over user monitoring, particularly in the context of DoubleClick's acquisition of offline consumer information gatherer Abacus Direct with the intention of combining on- and offline consumer information. The resolution of complaints and suits from privacy advocates and state litigants has resulted in the redefinition of privacy in favour of media owners and advertisers. This extends the implications stemming from Internet advertising into the future of network development and, arguably, in terms of media privacy as a whole.

And **Chapter Seven**, the conclusion, identifies directions for future research, particularly in the area of network redevelopment to provide a stable basis for commercial revenues. The chapter discusses the universally acknowledged need for wider broadband penetration and developments at the network-engineering level to allow for network operator revenues from content creation and distribution. The chapter also discusses the emergence of the Japanese wireless Internet-like network, DoCoMo, as the ideal model for further commercial redevelopment of the medium.

From this, it is the argument presented in this thesis that Internet advertising represents a step in the development of the Internet from a user-defined public space into a privately owned and commercially run media-space.

Chapter Two

A History of the Internet as a Technological, Social and Commercial Medium

Five years ago, who would have imagined that millions of consumers would be buying their airline tickets via something called a "reverse auction" from their desktops? Or that teen-agers in middle America would be less than cool if they didn't have a digital PCS device in the massive pockets of their baggy jeans? Or that the price of a state-of-the-art PC would fall to around the cost of a decent set of snow tires?

Proctor & Gamble marketing executive Vivienne Bechtold and AAAA director Mike Donahue
(*Advertising Age* 2000)

“And suddenly, everyone woke up...”

It was like it came from nowhere and became everything. And it seemed to happen so quickly. If the millions of pages pressed and gallons of ink spilled over the rapid popularization of the Internet were summarized in a single utterance, this would be it.

It was hard to resist the enthusiasm of it all back in 1995 when the Internet really became a household word. Bizarre strings of dots and letters turned up on billboards and busses; neighbours' kids “surfed” the “web” in offices and computer labs for digital porn and *Star Trek* trivia; David Letterman sarcastically mocked the jumbles of letters and symbols which as soon as a year later would be our links to some of the most well visited destinations on the “Information Super-Highway”—Amazon.com, Yahoo!, AOL, PersianKitty. Old rules no longer applied. Information wanted to be free.

For most of us, we had walked in on a story that was well underway. The future

had been mapped out and the rest of us were going to have to catch up if we wanted to share in what the technology would bring. By 1995, the Internet, a global “network of networks” had been switching packets for over 25 years. Prior to that, information networks had linked the earliest vacuum tube computers of the 1950s. The big difference everyone woke up to in the mid-90s was not the product of some radical innovation in the field of computers or communications. What had changed was the way people were now able to use computers to communicate. By 1995, the Internet was no longer a computer application, it was media.

Not only was it media, according to its sponsors it was “new” media; something that would fundamentally change everything. MIT Media Labs director Nicholas Negroponte, in his book *Being Digital* (1995), saw a future in which technology users would be freed from the physical world of atoms to explore virtual bit-worlds of their own choosing. Microsoft founder Bill Gates (1996) told us of the coming of “friction-free capitalism” which would release us from all the burdensome duties of consumption. With the help of Microsoft, goods and services would land on our doorsteps with only the click of a mouse (which, in hindsight, made the Information Super-Highway sound suspiciously like Microsoft’s parking lot).

This kind of utopianism still has its ebb and flow in the media and in speculative forecasts about the impact of information technologies on the ways in which we live, govern ourselves, and do business. But today, much of the initial enthusiasm has gone up in the same smoke that lingers over the wreckage of the dot.com crash. Speculation about the effects of the Internet have been put on hold until the cogs and wheels are fitted

together to determine what this digital future will really look like.

Recent developments have born out many of the reservations expressed by critical researchers in the field of mass communications who expressed skepticism during—and even prior to—the medium’s surge in popularity (e.g. Winseck 2002, 1999, 1998; McChesney 1999; Schiller 1999; Mosco 1998, 1996, 1989; Bettig 1997; Menzies 1997; McChesney and Herman, 1995; etc.). Pointing out the tendency for market pressures to bend communication technologies towards producing a limited set of commercial values, critics have cast dubious eyes on the hype which has accompanied the rise of the Internet. This caution was not unfounded. In fact, there is now a general agreement between both critics and advocates that the Internet is becoming more and more like commercial mass media. But while the critics question the value of such a new media, its present owners are more concerned with how to get it there.

From a commercial standpoint, the Internet is indeed a powerful new tool for connecting producers and consumers. Commercial uses such as advertising and electronic commerce present the tantalizing opportunity to overcome many of the limitations imposed by “old” media on the circulation of goods and capital. But what remains as a key obstacle to this endeavour is a persistent refusal on the part of the Internet-using public to take notice of these applications leading to tensions between commercial investors as to the best way to make the medium live up to its commercial potential.

In order to understand the nature of these conflicts, it is necessary to examine the emergence of the Internet in its historical context. The Internet evolved through a

protracted period of collaboration and contestation between users, technologists, regulatory bodies and private enterprise. Eruptions occurred at times between public and private research goals, at times between the dominance of competing industries, and at times between groups of users themselves. But a thread runs throughout all of these negotiations, one which can be bound into a larger pattern which describes a key aspect of how the Internet took its present shape. The Internet was explicitly designed to be an open communications medium which would impose few restrictions on how users stored, accessed and shared information. Open standards and uses were a core objective and it is against this objective that the development of the Internet can be measured.

This chapter traces the history of the Internet through three phases: the early period experimentation and development from the early 1960s to approximately the mid-1970s; the proliferation of users and uses which emerged between the mid-1970s to the mid-1990s; and the impacts of privatization and commercial mass media participation from the mid-1990s on.

2.1 “Inventing” the Internet

The Internet is a digital, distributed packet switching scheme for exchanging data between computers over communications networks. It is distinguished by its layered structure and open standards architecture. These core technical properties were developed over a period of time spanning from approximately the late 1950s to the early 1990s. This structure was never the product of a top-down design approach but evolved piece by piece through experimentation and standardization by many groups and

organizations around the world. The interests of many actors were represented through this development, including computer science researchers, governmental bodies, international standards associations, representatives from industrial and commercial sectors, and by the users of the technology themselves. As such, it is difficult to identify a moment of “invention” for the Internet; rather, it was only after a protracted period of negotiation that the Internet emerged.

Its origins are often attributed to the US military’s desire for a survivable communications network in the event of a nuclear war (Winston 1998, p. 324; Chodos, Murphy & Hamovitch 1997, pp. 23-25; Nelson 1984, p. 32. etc.). Indeed, military funding in the 1960s made it possible for the first “Internet” to be built—the Advanced Research Projects Agency Network (ARPANET). In addition to creating the prototype, ARPANET research also led to significant advances in the field of communications, computer science, software engineering, computer networking, and helped in the process to create a core mass of users skilled in designing computer networks and applications. But it also needs to be acknowledged that research in computer networking was not confined to the ARPA. By 1962, the year in which advanced computer networks were first proposed to the US military (Leiner, Cerf et al. 2000), computer networking was already an established phenomenon around which an active commercial industry had formed.

The computer industry was born in 1951 with the sale of the first UNIVAC computer to the US census bureau (Brock 1975 p. 11). By the early 1960s the commercial computer industry was well established and dominated by many companies

who continue to play a large role the market today: National Cash Register (NCR), Digital Equipment Corporation (DEC), and particularly IBM whose share of this early market dwarfed that of all its competitors combined.¹ At this time, large and expensive mainframe computers were the cardinal product of the industry. The market matured within a short space of time so that segmentation became feasible. By 1960 DEC and other companies began marketing “minicomputers” with reduced processing power but at substantially cheaper cost (priced in the tens of thousands as opposed to the hundreds of thousands demanded for mainframes) (Brock 1975, p. 14; Phister 1974, pp. 10-11).

Along with processing power, there was also a growing market for peripheral devices including input terminals, storage devices and software applications. Throughout the 50s and 60s, IBM’s overwhelming dominance in the mainframe market made its own proprietary standards the *de facto* standard throughout the industry for everything from socket interfaces to tractor feed printer paper. This led to significant antitrust action against the company in 1952 by the US Department of Justice (DOJ) on behalf of affected competitors. Settled with a consent decree in 1956, the suit led to a number of changes to IBM’s business and to the structure of the industry as a whole which would later have tremendous impact over the future evolution of computer networking (Cortada 1993, pp

¹ Nelson (1984, pp. 10,11, 31-32, 68-70) argues that the emergence of the U.S. commercial computer industry was the product of protectionist government policies as well and to subsidies granted to participants—IBM specifically—both directly and indirectly in the form of research grants and through exclusive sales and leasing agreements. As the complex web of linkages between governments and industry is not directly the subject of this thesis, the point is only presented here to draw attention to the complexity of the negotiation between the various instrumental forces which participated in the development of the Internet.

230-2; Phister 1974, pp 48-54).

The agreement between IBM and DOJ required the company to amend its standing practice of offering its equipment only on a lease or rental basis. Leasing entailed long-term service agreements, discouraged end-user migration to other hardware, and blocked competition from third party computer service vendors (Brock 1975, pp. 11-6; Phister 1974, pp. 36,49). While the agreement did not prohibit IBM from continuing to lease equipment, it did require that the company also make its computers available for outright purchase. Another term of the agreement compelled IBM to licence its technology to other computer manufacturers, essentially requiring the company to compete against its own products as delivered by re-sellers. This contributed to the company's eventual move in the late 1960s towards "plug compatible" architecture and strategic relationships with peripheral manufacturers to develop components for IBM machines (Brock 1975, pp. 18-9; Phister 1974, p. 38). In subsequent years, similar partnerships with Intel and Microsoft would have significant impact on IBM's dominance within the industry.²

A third key outcome of the 1956 consent decree was IBM's agreement to spin off its data processing business into a separate competing firm, the Service Bureau Corporation (SBC) which it subsequently sold in 1963 to competitor Control Data

² IBM faced numerous anti-trust actions from the 1920s through to the early 1980s. The last began in 1969 and lasted nearly thirteen years when it was dismissed in 1981 (Cortada 1993). The plaintiffs alleged that IBM was wielding plug-compatibility against unlicensed competitors to keep them off the market (Brock 1975, p. 20). This issue of proprietary standardization played a significant role in later negotiations over network interoperability as will be discussed below. It is also worth noting the similarity to DOJ proceedings against software producer Microsoft over forty years later.

Corporation (CDC) (Phister 1974, p. 54). Throughout the 50s, 60s and 70s, data processing was a core product of the computer industry and remote data transactions drove the commercial development of computer networks as the technology became more prevalent (Phister 1974, p. 24, 48; Lee 1971). Although little attention has been given to the 1956 IBM consent decree in literature covering the development of the Internet, its effects can only be regarded as highly significant given later battles over open vs. closed standards for the Internet. Had IBM greater ability to exercise its prerogatives over future network development through proprietary standardization, it is not difficult to imagine the barriers this would have presented to the widespread dissemination of the Internet in future decades.

Computer networking was a part of the commercial computing market from very early on. As an extension of the computer leasing business, manufacturers also leased computer access for remote application processing for sites without access to their own hardware. Applications were often transferred between sites by mail or courier but given the obvious demand, private electronic links between computers and remote terminals began to emerge by the mid-50s. By 1958, monopoly telecommunications provider AT&T was leasing dedicated lines on its telephone network for the purpose of remote data processing and by 1962 was upgrading lines to permit higher data transfer rates (Phister, 1974, p.76).³

³ This was a service for which AT&T charged premium rates. According to Phister (1974, p. 24), by 1974 the total revenue from data communications exceeded US\$800 million per year with 77% of average total expenses for this ability being paid to AT&T in line fees.

These early network services were employed for scientific and industrial research, but commercial applications such as payroll and inventory control were also key parts of early networking business (Phister 1974, p. 146). The airline industry was among the first to employ network technology to handle consumer transactions, using them to coordinate flight reservation information from ticket vendors in central databases (Phister 1974, p. 22).

The inter-relation between public and private investment in the development of computer networking is further illustrated by directions taken by governments in other countries to foster the growth of computing technology. In the US there was a clear political imperative set by national security priorities along with a desire to bridge the perceived technological gap with the Soviet Union in the wake of its Sputnik launch (Abbate 1999, pp. 8-9; Rheingold 1993, p. 58; Fler 1990, pp. 16-8). The United Kingdom on the other hand regarded a strong domestic computer industry as crucial for keeping up with the US as an industrial power (Abbate 1999, pp. 21-23; Nelson 1984, p. 70; Lee 1971, p. 250).

Given the lack of comparable resources available to the British government, it sought to achieve this by consolidating public research and private industry to create a number of strong national industries—such as computer giant International Computers Limited (ICL)—capable of competing on the continent and around the world against US technology (Nelson 1984, p. 35; Lee 1971, p. 257). Concurrent to early networking proposals within the US military research community, Donald Davies of Britain's National Physics Laboratory (NPL) came up with his own design for an Internet-like

packet-switching network in the mid-60s which, although implemented only on a very limited scale, was nevertheless influential within the computer research community and had significant influence over the direction taken by ARPA (Abbate 1999, pp. 33-35).

Davies, however, saw his invention as a means to reduce the overall cost of computing, not to provide a failsafe communication system. Given the tight integration of public and private enterprise at the time, he saw his invention as having commercial rather than military applications (Abbate 1999, pp. 27-28).

Davies was only one of several computer scientists to independently conduct research into packet-switching as an element of computer networking. Another was MIT computer scientist Leonard Kleinrock who had the distinction of being the first to publish his research on packet-switching in 1961 (Leiner, Cerf, et al. 2000). However, it was Rand Corporation computer scientist Paul Baran who provided the most comprehensive model of the objectives and design of packet-switching computer networks.

Outlined in his 1964 eleven volume “memo”, *On Distributed Communications* (Baran 1964), his proposal differed from all existing communication systems of the day (Figure 2.1, p. 23). His network was defined by three core elements: it was digital, distributed, and it utilized packet-switching for message relay. Each of these components became the core properties of the ARPANET and subsequently the Internet. It is a far more flexible design than end-to-end communication networks, allowing greater diversity in local application and usage.

Since Baran’s network was intended to exchange messages between computers, it

Figure 2.1 Illustration of hierarchical and distributed network topologies (Baran 1964).

Figure 2.2 Multiple pathways within a digital packet switching network (Baran 1964).

was a logical requirement that it be designed to convey data in digital format. Digitized data possesses a number of advantages over analog for network communication including its capacity to represent many different types of content electronically in formats which are easily compressed and stored. Transmitting digital data over existing twisted copper telephone lines, then (as it is now) the most ubiquitous electronic communication network, is problematic in that circuit-switched telecommunications networks are built to transmit analog voice signals along a single dedicated circuit between a sender and a receiver. While digital/analog conversion is possible through hardware and software modulation, analog transmission methods are nonetheless inefficient for digital transfer. Minuscule line disruptions are common but are corrected in a person-to-person conversation through the built-in error correcting properties of speech. Errors in a digital transmission corrupts the whole signal which then needs to be resent in its entirety until successful (Truxall 1990, pp. 7-33). Repeatedly re-sending incomplete messages over a dedicated open telephone circuit places a burden on both computer and network resources.

But unlike an analog wave pattern, digital impulses are easily broken up into discrete packets which can then be encoded with reassembly instructions. In this manner, long transmissions can be delivered in pieces and reassembled by the receiving computer. This improves transfer reliability as errors are repaired by replacing only the damaged packets.

Baran's model also called for a redundancy of pathways along which packets

could travel. Sorting computers at each destination would store a packet, read its address, and forward it on towards its destination by the quickest route showing the least traffic. This would bring overall demand down significantly by distributing traffic across the whole network. Ideally, no single pathway is overburdened in this system, connections would only need to be maintained for the few seconds required to receive and re-send small packets, and bottlenecks would be kept to a minimum.

Because the “thinking” is done by the computers at each end of the connection, how packets travel between them is of little consequence. Digital packets can travel along any type of electro-magnetic connection—telephone or satellite links, microwave or radio frequencies, even AC power conduits—so long as there is a computer at each end to properly receive and direct them. By Baran’s thinking, all existing communication networks could be computer networks (Figure 2.2, p. 23). This is precisely how the Internet functions today—not as a single, dedicated, end-to-end computer network; rather, it is a distributed “network of networks” (Cerf, cited in Marine, Kirkpatrick et al. 1993, p. xv). Each network itself is “dumb”, treating digital packets no differently than any other signal it carries. All the sorting functions are conducted by “smart” computer relays at the periphery of the network. Unlike other technological communication pathways where the “intelligence” is centralized within the network, the intelligence of the Internet is at the end points.

Baran’s proposal, originally drafted for the US Air Force, was never implemented. The reason, which Baran later confessed, was his hesitation to cede control of the project over to the Defense Communications Agency (DCA) which favoured a centralized

communications model and preferred to contract construction through private telecommunications contractors such as AT&T (Brand 2001; Abbate 1999, pp. 20-21). In Baran's opinion, the telecommunications industry would not understand the advantages of packet switching and would build the network incorrectly. For its part, AT&T was not interested either, due to the radical dissimilarity of Baran's network from its own telecommunication system and its preferred practice of building high quality and high rent dedicated lines (Abbate 1999 pp. 15-17, 20-21). Presumably, the fact that by the early 60s the company was already building a computer networking business of its own also figured into this reasoning. As a result, the task of experimentation and implementation fell to the Information Processing Techniques Office (IPTO) within ARPA which brought in Lawrence Roberts in 1966 to oversee these efforts (Leiner, Cerf et al. 2000).

Internet historian Janet Abbate's (1999) perspective on the creation of the ARPANET focuses as much on the research community and management techniques of the project as it does on the technologies it developed. Research was carried out by a variety of institutions across the US including UCLA, Stanford University, the Massachusetts Institute of Technology (MIT), and by private contractor Bolt, Baranek and Newman (BBN). Effective co-ordination was complicated not only by the distance between research sites, but also by the often incompatible assortment of computers available at each site. This made sharing research difficult even within a single location. The obvious and most expensive solution would have been to replace existing equipment with new interoperable hardware. It was decided however that the better approach would

be to design the network to accommodate heterogeneous systems, thus widening the range of computer resources available on the network (Abbate 1999, pp. 48-50).

This was accomplished with a layered network arrangement. On the communications layer, simple and inexpensive interface message-processing computers (IMPs) conveyed traffic between sites. At the host layer, common protocols and software applications were developed to translate the communication between various computers and local IMPs. Not only did this modular arrangement allow for greater network flexibility, it was also a means to effect a division of labour by giving various research sites small parts of the puzzle to work on.

The first node of the ARPANET went live in 1969 at UCLA with five more nodes added at other sites shortly afterwards (Leiner, Cerf et al. 2000; Abbate 1999, p. 64; Wertheim 1999, p. 224-226). The ARPANET's capabilities were first demonstrated at the 1972 Conference on Computer Communications where attendees were able to see how it could be used to access stored information and run remote applications on computers around the country (Winston 1998, p. 329; Rheingold 1993, pp. 66-72). Abbate suggests that this demonstration represents the end of the design period for ARPANET. The next stage would be to establish connections with other networks around the world.

This stage presented many of the same challenges as the first in the need for a uniform set of standards and protocols to provide communication between computers on other networks. This was accomplished largely through negotiation between governments and industries at the national and international levels from the 1970s through to the 1990s. A consistent theme in these negotiations, however, was the desire

to preserve the heterogeneity and flexibility built into ARPANET.

This desire was put to the test starting in 1976 with the emergence of the X.25 protocol proposed by the Consultative Committee on International Telegraphy and Telephony (CCITT) of the International Telecommunications Union (ITU) (Abbate 1999, pp. 150-161). The ARPANET, now under the direction of Robert Kahn, was at this time in the process of implementing its own TCP/IP protocol suite (short for Transmission Control Protocol/Internet Protocol), developed by Kahn and Vinton Cerf.

Like the ARPANET, TCP and IP were open protocols designed on the assumption of a heterogeneous patchwork of systems, data, and networks. TCP provided information to determine flow-control and error checking between hosts on the network (IETF 1981b). IP was for fragmenting and addressing information packets for inter-network delivery (IETF 1981a). By 1972, public and private regional networks utilizing a variety of networking schemes were becoming common in the US (Ahuja 1982 pp. 4-9). Dividing the task of network transmission into two inter-networking protocols relieved participating networks of the need to harmonize their existing internal arrangements according to a single dominant international standard. Thus, the design of TCP/IP reflected the philosophy that the intelligence of computer networks belonged at the periphery, not the center.

X.25 was an end-to-end packet switching protocol designed to handle both addressing and transmission control functions, in essence creating a “virtual circuit” between sending and receiving machines. According to one ARPANET engineer, “This can scarcely be deemed sound design practice for an inter-computer networking

environment, although many have conjectured that it probably makes sense to telephonists” (IETF 1982). US network researchers regarded X.25 as an attempt by the international telecommunications industry to undo the distributed intelligence exhibited by TCP/IP networks and were hostile to the proposal. Abbate suggests that X.25 was predicated on the assumption of national telephone monopolies and universal telecommunications networks (1999, p. 152, 166-7). Its strengths were particularly relevant in the area of cost accounting which better enabled network service billing.

This debate came to an end in 1982 when ARPA demonstrated that a TCP/IP network was capable of linking with X.25 networks, thereby eliminating the necessity for network developers to choose between one or the other (Abbate 1999, p. 175). And by the early 1980s, it turned out that open standards were in the best interests of telecommunication providers anyway. Liberalization in the US telecommunications industry and the 1984 breakup of AT&T—who in 1975 had passed once again on the opportunity to take up the operations of the Internet (Abbate 1999, p. 135)—convinced network operators that open standards might best serve their interests in the new, competitive marketplace for specialized telecommunication services (Schiller 1999, pp.107-108; Winseck 1998, pp 63-66).

Open network standards were further supported with the development of the Open Systems Interconnection (OSI) framework which began in 1978 by the Geneva-based International Standards Organization (ISO). Its objective was to “facilitate multi-vendor equipment interoperability” (Cisco 2003). Given the proliferation of competing hardware manufacturers and different proprietary networking standards (Ahuja 1982, pp. 4-9) these

guidelines were an attempt prevent single vendor dominance through proprietary standardization—mainly IBM whose proprietary hardware networking system threatened to impose its dominance on the entire industry (Abbate 1999, pp. 167-168, 172).

The OSI model was a “meta-standard” which isolated network functions into seven layers, from physical cable links at the bottom to higher level application protocols (Cisco 2003; ITU 1994). It also sought to make inter-networking more simple by clearly defining network functions and interfaces (O’Leary & O’Leary 1997, pp 170-1). Adoption of the OSI framework was gradual as the standards evolved—a process completed in 1994 (ITU 1994)—and as network operators, hardware vendors and software designers developed for OSI through the mid-80s and early 90s (Abbate 1999, pp. 171-2). As with the openness exhibited within ARPANET and by TCP/IP, OSI established the necessary parameters for interoperability without limiting the flexibility of the network as a whole.

By 1982 the patchwork of networks around the world—public and private, commercial and research, civilian and military—could rightly be referred to as the Internet. By 1985, the number of participating networks had grown from fifteen to over 400 (Abbate 1999, p. 188). With MILNET established as a separate military network in 1983, ARPANET was dismantled and the backbone folded into the National Science Foundation’s NSFNET in 1989. From 1990 on, NSFNET was in turn dismantled piece by piece, a process completed by 1995 with the entirety of the Internet backbone passing into the hands of private sector operators.

While today the Internet consists of thousands of networks around the world, a

number of bodies preside over its continuing development. The Internet Society (ISOC), made up of over 16,000 members from public and private institutions around the globe, provides a public forum for issues relating to the oversight of Internet development (ISOC 2003; Abbate 1999, pp. 207-8; Johnson, Johnson & Handa 1995, p. 24). Within ISOC, the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB) implement development standards and issue proposals (Request for Comment documents or RFCs) for the Internet development community. According to its mission statement, the goal of ISOC is, "To assure the open development, evolution and use of the Internet for the benefit of all people throughout the world" (ISOC 2003).

As Abbate points out, however, ISOC's informal authority over the evolution of the network is uncertain as privatization has raised a number of issues over the legal governance of the Internet (1999, p. 208). Presently, one of the bodies with the task of resolving domain name disputes, the Internet Convention for Assigned Names and Numbers (ICANN), is a private, US government licenced, not-for-profit corporation. This turn towards privatized standards in an area with commercial implications sets a precedent for the future of open Internet governance where commercial interests are at stake.⁴

In conclusion, the evolution of the Internet's architecture was characterized by open standards and a distributed structure which placed the message switching functions, the "intelligence", at the ends of the network. This structure evolved in the context of an active marketplace in computing and at the same time as alternate networking designs.

⁴ For a detailed account of the history and operations of ICANN, see Brophy (2002).

For this reason, the Internet cannot be regarded as a product of technological innovation, rather it was the product of a design philosophy. Open standards permitted flexibility, scalability, and did not limit unexpected developments through *a priori* standardization.

But perhaps the most important discovery made in the course of early Internet development was that the “intelligence” relocated from the center to the periphery was not that of packet switching computers, it was the intelligence of its users. Its open structure maximized user agency. This observation was born out repeatedly throughout the development of the network, and is perhaps best expressed by computing pioneer and ARPA researcher J.C.R Licklider (1967). The value of the network was not from any one instrumental application—defense, resource sharing and so on. It was from the collective outputs of collaborative inputs of its users which he calculated as “ n , the number of netted users, and c the coefficient of contributive cooperativeness that measures the value of each user’s creative effort.”

With the Internet, computing ceased to be strictly about information processing and became inextricably linked with communication—not as a means by which communication could take place, but rather as a product of communication itself.

2.2 The Accidental User

When considering the Internet as a communication medium, the majority of attention is paid to the World Wide Web (WWW), its most popular application. But this is only one of the communications applications which has developed on the Internet. For the most part, these applications were never imagined in the original design which was focused on

sharing scarce computing resources. They took up central prominence nonetheless due to the overwhelming enthusiasm of users around the globe. For this reason it can be argued that the Internet became a communications medium through the activities and participation of its users.

One of the more significant “official” applications which was intended in the original design of the network was file sharing. The extent to which file sharing became common illustrates that while ARPA researchers were learning to build computer networks, they were at the same time also learning how to use them. Once the first nodes of ARPANET were in place it surprised project managers just how underutilized the network actually was. While this was in part due to the increasing availability and sophistication of computer hardware at various research sites, it was also the case that users preferred to duplicate and transfer files to their own local machines rather than working with them across the network (Abbate 1999, pp. 104-6). This developed into the pattern in which applications and documents were deposited in open file directories across the network for open access by anyone who cared to make use of them. The development of a special protocol for file transfers (FTP) permitted files to migrate around the network quickly for other users to work with or simply learn from. In this way file sharing helped to refine and popularize the tools available for network and software development. In later years, FTP sites hosted by organizations such as NASA and the Smithsonian Institute archiving public domain documents and images became popular destinations for pre-WWW Internet users (Rheingold 1993, p. 98).

File sharing also helped to create communities centered around common interests

within the disparate and dispersed body of researchers. One unsanctioned but tolerated interest was a “sci-fi lovers” chat list which was circulated as a discussion between users across the network (Rheingold 1993, p. 70). Another unsanctioned use was Project Gutenberg started in 1971 by non-ARPA member Michael Hart as an effort to convert and distribute print documents electronically across the network (Project Gutenberg 1992). Project Gutenberg is still active and has archived thousands of public domain published works since its beginnings.

Another user-developed application which became very important to early researchers was electronic mail. The first e-mail program was developed Ray Tomlinson at BBN in 1971 (Abbate 1999, p. 106). With improvements to the e-mail software interface and the refinement of the addressing scheme, e-mail became the most popular use of the ARPANET, allowing for communication “combining the speed of the telephone with the permanence of mail (Harrissen 1995, p. 7). The *ARPANET Completion Report* credits e-mail as having “the largest single impact” and as having “changed significantly the ‘feel’ of collaborative research within remote groups” (Hearst et al. 1978, p III-110, cited in Abbate 1999, p. 107).

E-mail also fostered the growth of online communities, allowing users to “meet” in virtual space over the network. According to its designers, the popularity of e-mail within the ARPANET community was “...a harbinger of the hybrid activity we see on the World Wide Web today, namely, the growth of ‘people-to-people traffic’” (Leiner, Cerf, Clark et al. 2000). It was not only a person-to-person means of Internet communication. Listserv presented a means by which e-mail could be used to address a mass audience. It

is essentially an automated discussion list which users join and add to by e-mailing the commands to a list-server (Marine, Kirkpatrick et al. 1993, p. 191).

Usenet, an electronic message board application, was the first Internet application to be developed by non-computer scientists. Created by Duke graduate students Tom Truscott and James Ellis and by University of North Carolina graduate student Steve Bellovin in 1979, Usenet was not originally part of the Internet at all but rather a local network application using the UNIX operating system's Unix to Unix Copy Program (UUCP) (Harrissen 1995, pp. 7-8). It was initially accessible only within a networked site or remotely via direct telephone connection.

Usenet discussion topics are organized according to subject hierarchies including the comp. hierarchy for topics relating to computer science, rec. for topics relating to recreational interests, and many others including biz., sci., and soc.. Within each top-level category, there are often hundreds of sub-topics: comp.unix for discussions relating to the UNIX operating system or rec.tv.startrek for discussions relating to the television show. Voluntary managers set guidelines at its various levels for acceptable content within each discussion topic. A notable addition to the top-level hierarchies was the alt. (for alternate) hierarchy which tends to have fewer rules and attracts discussions not permissible elsewhere, for instance the alt.sex topics or alt.2600 which focuses on computer hacking and software piracy.

As a relatively simple application accessible by anyone with access to a UNIX account, Usenet participation swelled and attracted attention from new users outside of the computer research field. This increased not only the number of users but also the

variety of interests brought to network. Connections between Usenet and ARPANET were established and by 1985 it had become a fully functioning Internet application with its own Net News Transfer Protocol (NNTP) (Harrissen 1995, p 15).

It was an environment in which a distinct Internet culture and “language” grew. “Smileys” are a form of pictographic expression using ASCII characters to expand the limits of text messaging by conveying the intent behind an Internet message—contentment, sarcasm, shock, etc. They were created by Usenet user Scott Tahlman 1980 (Harrison 1995, p. 199). Usenet was also a laboratory for Internet jargon and acronyms sometimes referred to today as “chyping” (chatting + typing). Terms include: FAQ (a file containing frequently asked questions with answers), IMHO (“in my humble opinion”) and RTFM (“read the f*cking manual!”).

Usenet became an early site for commercial advertising, a practice which was widely disparaged by its mass of users. This lesson was learned by New York law firm Cantor & Siegel who in 1994 found their solicitation on 5000 Usenet groups greeted with “spamming” and “flaming” (Cassidy 2002, p. 78; Wolff 1998, pp. 109-110), two of the less pleasant Internet customs which developed on Usenet. Spamming involves filling a user’s account with junk messages, sometimes to the point of interfering with his or her Internet access. The term has also come to be applied to unsolicited commercial messages sent to users through e-mail. Flaming refers to a number of techniques employed to denigrate a particular user ranging from insults to, in extreme cases, threats. As an NSF-backed network until 1995, there was both an official prohibition as well as a user-preference against commercial usage of the network. The Cantor and Siegel incident

illustrates how fiercely Usenet users valued their non-commercial space.

Along with message posting systems such as e-mail and Usenet, real time messaging was using the Internet relay chat (IRC) application which became available in 1988 (Zakon 2003; Rheingold 1993, p.184). This popular application was preceded by the real-time network games known generically as Multi-User Dungeons/Domains (MUDs), developed in 1979 at the University of Essex (Wertheim 1999, p. 234-237; Rheingold 1993, pp. 227-228). MUDs take a number of forms depending on the type of interaction and level of computer programming skills (Turkle 1996) but are typically text-based virtual environments created by hundreds of participating users. They are accessed via the telnet protocol with users engaging with an active process on the hosting computer. As such, MUDs are an application which closely resemble the remote processing ability originally envisioned as the main benefit of the ARPANET by its designers.

By the mid-1980s, this assortment of Internet applications was available to users in computer-equipped institutions around the world. But for home users, accessing these applications was often difficult and was generally limited to hobbyists armed with the required information and enthusiasm to use the network. Accounts by early users of Bulletin Board Systems (BBSs) which began to spring up in the 1980s provide some insight into the variety of satisfactions and frustrations encountered by these early home users (Rheingold 1993, Garcin 2002). BBSs were communities of users connecting to remote computer systems over telephone lines to share files and exchange messages between subscribers. They were not connected to one another and were usually regional.

By far the largest of these systems was WELL or “Whole Earth ‘Lectronic Link” which had many thousands of subscribers by the early 90s (Rheingold 1993). BBSs brought a new base of home-users into contact with online communications, eventually bringing them into contact with the Internet as the medium spread and BBS services migrated.

Another key development which brought home users closer to the Internet was the drop in price of personal computers equipped with modems and multimedia capacity (Schiller 1999, pp. 90-92). In many respects, this was the result of IBM’s strategy to expand into the household market (Wolff 1998, pp. 109-110). In 1981 the company licenced critical components for its personal computers (PCs) from two companies: the processor from Intel and the operating system from Microsoft. Each of these companies in turn licenced these components to IBM competitors, undermining IBM’s ability to leverage its dominant proprietary standards into the home PC market. With greater demand and more competitors, the price of personal computers dropped and the Windows/Intel (Wintel) duopoly took control of PC standards. By the early 1990s, household penetration was increasing and the number of regional Internet service providers (ISPs) was expanding (Abbate 1999, pp. 199-200). Both of these factors set the stage for the Internet explosion which accompanied the development of the World Wide Web.

But by 1991, the Internet was still by and large an un-catalogued assortment of files residing on computers around the world. Finding a specific piece of information was all-but impossible without knowing precisely where the information was kept and how to access it. One early attempt to sort this information was the Wide Area Information

Server (WAIS) Internet search application developed by Thinking Machines, Apple Computer and Dow Jones (Morgan 1994, p 2). This scheme searched for documents with WAIS header information and returned a listing of files based on the number of times the relevant search terms appeared in the document header. It was released freely on the Internet but was limited in that only files prepared for WAIS delivery could be accessed (Maurer 1995).

Another method called Gopher was also developed in 1991 by researchers at the University of Michigan. This method organized Internet resources within a menu system which users could navigate and search. Gopher also supported multimedia display and was able to spawn FTP, telnet and WAIS search functions from within the Gopher environment. The popularity of this application was drastically curtailed in 1993 when the University of Minnesota decided to charge a licencing fee from users. According to WWW designer Tim Berners-Lee (1999, pp. 72-73), this was tantamount to an act of treason as far as Internet users were concerned. In this pre-commercial environment, applications development often took place free of charge for research purposes. After the announced licence fee, Gopher experimentation by third party programmers was abandoned due to the fear of being assessed for licence fees or even held liable for infringement of copyright (Berners-Lee 1999).

Computer programmer Berners-Lee's World Wide Web application began as a personal directory he used to keep track of researchers and projects at the CERN (Conseil Européenne pour la Recherche Nucléaire) particle physics laboratory in Geneva. He and associate Robert Calliau adapted and released it for Internet usage with CERN approval

in 1990 (Abbate 1999, p. 214; Berners-Lee 1999, pp. 9-10). Like Gopher, the Web was designed to support multimedia files and was able to spawn FTP and telnet threads. However, unlike the hierarchically arranged Gopher system, WWW resources were linked in a non-hierarchical, non-linear hypertext system.

Berners-Lee was influenced by author and counter-cultural information theorist Ted Nelson who developed the concept in the 1960s (Abbate 1999, p. 214; Berners-Lee 1999, pp. 65-66). Documents were meant to refer to one another using embedded links or to be called up directly by its Universal Resource Locator (URL) address. There was no *a priori* categorization scheme; files were meant to be “surfed” according to the subjective preferences of the user. The reason for this arrangement was to permit the volume of information to grow freely. According to his proposal to CERN management, “the method of storage must not place its own restraints on the information” (Berners-Lee 1990). Berners-Lee’s design also called for total interactivity between users and Web content giving users the ability to modify files, not just view them (Abbate 1999, p. 216).

From 1990 through 1991, the Web slowly grew from only a few computers within CERN into a patchwork of Web servers around the globe. In 1993, managers of CERN decided to release ownership of the Web under a general public licence which made the Web freely available to everybody (Berners-Lee 1999, p 74). At this stage, the Web’s biggest drawback was the lack of an adequate user interface. The multimedia Mosaic browser, developed in 1993 by a team at the University of Illinois’ National Center for Super-computing Applications (NCSA), gave the Internet a face. Mosaic was followed up the next year with the creation of the Navigator browser by the members of the Mosaic

team who had left the NCSA to found high-tech startup Netscape (Scheff 2000).

The language for developing Web content was a variation of the markup language used for print publication. It required very little network knowledge and virtually no programming skill to create documents for the WWW. This led to the rapid growth of Web content creation (Cassidy 2002, pp. 19-20). Its growth was further encouraged by Netscape's decision to grant free licences to certain classes of users, effectively giving their product away for free. Much to Berners-Lee's chagrin, however, Netscape did impose one limit on his conception of the Web by not providing an editor to allow collaboration by modifying the online documents of others (Berners-Lee 1999, pp. 70-71, 169-172). Nevertheless, Netscape was a very successful application which had a fundamental impact on the way in which the Internet was used. While web usage grew exponentially shortly after its initial release, its growth exploded after the development of a graphical user interface. Figure 2.3 (p. 42) depicts its growth in terms of Internet servers which came online to deliver Web content.

In conclusion, the collaborative development of Internet applications from its origins to the mid-1990s supports Licklider's assertion that the value of information networks resides in its users, not the technology. It is impossible to regard the growth of the Internet strictly in terms of its technical capacity. Rather, the open structure of the network maximized user agency which led to new forms of usage and social interaction.

Equally important was the growth of a shared set of customs and values within the community of Internet users which, like the network itself, stressed free and open participation. Without end-to-end control or prior structural arrangement of resources,

Figure 2.3
Growth of the World Wide Web - 1993-2002

Source: Zakon 2003

communities formed based on common interests, affiliations, or simply by chance. The products of this social collaboration took off in unpredictable directions.

With its popularity increasing, commercial interests in the computing, telecommunications, cable, media and advertising industries began to give the Internet serious attention. For network owners, it appeared to offer a new source of revenue from enhanced information services. For media providers, it was clear that the growing user base was a new market for old media. And not only was it a new market, the potential for integrating different networks to carry multi-media content seemed to indicate that the creation and control of online markets would lead to greater control over those offline. With the network in place and the users available, the only task remaining was to impose a structure which would maximize the value of the Internet.

2.3 The Digital Gold-rush

“Content is King!”

This was the phrase that sank a thousand dot.coms. By 1995, public enthusiasm was growing exponentially by the month, and the dominant perception among commercial stakeholders was that the value of the Internet was in the information it allowed users to access. The Internet was not about connections or computers or nodes or routers: it was media. And it was about the two simple things that the media knew best—content and advertising. For five years, between 1995 and 2000, the drive to corner the information market using the tried and true business model of television, radio, magazines and newspapers was worked through, experimented on, re-tooled and reverse engineered over

and over again. Forecasts predicting the Internet's value as a mass communication medium expressed an optimism verging on the commercial sublime. Financial markets and speculation swelled to the point where every law, even the laws of economics, was called into question.

But in the media value-chain, the audience proved to be the missing link. They surfed, chatted, e-mailed, gamed and downloaded porn, but they didn't do the thing they were supposed to do: they didn't pay attention. Dot.coms—start-ups looking to compete against established media providers for the Internet audience—began to feel the effects after the high-tech market took its final dip on April 14, 2000 (Kait & Weiss 2001, pp. 297-298; Berenson 2000). Without revenues from audience commodities and relying heavily on capital markets, thousands of companies saw their values sink to nothing. These effects radiated throughout the communications sector, from commercial content providers to network developers and operators, radically altering the Internet landscape and setting a new course for the future development of information networks.

While thus far this examination has focused on developments surrounding the structure and usage of the Internet itself, the backing against which the Internet appeared was one of international regulatory liberalization over the communications industries (Herman and McChesney 1996; Streeter 1996; Aufderheide 1999; Winseck 1999a, etc.). Pressure on governments to re-write existing communication policy came mainly from network operators who saw enhanced services such as information provision as having significant advantages over regulated monopoly carriage arrangements (Winseck 1998, pp. 63-66). While the emergence of the Internet increased these pressures (Anania &

Solomon 1997, p. 104), the drive towards deregulation and network convergence predated the popularity of the Internet by several decades.

Speaking in 1980 while inter-networking standards were still being debated in the ITU and ISO, the director of Bell Canada's Computer Communication Group, Palle Kiar, offered his vision of the role of computer networking in the future of communications carriage. It would involve, "the evolution of new applications, such as pay-TV, conference television, [and] electronic mail..." Furthermore, these new applications would clearly be offered at the expense of competing service providers since telecommunication networks, particularly in the wake of fibre-optic networking, offered, "a better and more cost effective grade of services than competing technology" (McLean-Hunter Research Bureau 1980, p 140). These three elements—data, voice and video—could be rolled into a single network. The will to combine them was clear, and the Internet provided the means by which this could be accomplished.

Looking to provide direction for the "Information Highway", in the early 1990s the incoming Clinton administration in the US sought to develop policy which would balance the desires of network providers with the public interest. This led to the formation of the National Information Infrastructure (NII) initiative under the direction of Vice-President Al Gore. Its 1993 white paper charted the US government's future role in the development of the "information society". The US government's role was stated as:

- 1) "encouraging private investment in the NII";
- 2) "promoting and protecting competition";
- 3) "providing open access to the NII by consumers and service providers";
- 4) "preserving and advancing universal service to avoid creating a society of information

‘haves’ and ‘have nots’”; and 5) “ensuring flexibility so that the newly-adopted regulatory framework can keep pace with the rapid technological and market changes that pervade the telecommunications and information industries” (NII 1993). While Fraser (1999, pp. 64-65) suggests that the administration would have preferred a stronger public interest agenda in its communication policy, the US government’s position as developed in this document equated public interest with consumer choice, best accommodated through the natural course of market competition. In exchange for this promise to let the market in communications run its course, the NII only requested operators to provide “universal access” to at least ensure that all consumers would benefit from a liberalized information market.

Internet user groups such as Computer Professionals for Social Responsibility (CPSR) expressed concern that even these minimal objectives of the NII would not be met if left only to the private sector (CPSR 1996, cited in Aufderheide 1999, p 221-39). On the other hand, private sector representatives resented the limited obligations they were being asked to provide, arguing that even this small amount of government regulation would slow the progress of technological development. The Council of Competitiveness, a government lobby group representing media, computer, and communications network providers, bemoaned the “tangled web of regulations and public policies” which threatened to “put a roadblock on the Information Super Highway” (Fraser 1999, p 65).

The US administration followed through on its NII objectives with the 1996 *Telecommunications Act* (TCA) (United States 1996) which removed many existing

regulatory barriers to consolidation between telecommunications and “closely related media and information industries” (Herman & McChesney 1997, p 109-10). The intent of the Act was to foster competition within the communications sector as a whole by allowing telecommunications providers, cable television providers, participants from other industrial sectors, and new start-up entrants to the field to compete in the same market for data, voice and video transmission over broadband communications networks (Schiller 1999, pp. 105-107)—essentially permitting competition between point-to-point carriers and multi-cast providers (Aufderheide 1999, pp. 14-15).

Loosening up regulation did, however, impose certain responsibilities on existing network operators. Given the enormous sunk costs of duplicating existing networks, the Act required that existing owners open their networks to provide competitors “nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just and reasonable, and nondiscriminatory” (United States 1996, 251 ©)(3)). In making this request, the TCA followed through on the NII assumption that commercial competition was the best mechanism of administering the public interest. Hence, it furthermore made clear the diminishing role of the Federal Communication Commission (FCC) as regulation would become a function of market competition (Aufderheide 1999, pp. 61-62).

What subsequently transpired within the industry bore little resemblance to the central assumption of the NII and TCA. With regulatory approval to expand beyond their existing markets, the Regional Bell Operating Carriers (RBOCs) created in the wake of the AT&T breakup went on buying sprees, consolidating by 1999 into four

telecommunication giants in the US—Verizon, SBC, Qwest and Bell South—each with regional monopolies and holdings across the communications spectrum (Rose 2002a; Winseck 2002). The formerly regulated monopoly AT&T was now able to find ways back into households and consolidated holdings in cable and wireless networks. Worldcom took up the largest share of the Internet backbone with the acquisition of MCI in 1998, adding to its existing ownership of UUNET. In the cable industry, Cox, Time-Warner and Comcast expanded, joining AT&T as the largest cable providers in the US. And a similar wave of mergers and acquisitions swept across the media sector, creating horizontally integrated media giants with holdings in print, television, cinema and the Internet.

However, while established network owners were quick to expand their influence, they were not as eager to permit newcomers entry into their domain. Because both the NII and TCA espoused market competition as the best arbiter of commercial conflict, there were no remedies built into the TCA and network owners chose not to open their networks as required by the Act (Rose 2001). Contrary to the original intention of regulators, the TCA reduced competition and ushered in a new era of convergence within the information and communication sectors. The effects of these mergers on the Internet are still in ferment but pose significant opportunities for radical revisions to the communications infrastructure through future industrial concentration and network convergence.

The privatization of the Internet was well underway prior to 1996 as public and private Internet-compatible networks began to spring up around the world (Abbate 1999,

pp. 200-205; Johnston, Johnson & Handa 1995, p. 17). Under government pressure to open the Internet to commercial competition, NSF leased management of the Internet backbone to the non-profit MERIT group in 1987 who received assistance from IBM and MCI. When the lease expired in 1995, the decision to fully privatize the network was made and the backbone was sold in pieces to a number of commercial network providers including UUNET, MCI, BBN, Sprint, and AT&T (Cassidy 2002, p. 24; Abbate 1999, p. 199; Herman & McChesney 1997 pp. 114-117). Other aspects of network management were also sold off. The domain name registration system which assigned addresses and maintained the primary tables of Internet resources was spun off as a private firm, Network Solutions Inc. From that point forward, determining what would be included in the Internet was a commercial function. By 1996, the Internet had well and truly become a privately owned, commercially run network. Attention now shifted from developing common standards and new uses towards finding ways to maximize its value.

Alongside the emergence of commercial ISPs, another class of services, Online Service Providers, offered access to proprietary regional computer networks. The first of these, CompuServe owned by accounting firm H&R Block, opened in 1969 as a business information service. Later, a partnership between IBM, Sears and CBS created Prodigy in 1990. Both services acquired at their height a user-base of over a million subscribers each. America Online (AOL) went into business in 1982 offering games and entertainment content. Services such as these linked users together and provided basic Internet-like functions such as e-mail, but they were closed networks which kept users within their specific environments and billed on an hourly basis for usage. Despite losing

money for years, AOL became by far the most successful of these services, launching an initial public offering (IPO) in 1992 which won it US\$23 million in investment (Cassidy 2002, pp. 76-77; Wolff 1998, pp. 203-205). After its 2000 merger with Time Warner Inc.—the largest corporate merger in U.S. history at the time combining assets of US\$225 billion—AOL became both the largest Internet and the largest media company in the world (*Wired* 2000).

From its beginning, AOL's business more closely resembled that of media than a technology company. In addition to the basic message and file sharing services offered by other Online Service Providers and BBSs, it also supplemented these services with advertising-bundled content (Brandweek 1993). Journalist and early Internet entrepreneur Michael Wolff (1998 p. 203) suggests that its success in attracting advertising was due to its direct marketing capability of keeping tabs on user activity and selling the information to advertisers and product vendors.⁵ While content was initially purchased from cheap or free third party sources, in 1993 it began affiliating with branded offline information providers. One of its first partners was Time-Warner who was at the time conducting its own experiments with interactive media with its Full Service Network, an interactive television network which it released in Orlando, Florida in 1994

⁵AOL began to provide its users with limited access to the Internet in 1994 and now accounts for over one third of all hours in the US spent online (Rose 2002a). It is still however a proprietary network which keeps users within an AOL network shell. Existing Internet services such as search engines are duplicated for AOL when made available to its users (*Wired* 2002). This permits exclusive ownership of its user-base which remains anonymous to the network as a whole (Bushwaller and Martin 2003, p. 44) but gives the company detailed knowledge of user activities which it links with registration information (Wolff 1998, pp. 213-214).

at a cost of over US\$ 100 million (Rose 2000). The agreement between the two companies gave Time-Warner a percentage of AOL connection fees in exchange for free or low-cost advertising in Time-Warner media. AOL was the overwhelming winner in this agreement as subscriptions increased and income climbed through access fees, advertising sponsorship, and through increased stock value. Time Warner on the other hand received less than US\$500,000 in direct payment (Wolff 1998, p 117-8). Wolff credits the inequity of this deal as a mitigating factor in its future Internet business decisions.

AOL also mimicked offline media through its practice of mail solicitation, sending out computer disks which allowed users to connect and subscribe to AOL, offering ten free hours as an incentive. By 1994, the company had sent out over a billion disks—more than three disks for every man, woman and child in the United States (Wolff 1998, p. 205). Unlike a media company however, AOL was able to draw on high levels of investment providing resources which were thirty times greater than actual revenues (Cassidy 2002, pp. 108-113; Wolff 1998, p. 205). By 1996, AOL's subscriptions had risen into the millions with operating revenues exceeding a billion dollars (US\$). Having dominated the online service industry, AOL now regarded its competitor as the offline mass media and hired MTV executive Bob Pittman as CEO (Wolff 1998, pp. 214). As far as AOL was concerned, revenues from information networks would be derived from users through content and sponsorships.

Time-Warner also saw the Internet as a content-driven medium and attempted to leverage its offline content libraries onto the Internet in what it hoped would become its

own subsidiary technology business. In 1995, Time Warner put its “content is king” assumption to the test with its Pathfinder “Internet destination” which it subsidized through a combination of subscriptions and ads. Time-Warner placed particular emphasis on the ability provided by interactive media to target consumers for customized advertising. The company had already seen success with “selective bind-in” advertising in magazines whereby ads were targeted by zip code and inked in during the print run. The marketing executive credited with developing this technique, Bruce Judson, was a key member of the company’s Online Steering Committee which was formed in 1994 and chaired by former Time journalist Walter Isaacson. In Isaacson’s words: “The Web puts us back in the driver’s seat. We can control our content. We can target our audience. We can use our resources to reach that audience. We can sell that audience.” (Wolff 1998, p 121).

The Pathfinder project racked up significant losses before it was finally pulled in 1997 with Time Warner spending US\$10 million in 1995 on US\$2 million in revenues in the first year and US\$20 million on US\$4 million in the second (Wolff 1998, p. 132). The company found Internet users reluctant to pay for online content when there was already so much available for free. But with the entry of Time Warner onto the Internet, the “content is king” paradigm and the dot.com industry was born.

By the mid-1990s, the Internet and information technologies were being evangelized by the media as a whole, particularly in the burst of new “old” media publications devoted to a spreading new, high-tech information culture. Louis Rossetto, founder of *Wired* magazine, was not just the prophet of the new technological age, he was

also one of its saints. As a former hippie and U.S. expatriate living in Amsterdam (Wolff 1998, p 35), few could be said to have been further away from the science and ethos of technological research and development. The editorial vision of *Wired* projected the transformations of the technological information society. *Wired* presumed to challenge everything—social practices, technological limitations, business conventions, even the tried-and true format of magazine publishing. From its founding, the magazine has been infamous for such unconventional practices as yellow text on purple backgrounds, unconventional layouts, presenting large volumes of uncontextualized data, and being at the forefront of hype with its “Hot/Not” lists. It was more a product of early “zine” culture owing debt in particular to early “cyberjournals” such as *Mondo 2000* (Rushkoff 1997, pp. 229-236). It was often behind the times in terms of technological development, as evidenced for instance by one early article which puzzled over the future of URLs, “...just as you become accustomed to them, they will likely be replaced by something better” (Theise 1994). But *Wired* was not about technology, it was at the arrogant forefront of “digital culture”.

Wired magazine is the most prominent example of the enthusiasm of traditional media towards new information technologies. The magazine attracted significant investment from other media sources including Conde Nast, advertising conglomerate WPP, and German publisher Burda (Cassidy 2002, p. 44; Wolff 1998, pp. 45-46). But ultimately, despite its visionary message, the magazine was too “old” media to attract high-tech investment on the open market. Failing to launch IPOs twice, in 1995 for US\$450 million (forty times its actual worth at the time (Wolff 1998, p 47-8)) and in

1996 for US\$250 million, *Wired* was eventually absorbed by Conde Nast, one of the most established and decidedly “old” media magazine conglomerates in the US. Nevertheless, *Wired*’s influence spawned numerous imitators and led the media hype about the Internet.

Ironically, while the media stressed the transcendent power of digital culture, the few who managed to profit from the Internet did so by appealing to the carnal inclinations of its users. Although there are some analyses of Internet commerce which have considered the role of the online porn industry (Lane 2000; OECD 1997), it has nevertheless been widely overlooked. Many of the techniques of Internet commerce are based on early payment and advertising experiments conducted by the Internet porn sellers. This industry was also active in developing high-end applications for enhanced content and video delivery (Rose 1997).

One area in which the porn industry facilitated the growth of e-commerce was in being among the first supporters of online payment schemes (Lane 2000, p. 115; Wolff 1998, pp. 188-189). According to Jupiter MediaMetrix, Internet pornography was worth approximately one to two billion dollars, representing from 5-10% of all online revenues in 1999 (Lane 2000, p. xiv-xv). Primitive Internet payment systems generally required credit card transactions over unsecured connections. Aside from making credit card companies one of the prime beneficiaries of the Internet porn business, it also demonstrated at least in some circumstances, users were willing to use the Internet to purchase goods and services. Seeking to provide a more discrete means of conducting adult entertainment transactions, other services emerged to serve as payment proxies. One such service, First Virtual, while not intentionally created as a porn service, found

that most vendors were reluctant to pay the 15% surcharge it levied from transactions. The porn sellers, however, did not seem to mind so much and hence became the major customer for such services. At present, while it is difficult to get figures from Internet pornography vendors, the industry still manages to keep itself afloat on the basis of content sales (Cone 2002).

The speculative bubble formed around Internet and technology companies is another crucial development in the commercialization of the Internet. After releasing its Web browser, Netscape received significant private investment from media and communications providers raising the market value of the company to US\$150 million on revenues of only US\$ 7 million (Cassidy 2002, pp. 64-65). The company launched its IPO in August of 1995 and by the end of the first day of trading, its share value had nearly tripled from US\$28 to US\$71 giving the total market capitalization (share price multiplied by total shares) of over US\$2.2 billion dollars (Cassidy 2002, p 87).

This trend continued for the raft of Internet IPOs which followed over the next five years. Huge investments in Internet companies provided business capital despite minimal and often negative revenues. The general perception was that the Internet was the future and no price was too high to buy a piece of it early. As overvalued as Netscape was, it could at least boast ownership of a tangible product. Many of the businesses which came afterwards could not make the same claim. Search engine portal Yahoo! launched its own IPO in April of 1996 with its share price also tripling on the first day, giving the company a market value of US\$850 million (Cassidy 2002, p. 100). Yahoo! owned nothing except some Internet real estate and a large base of users.

The Internet bubble could be characterized as being the product of a collision between two investment cultures—that of Silicon Valley on the west coast where the speciality was technology, and Silicon Alley in the traditional home of commerce, media content and advertising on the east coast. One of the fundamental features of this divide was the different emphasis that each side placed on the value of information and networks. In Silicon Valley, investment patterns typically followed something similar to the law of natural selection. At any one time, there might be dozens of different products under development and money was directed by venture capitalists at as many as possible on the assumption that eventually a single innovation would win and drive competitors out of business resulting in huge dividends and appreciated share value to investors who purchased early.

On the east coast, business competed for audience share which was needed to establish a stable revenue base. Once profitability was achieved, investment was shared relatively evenly on the assumption that shifting audience preferences would cause audience share to fluctuate. Technology was of secondary importance; after all, no one needed to know how the television worked in order to place advertising on it.

As a result, culture had differing perspective on the value of information. The west coast, steeped in the unlikely union of protest culture and high technology (Boorsook 2000), predominantly held that “information wants to be free”. Technology was the primary source of value. On the east coast however, the opposite attitude held sway, characterized with typical irony by Wolff, as: “information wants to be paid for” (1998, p 57). The audience was paramount and information was essential for attracting

audience value, either through subscription payment or as a means of aggregating audiences for advertisers. In the combination of these two cultures, the concept of “audience share” took on the new meaning of “audience monopoly”. Investment flooded into dot.com start-ups boasting a “killer app” which would bring users into the orbit of a limited set of predictable sources of value.

Nevertheless, despite a flood of resources never before seen by media providers, generating revenues from Internet business was an elusive goal. In order to expand their share of the audience, online businesses used their stock values to buy up unprofitable competitors at vastly inflated prices. But with no stable revenue-base, the money was being consumed much faster than it was being made. The rate of loss was referred to as a company’s “burn rate”—the amount of capital divided by monthly expenses as an approximation of the time left before bankruptcy. The burn rate of Internet companies was astounding although rarely publicized or even acknowledged. According to Wolff, “...while this was true of...the new Internet industry and while everybody knew it was true—that cash was being consumed at a rate and with an illogic that no one could explain, much less justify—you must never, never admit it” (Wolff 1998, p 101).

Dozens of other dot.coms followed the IPO pattern—Amazon.com, eBay.com. DoubleClick.com—all with negative revenues but offering big pay-outs when the supposed destiny of the Internet was realized and all commercial activity migrated to the Internet. It became standard practice for stock ratings firms to assess the value of a company based on non-financial criteria such as its user-base or “mind share” (Morgenson 2001). Profiting from each of these market miracles were venture capitalists

and investment banks such as Morgan Stanley, Goldman Sachs, and Merrill Lynch who underwrote high-tech IPOs for a significant ownership stake in newly publicly traded firms. Analysts from these firms were among the most enthusiastic promoters of Internet stocks, consistently over-valuing money-losing companies. Henry Blodget of Merrill Lynch and Mary Meeker of Morgan Stanley were easily the two most influential analysts. Their buying recommendations were always positive—particularly for companies in which their respective firms had a stake (Cassidy 2002, pp. 94-97, 200-201; Morgenson 2001; Kurtz 2000, pp. 136-138, 153-157).

Investing patterns changed during the height of the Internet boom. During the year 1999, 79% of all stocks on the New York Stock Exchange (NYSE) traded hands and the volume of trading on the NASDAQ market was three times higher than in any other market in the world. The average length of time a stock was held had dropped from two years to eight months (Morgenson 2000). It was a highly volatile market in which a company's value was halved and then quadrupled in the space of weeks.

In the early months of 2000, the bubble surrounding publicly traded high-tech and Internet stocks burst. In one week, between April 10 and April 14, the NASDAQ lost one third of its value, totaling over US\$2 trillion dollars. It was the worst market crash in history (Kurtz 2000, p. 295). Figure 2.4 (p. 59) depicts the stock value of four Internet-active companies between 1998 and 2003. As the figure shows, this market has not recovered.

As indicated by journalist Howard Kurtz (2000), Internet companies drove this speculation through active public relations campaigns to sway the opinion of media and

Figure 2.4
Selected Internet/High Tech Firm Share Prices 1998 - 2002

Source: Barcharts.com (2003)

investors. As well, amateur investors were bedazzled by all the information made available on the Internet, but did not have the necessary background to understand it. Cassidy (2002) suggests that the responsibility belonged to the media itself, particularly those media firms with a financial interest in the Internet economy who profited from their increased share value. Many of the dot.com participants interviewed by Kait & Weiss (2001) maintain that the foundation of the industry was sound but the competition was too fierce for Internet business to survive. Wolff (1998), who provided his picture of the Internet media business while it was still booming, suggests that it was the product of unbridled greed and unrestrained arrogance on the part of digital entrepreneurs.

While all of these perspectives are valid, they over-look the observation that the value of Internet stocks—the value of digital media itself—was based on the participation of audiences. The attention paid by Internet users to commercial value sources was internalized into the market itself. Users did not respond in sufficient numbers to sustain stable revenues for digital media making collapse inevitable and the possibility of an “Internet economy” more remote. As Licklider observed in 1967, and as demonstrated through the collaborative development of Internet culture and uses, the value of the Internet is in what is created by its users. The products of this collaboration are heterogenous and unpredictable. Commercial information and service providers attempted to make the Internet work to their benefit by developing value generating structures for the medium and waiting for users to participate. They did not. This analysis is discussed in depth in Chapter Four which looks closely at advertising on the Internet.

In conclusion, the failure of the Internet as a commercial content medium cannot be traced to the agency of a single group of actors. Rather, it was a systemic failure evident from the earliest phases of the Internet's commercialization. Privatization of the Internet and regulatory liberalization in the communications sectors were justified on the grounds that commercial interests coincided with those of the public. When this assumption was put to the test, it proved to be the case that the interests of the public at large diverged wildly from commercial expectations. This does not, however, indicate that commercial designs for the Internet have or will cease; on the contrary, it implies that the public interest is an obstacle to be overcome. This marks a turning point in the development of the Internet as new structures are developed in the future which will inhibit rather than encourage user agency.

2.4 Conclusion

Tracing the trajectory of the Internet from a packet-switching networking experiment to commercial media provides a number of observations relevant to the subsequent discussion of Internet advertising.

Communication technology such as the Internet has a profound impact on social relations, eliminating boundaries of time and distance, facilitating the circulation of information, and creating new forms of social interaction. But while technology has brought down barriers, it has also had the potential to raise new ones. As it may free information, it may also provide the means to better control its dissemination. As it serves as a catalyst for new social formations, it also bounds and limits these relations

within prescribed boundaries determined either by the form of the technology itself or by some other extra-technological set of criteria.

From the earliest experiments with packet-switching networks, through the controversies over network and hardware standardization and over the X.25 protocol and the Open Systems Interconnection framework, the technological design of the Internet was deliberately structured to place as few limits as possible on the ways in which information circulated. That international development and negotiation over these priorities was sustained over the course of several decades serves to indicate that the desire for an open communication system was not an accident or the product of strictly political or technological imperatives. Nor, since commercial computer networking developed prior to and along with the Internet, was the technology structured in this way because its commercial applications had not been considered.

For this reason, it is the argument presented here that the Internet was developed with the objective of minimizing *a priori* structural limits—whether through proprietary standardization or a linear and hierarchical resource organization scheme—thereby maximizing user agency, input, and collaboration. The Internet provided far greater social utility than all other communication systems. It is further argued here that this social utility became the reason for its widespread popularity in the 1990s and remains the key aspect of its appeal.

The privatization of the Internet and the introduction of commercial information providers represent ongoing attempts to develop a structure capable of converting some or all of this social utility into a marketable commodity. This implies reducing the

surplus utility of users in order to increase the marginal utility to commercial operators and providers. Furthermore, the importance of developing the Internet for this purpose extends far beyond the medium given the unique capacity of this communication network to extend value acquisition across the media spectrum and the commercial spectrum as a whole. As will be discussed in subsequent chapters, advertising is only a single commercial application intended for this purpose, but one which inter-relates with content provision and other commercial applications of the Internet.

Finally, the importance of the 2000 crash cannot be overstated. It changed everything—not only the commercial landscape as companies shrank and went out of business, but also expectations about the commercial value of digital media. It is argued here that it dispelled the speculative hype and created awareness that technological innovation was not by itself enough to impose a structure necessary to generate meaningful value from the medium. Technology will require restructuring according to commercial imperatives if it is ever to provide a return on investment. In the future, commerce on the Internet will not be like trying to “sell wine without bottles” (Barlow 1994). The only way the Internet will be made profitable is by developing new ways in which users are able to interact with and through it. The future of the Internet will not be about selling wine—it will be about selling straws.

Chapter Three

Theorizing an Effective Internet Audience Commodity

Here men are demoralized in the shortest possible time at
the largest possible scale, at the cheapest possible price.

(Soren Kierkegaard, cited in Dreyfus, 2001, p.78)

According to Internet pioneer and TCP/IP designer Vinton Cerf, the Internet is a medium which is inherently “stateless” (Marine, Kirkpatrick et al. 1993, p. xx). Not stateless as we might think of it as unbordered by national boundaries (although this is certainly also the case), but “stateless” in terms of the relations between the various elements arranged within this network of networks. As it is used here, the term emerged alongside the development of digital computation. Computers sort many millions of random bits per second ordered according to a set of programmed instructions. In a particular program environment, “The state of a system at a given instant is the set of numerical values which its variables have at that instant” (Ashby 1960, p 16). In these terms, a state is a fixed value of a variable possibility which contributes to the output of the system as a whole, defined within the program environment or “state space”.

The application of the “state space” concept is not limited to computing applications. For the purpose of locating a ship at sea, for instance, normal three-dimensional geophysical spatial co-ordinates are effective under most circumstances. To direct artillery shells at this same ship, much more information is required: its orientation, speed, position relative to the level of the ocean, the position of sensitive points of

contact, and so on. The state space required here means moving well beyond three dimensional space into a multi-dimensional abstract space relative to the specific function of firing artillery, not the space of the physical world. State space is an abstract instrumental space; space existing only in terms of a specific purpose.

In terms of its technological structure, the Internet is stateless to a much greater degree than other communications media. Unlike electro-mechanical telecommunications networks, information is not "known" by the medium it travels across. The only function an Internet network serves is to direct packets. The network does not need to know which packets belong to which message or even what type of information a packet contains. The Internet network arrangement is simple and open because packets are stateless.

Similarly, the applications developed to operate over the Internet were predicated on the statelessness of the medium. The World Wide Web provides the most striking example of a stateless communications application. It was designed to associate dissimilar files and documents according to unique user selection, not according to an *a priori* indexical structure. This inherent statelessness was enhanced by the low technical and economic thresholds to content production which increased the volume of information available on the Web. It is a vast information environment, a stateless channel on a stateless medium created and ordered by information users, not by information owners.

For commercial network operators and information providers, the inherent statelessness of the Internet is a problem. Well publicized engagements between the

music industry and Napster and the ongoing threat of computer hacking and network viruses provide an illustration of some of the ways in which debate over this problem has been framed. In this context, statelessness is a threat. It suggests the need for better technological and regulatory protections for copyright management and transaction security. While the intent of these efforts is to guard against unauthorized or unpaid access to protected systems and information, these protections also serve to extend the rights of property owners not only over which information is accessed, but *how* it is accessed. Critical research has illustrated how copyright and security management technologies participate in the process of transforming the Internet as a whole from a stateless space to a commercial state space (Winseck 2002, 2000, 1999; Mosco 2001, 2000, 1999; Lessig 1999; Bettig 1997, etc).

Internet advertising is another domain in which the statelessness of cyberspace needs to be overcome. While the primary social issue arising from Internet advertising from a public interest perspective pertains to personal privacy (Steeves 2001; Lessig 1999; Gandy 1993, etc.), the introduction of advertising to the medium is only part of a much broader transition from stateless social space to commercial state space. Its significance is twofold. On the one hand, it represents the clear imperative to commodify Internet uses and users. On the other, as a revenue subsidy mechanism for content creators and network operators, it implies a particular configuration of institutional arrangements to supply and maximize the value of the user commodity.

Contrary to the inherent properties of the medium, for advertising buyers and sellers it is desirable to know where packets are being sent and to whom. Advertising-

active industries use this information to identify individual users according to commercially meaningful criteria. This is done to customize advertising thus maximizing advertiser surplus. The Internet provides the means to develop a technology-enabled commercial state space wherein the value of a user is a function of the network advertising process. Advertising therefore plays a vital role in the transformation of the Internet from cyberspace to commercial space.

Through the co-ordination of commercial interests, regulatory policy, and technological re-engineering, the Internet is being woven ever more tightly into the fabric of the commercial media. This process is best described by examining the political economy of mass communications and identifying how properties consistent with offline communications also apply to the Internet. Assumptions about audiences acquired offline have also been transferred to the Internet and have, in their reception by Internet users, been proven incorrect. The disjuncture provides an opportunity to inquire into the validity of audience commodification and the institutional forces which converge to seal these lacunae.

Understanding the actual contours of the Internet audience is beyond the scope of this study. It is, nevertheless, possible to indicate how commercially useful ideas about audiences have been applied to the Internet. In essence, the future of this medium as a commercial state space is predicated on fixing and assigning value to its audience.

3.1 A Political Economy of Advertising on the Internet

Approaching the study of mass communications in terms of industrial processes is only

one approach to research within the discipline. According to Blumler and Guerevitch (1996), North American research since the 1930s has tended to focus on media effects utilizing behaviourist psychological models or with reference to sociological models of media use and user gratification (e.g., Schramm 1964; Kappler 1960, etc.). The commercial relevance of such research is fairly obvious given that the question of how audiences use media has direct bearing on, for instance, audience reception and uses of advertising. Indeed, parallel research in market-oriented disciplines focuses extensively on media effects (e.g., Aijo 1996; Foxall 1993, etc.). The European tradition has generally been more critical, looking at the effects of mass communications on the signs and symbols of language and on ideology (e.g. Habermas 1989; Horkheimer & Adorno 1979, etc). However, as Jhally (1987) points out, all these approaches share the common tendency towards “the valourization of consciousness” in that they focus on the meanings and social uses obtained from mass communications media. While this is not to say that these approaches preclude examining the technological and industrial context of message creation, they tend to locate the use and exchange value of communications in the relationship between messages and message receivers.

Institutional and political economic analyses of mass communications take the alternate approach of examining the institutional context of message creation. Critical research in both these fields recognizes the important social, economic and political role of media and telecommunications in industrial and post-industrial societies; however, it also acknowledges the tendency in the communications industries towards convergence and monopolization. The two fields differ in that while institutional analysis points out

the impact of communication systems on the public interest in areas such as universal access, freedom of speech and privacy (e.g Lessig 1999; Herman and McChesney 1996), while critical political economic analysis regards commercial mass media as “a social process of exchange whose product is the mark or embodiment of a social relationship” (Mosco 1996, p 72). From this perspective, commercial interests are inherently corrosive to the public interest (as it pertains to social use value) which is an obstacle to commercial expansion. This is true both of the commercial mass media and throughout the market system as a whole for which communication technology is an indispensable component.

From a political economic perspective, the key question for consideration is the manner in which communications users and communications institutions mutually produce one another. One of the problems encountered when attempting to answer this question is to attribute too much causal agency to one side or the other. By adopting a social constructivist position and citing users as the originators of the media relationship, one runs the risk of ignoring the material conditions within which communications take place. But on the other hand, one slides in the opposite direction into determinism if one focuses too much on the way institutional forces give shape to this relationship without also taking into consideration the multiple ways social actors use and shape mass communications. The axial component of this problem is the audience: How do mass communications institutions create and make use of audiences, and how do audiences create this role for themselves?

Vincent Mosco in *The Political Economy of Communication* (1996) isolates three

entry points into an analysis of mass communications. The first of these, commodification, refers to the process of converting the use value of socially or naturally occurring phenomena into salable commodities having an exchange value in the marketplace (p. 141). In the field of communication, the focus of analysis from this direction tends to be on either information or audiences as the primary source of media value (p. 145). The second point of entry, spatialization, refers to the inter- and intra-organizational arrangements of commodities and production process in order to overcome physical and temporal limitations and maximize value (p. 173). Political economic research identifies the expansion of corporate power in the communications sectors through vertical and horizontal integration (pp. 175-177). The third entry point is structuration which refers to the reciprocal influence social relations have on institutions and vis versa (212-13). This area is particularly relevant to mass communications as it summons an examination of the social and historical processes implicit in the development of mass communications media.

Approaching the Internet as a mass communications medium is possible from any of these three entry points. In terms of commodification, it has been witness to a variety of strategies to develop information and audience commodities. Due to its technological capacity and the interests of its dominant commercial stakeholders, it has catalyzed horizontal and vertical integration between information and network providers. And an approach from the direction of structuration is available by examining the steps taken in the gradual conversion of social usage into network value. Approaching Internet advertising from any of these three points is also possible , but is examined here primarily

through the lens of commodification.

Taken together, communications firms are industries which, like any other, produce and sell products for profit. The specific product of these industries varies in accordance with institutional criteria such as technological capacity, regulatory boundaries, market position and so on. The product of the telecommunications sector, for instance, is access to physical communication networks which it sells to customers according to various billing arrangements depending on the type of demand and usage available. The film and music industries, mainly produce entertainment content which is packaged for sale both directly to consumers through recordings or theatrical release, and indirectly by repackaging and resale as music videos, video rentals, radio and television broadcast, and so on.

While access and content revenue streams are also available to commercial print and broadcast media providers through cable and/or delivery subscription fees and through content licencing, the overwhelming majority of revenues for these media are secured through the sale of advertising space or time to other industries wishing to access a mass audience. In effect, while telecommunication companies (telcos) are able to charge on the basis of their control over network access, and entertainment producers charge based on their control over the means of content creation and distribution, commercial media differs in that it is able to charge on the basis of its control over access to a mass audience.

As depicted by Smythe (1981), Streeter (1996), Jhally (1990, 1987), Ewen (1976) and others, the advertising sponsorship model played a particularly influential role in the

historical development of electronic broadcast technologies. Factors such as physical costs, bandwidth scarcity, patent distribution and government regulation (or the fear of it) contributed in shaping broadcast media into a one-way advertising delivery system presided over by a limited number of participants. Other developments such as content syndication and national broadcast networks accompanied technological advancements allowing broadcasters and advertisers to reach larger audiences while at the same time refining audience-value according to time, region and content.

To the extent that the Internet is regarded as mass media, its appeal transects the entire spectrum of the communications industries. Not only does the Internet provide a new market for media and communication service providers, it also provides the means to combine all of its various commodities—access, content and audience—within a single medium. It has the technological capacity for secure, centralized sales and financial transactions between buyers and sellers. As well, it possesses the potential to deliver specific users to specific advertisers on the basis of a rationalized cost structure through user monitoring

In other words, the Internet provides opportunities for both the intensification and extensification of corporate mass media enterprise (Mosco 1996, pp. 150-160). On the extensive side, it provides the opportunity to expand existing operations into a new media channel and to potentially leverage existing offline businesses into previously inaccessible markets such as content provision by telcos or direct “pay-per” content transactions by mass media audience producers. On the intensive side, the technology provides the means to maximize the value of its existing commodities either through

direct user payment or through refined audience measurement. Taken together, the Internet collapses existing divisions faced by offline media and presents the potential for an end-to-end, lower cost, higher yield, reduced “noise” marketing channel—an ideal commercial state space. In terms of advertising, this means greater value to converged Internet media owners who could potentially command far greater control over audience share and increased bargaining power with advertisers over audience value.

The development and exploitation of this commercial state space has been forestalled however due primarily to two main factors. In the first place, users themselves have proven reluctant to voluntarily provide their time and money to supporting commercial activity on the Internet, particularly where online content is simply a repackaged version of information abundantly available offline. User indifference has arrested much of the commercial development on the Internet which took place in the 1990s. The second factor is the rivalry inherent in all commercial activity. Buyer-seller relationships are adversarial as each competes over the value of contested commodities. As the Internet has yet to threaten their ability to access consumers, advertisers have been reluctant to support online media and have only done so on terms of their own choosing thus depriving this medium of a revenue source available to other offline media.

The onus then is on media and network owners with aspirations to online dominance to develop and demonstrate the value of an audience commodity on the Internet. This has involved horizontal and vertical integration between media and network providers both on and offline, and it will also involve developing effective means of measuring and intensifying the audiences which currently exists.

3.2 Ratings and the Audience Commodity

Understanding media as a business enterprise requires understanding what it produces. This is the question addressed by Dallas Smythe's (1981) audience commodity thesis. His concept is relatively simple but has a number of interesting implications. Smythe argues that the commercial broadcast industry's primary commodity is not the content it produces and sells to consumers; rather, it is the audience which it assembles and packages for sale to advertisers. Drawing from the Marxian tradition, Smythe suggests that the media operates in much the same manner as industrial capitalism by exploiting the labour of its primary audience commodity for the "consciousness industry". His argument is leveled as much against western Marxism as it is against the media, arguing that the failure to recognize mass communications as central to capitalist production is a "blind spot". According to Smythe, not only are audiences a commodity, they also labour by marketing goods to themselves in ways which include spending time watching advertising, maintaining their communications hardware, and by subsidizing the marketing efforts of consumer goods manufacturers by paying the advertising tariffs concealed in the price of products. The notion of audience labour, while an interesting analogy to describe the relationship between audiences and the material conditions of the media, is difficult to sustain into a full-blown extension of Marxian political economy of mass communications (Jhally 1987; Mosco 1996).

Media messages are merely a secondary effect, a "free lunch," Smythe argues making reference to the custom of providing food to tavern-goers to induce them to drink more. "The program material is produced and distributed in order to attract and hold the

attention of the audience so that its members may be counted...and sold to the advertiser” (1981, p 8). This insight draws a line between message creation and message reception. It separates the audience from the generative role assigned to it both by commercial media institutions and cultural critics who stress the ideological or social dimensions of media and dislocates message-meaning from its centrality in culture-based media analysis. In terms of media production, the audience is first and foremost a structural category of the media system and not the embodiment of a shared communal preference for a particular arrangement or method of arranging symbols.

The medium is not the message, it is the audience. It is both the source of media revenues and the alibi for media production. From the perspective of the audience however, messages can have any number of meanings and people can adopt any number of postures in relation to these meanings. It also follows from this that very little can actually be known about the audience from channels tuned into and programs consumed. But this does not suggest that audiences are completely autonomous agents in a media marketplace. They are still constrained in what they consume by the choices made by media producers.

Smythe’s analysis focuses as much on a critique of ideology as it does on a structural critique of the institutions of capital. He locates within the media a source of cultural hegemony which serves as a filter, screening out ideas contrary to its own ideological orientation (1981, p 16-17). In effect, on the one hand he argues that the audience is the commodity of the broadcast media, but then suggests that this relationship is a red herring which is actually concealing the production of consciousness. While this

is not to say that media are incapable of producing both audiences and consciousness at the same time, stressing an ideological function over institutional processes suggests a much different direction for media research than that implied by the audience commodity thesis. Jhally notes that by stressing the ideological nature of the advertising-audience relationship, Smythe ultimately succumbs to his own "blind spot" (1987, p 73).

The "free lunch" metaphor is much more applicable online where the cost of delivering content to users drops to insignificance than for either print or broadcast media. The volume of materials available on the Internet from commercial and non-commercial sources, either from the WWW or any other use, and the person-to-person messaging uses, further lowers the significance of content as a target for fixing valuations of the Internet audiences. It is difficult, in fact, to refer to the mass of Internet users as an audience at all.

Even those involved in Internet advertising are aware that the Internet has changed the way in which value can be extracted from audience participation. The Internet audience is not a "mass" in the sense which led Smythe to speculate on the consciousness-creating properties of media. Users have far more autonomy in their interactions with the Internet and it is difficult to regard them as passive receivers of "pushed" information. A fault has emerged between the Internet "audience" and advertising buyers and sellers.

But if Smythe is to be criticized for his own "blind spot" as Jhally suggests, it needs also to be pointed out that this same blind spot afflicts those parties who partake in the commercial advertising relationship. Trends in online audience cultivation are

oriented towards identifying commercially useful behaviours on the part of individual users and targeting advertising based on monitored surfing patterns. But the ability to customize advertising is not a shift from “mass” to user-specific advertising; rather, it is a shift from mass to niche consumer segments. This shift is consistent, however, with the assumption that the “audience” is still a naturally occurring commodity but differs in identifying certain consumer segments as displaying different patterns of consumptive behaviour (i.e., as having a particular “consciousness”). Here the Internet provides an advantage over all other media in the ability it provides for precise demographic targeting.

The mass to niche shift implies the refinement of audience value on the basis of cultivating consciousness, only at a more local level than previously available. Looking from the perspective of Internet media practitioners, the audience is still a category of the system, but the means to apply segmented value to users is more readily available. The demonstrated lack of user interest in Internet advertising would seem to deny the validity relegating them to such a role. Hence, this implies that the blind spot for advertisers is in regarding them as a source of value at all.

If the disjuncture between advertising and audiences on the Internet represents a fault in the system, it is not regarded as a limitation of the medium but as a condition for utilizing it to develop and trade audience segments. It is here that the rupture between advertising buyers and sellers emerges. The issue is not whether Internet audience segments have value, it is what this value is and how best to measure it. If user indifference proposes one obstacle to the utilization of the Internet as an advertising

vehicle, it is only a secondary consideration. Mosco (1996, pp. 150-156) points in this direction with his notion of the “cybernetic commodity” which he draws from the work of Eileen Meehan (1984) in her analysis of the broadcast ratings industry. By examining the conditions under which audience information is gathered, the “blind spot” of advertising becomes apparent.

Meehan opens up the question of the commodity of broadcast media by pointing to audience data acquired by ratings firms such as A.C. Nielson. She argues that, “The blindspot...has been neither cultural production or audience production, but rather the effects of the closed market for ratings that is formed by the intertwining of the advertising, broadcasting and ratings industries” (1984, p 216).

The product of the ratings industry is the demographic information it gathers and sells to both broadcasters and to advertisers. Ratings are a product of institutional practices and priorities which interact with those of its clients to participate in the production of the broadcast system. According to Meehan, two core assumptions underlie the ratings industry: 1) audiences are a naturally occurring phenomenon which are not created by the broadcast system; and 2) ratings serve as the basis for broadcasting decisions. The extent to which both of these assumptions are false is indicated by Milavsky (1992) who analyses the implications of the shift in Nielsen’s data gathering methodology between 1986 and 1988.

The switch from “passive” set-top boxes and viewer diaries to the “active” people-meter system of having viewers indicate their viewing habits by means of a special button pad considerably shifted the results of media measurement analysis

revealing a much different picture of the television audience. One of the more significant results was that ratings for the biggest broadcast networks dropped while the rates of specialty cable viewing increased. The controversy was significant enough for the broadcasting and advertising industries to sponsor a special Committee on Nationwide Television Audience Measurement to discuss this measurement crisis.

Nielsen participated by revealing portions of its measurement methodology which led to even more alarming revelations about broadcast ratings. Of the typical sample size of 4000 U.S. homes using television (HUTs), usable response rates were often as low as 35%, requiring a more liberal analysis of viewing patterns to yield usable results. Furthermore, given the amount of work required from viewers and the installation of the necessary equipment, low household recruitment rates suggested that Nielsen families might not actually represent a truly random sample of HUTs in the first place—the prime legitimizing basis of quantitative analysis. The findings of Audience Measurement Report serve to demonstrate Meehan's questions of broadcast media ratings. Even broadcasters themselves had to acknowledge that the way audiences were measured played a much a greater role in creating audience commodities than the way audiences behaved.

But why then, should ratings be trusted? As pointed out by Meehan, without ratings to measure the audience, broadcasters would not have a commodity to sell and would not be in business. "Only after agreeing on a basic method for producing measures of productivity and quality could broadcasters and advertisers move to the real business at hand—the buying and selling of audiences according to a rational price structure" (1984, p

222). Essentially, advertisers want access to the audience and broadcasters want to sell them—bad ratings are better than no ratings at all.

Another key aspect of Meehan's case is the implication that despite the empirical research methods used to calculate, assign value to, and develop content to attract audiences, the lack of supportable data for any of these activities makes all these values subjective (Gandy 1993). Their validity depends on a set of mutually agreeable assumptions which only become measurable once objectives for the media system as a whole are negotiated between interested stakeholders. Measurement and analysis of media audiences is an *a posteriori* analysis predicated on institutional goals, not audience preferences. The intra-institutional processes which comprise the ratings industry are themselves a blind spot which obscure the reality of the audience—albeit a highly convenient blind spot which permits the broadcast industry to continue to function.

Taken together, Smythe, Meehan and Milavsky's arguments offer significant insight into the ongoing quandaries of the Internet advertising business. For the most part, data on information usage is acquired by Internet publishers themselves or by agencies acting on their behalf. As such, their conflict of interest in negotiating audience value is obvious. This has created doubt on the part of major media advertisers such as Proctor & Gamble whose participation, highlighted in following chapters, is emblematic of major advertisers as a group.

Publisher-provided measurement tends to focus on the value of the medium for advertisers; however, users respond to Internet advertising in remarkably low numbers. Since the lack of consumer response has gradually become harder and harder to disguise,

initial advertiser doubts about the value of the medium have become entrenched and the Internet remains a minimal destination for advertiser investment. Ongoing negotiations between advertisers and publishers over measurement now reflect the conflicting nature of the buyer/seller relationship in advertising. Advertisers clearly display the upper hand in these negotiations as publisher revenue sources are limited. They have lobbied for a number of measurement concessions from online media producers including: the adoption of industry wide standards which will make the Internet measurable in terms of offline media; measurement practices which would oblige publishers to bear a portion of the cost of accessing audience segments; and transferral of the measurement function to a third party ratings bureaus—a market in which A.C. Nielsen is clearly as dominant online as it is offline. In the meantime, they have become more focused on their own efforts to use the Internet to augment their own direct marketing practices. Audience sellers, on the other hand, are eager to demonstrate that the measured value of audiences on the Internet belies the cost-effectiveness and inherent value of developing brand consciousness in target consumer segments—in other words, on the Internet, consciousness is for sale cheap.

All of these developments are discussed further in subsequent chapters, but it is worth noting that neither advertisers nor publishers doubt that the Internet is a commercially valuable environment, only that present conditions within the industry do not support the conflicting interests of other participants. Furthermore, it can also be pointed out that commercial proposals for the medium from either side of the divide suggest a common interest in bringing the Internet into a more commercially secure

environment with embedded assumptions transferred from offline media advertising.

In conclusion, Internet advertising represents a shift in the audience-advertising relationship and the audience buyer/seller relationship. The Internet separates advertising from its content and conjoins it to the data that advertising businesses acquire about users. But like offline advertising, the value of the enterprise is inherent in the audience, or, more precisely, in the information acquired about the audience. Paradoxically, since the available data seems to suggest that audiences have no real interest in advertising, what then justifies its existence? Clearly not its ability to generate a commodity; rather, it is justified through its attribution of desirable consumer behaviours. In order for Internet advertising to sustain its existence, it is not enough to market to an anonymous audience. It needs to find and create an effective audience.

3.3 The “Effective” Audience and Media Consumption

As presented in the preceding sections, understanding the Internet audience presents a triple paradox for media industries. Taken from Smythe as well as broadcast media practice, it is clear that the audience is a category of the media system. The first stage of the paradox occurs when it becomes apparent that audiences do not represent demand in themselves but only appear as an alibi to justify the converged interests of commercial publishing, advertising and ratings institutions. The second stage of the paradox, made evident ironically by the refinement of audience monitoring techniques, is that users have opted out of their assigned role. Given the manifold opportunities for user interaction with and through the medium, the audience represents not so much a commodity for

Internet advertisers as it does a crisis. And this ushers in the third stage of the audience paradox on the Internet. Because of uncertainty about audience value, it behooves the audience industries to redefine the audience and focus on creating strategies to harness the consumptive powers of an “effective audience”.

Cultural studies theorist Raymond Williams noted “there are no masses, only ways of seeing people as masses” (1961, p, 289). This is one of the main points developed by sociologist Ien Ang in her work relating to media (1996, 1991). Drawing from Foucault’s perspective that “knowledge is one of the defining components for the operation of power in the modern world” (1991, p. 8), she argues that the construction of audiences is a discursive practice geared towards the institutional goals of controlling the conditions of their own existence. The media is a “bureaucratic structural arrangement” (1996, p. 45) in which the audience is separate from but nevertheless situated within the material base of the media institutions.

Looking at audience research, Ang draws attention to the scientific rationale which provides its legitimacy as a “concrete discursive practice” enabling an understanding of the complex practices of media consumers as something that can be known and controlled (1991, p.8). She contrasts this against the heterogeneous uses to which media is employed by its users. As her research into the ethnography of television viewership indicates, the continuum between producers and consumers of media products is not fluid; rather, television viewing is an “autonomous struggle between texts and the individual” (1996, p. 38). To put it simply, watching involves interpreting and filtering messages, either actively or passively, according to the watcher’s tastes, social and

physical environment, and so on. Given the variety and combination of negotiations engaged in by viewers, scientific measurement and analysis truncates the “meaning” of television into a useful analytical construct.

Ang’s critique of the commercial media is epistemological, not ideological—about what is not said about media audiences and about what can be said. Ang notes that questions inconsistent with scientific formulation—as is often the case in social research—are dismissed as unscientific and excluded from institutional consideration (1996, p. 44). Hence, audience feedback from media participation is filtered through an analytical system capable of generating a limited set of outputs determined by the parameters of the system—in this case, audience value generation. Measurement is the key to the commercial state space of the media as a whole. It legitimizes and maintains the institutional structure of the media.

“Institutional knowledge is driven towards making the audience visible in such a way that it helps the institutions to increase their power to get their relationship with the audience under control, and this can only be done by symbolically constructing ‘television audience’ as an objectified category of others that can be controlled, that is, contained in the interest of a pre-determined institutional goal” (1991, p 7).

The negotiation between media users and media institutions is inherently determined by those able to own and shape the goals of the system. Hence, audience agency is inevitably constrained by institutional structure. “The world of actual audiences is too polysemic and polymorphic to be completely articulated in a closed discursive structure” (1991, p. 14). Again, the Internet is to date still a medium which imposes a much smaller set of limitations on its users. Hence, gaps in institutional knowledge about

the Internet audience are much wider than within the enclosed structure of traditional offline media. Assumptions from these avenues have led to multiple contradictions in the application of media principle to Internet practice.

The Internet has disrupted the stability of existing assumptions about audiences thereby highlighting contradictions which are inherent throughout the construction of consumer society. As recent history demonstrates, the extent of these contradictions expands to critical proportions in the context where information technologies maximize the subjective tactics of user participation while at the same time offering minutely refined techniques for exploiting consumer behaviour on the Internet. What has emerged is a vastly different picture of media usage and social consumption from that which was thought to exist. This implies for the commercial media the need to revisit assumptions—either those about the social uses of media or about institutional imperatives inherent in media.

This has not been missed by media practitioners and particularly those in the field of market demand management. It is important to recognize that concepts such as “surplus of meaning” are not strictly the property of sociological speculation. On the contrary, the implications of the heterogenous users and uses of media—and, by extension, all mass produced goods—are of central concern to the producers of commercial products. This is illustrated in the literature of the discipline of marketing which, like all other public and private institutions, now finds itself obliged to address the same challenges in adapting to an “information society”.

As an information driven economy provides consumers with an overabundance of

choice, the ability to predict what consumers will purchase diminishes. The thought generally expressed in market research is that chances of acquiring consumer patronage can be maximized with emphasis both on internal business structure and on external demand management. According to Aijo (1996), in order to profit in the information marketplace, producers need to lower costs, raise quality, speed up innovations, unbundle product offerings (ie. product differentiation and selling product components separately), and develop relationships with target consumer groups to encourage repeat transactions. Morgan (2002) provides a useful breakdown of marketing approaches into three categories: 1) sociological, which seek to understand the demand side of consumer choice and the integration of business into the context of this demand; 2) economic, which focus on supply side organization of operational factors which aim to maximize the value of transactions; and 3) strategy and organization, focusing on management and organizational adaptation to changing market conditions. While it can be assumed that this breakdown is by no means exhaustive, it does provides a useful means to examine assumptions within the field more critically.

One aspect worthy of particular emphasis is the implied division between internal organizational functions and external demand functions. Frequently, the consonance of these functions is justified by situating them in a socio-historical context. Aijo (1996) and others (Brownlie 1992; Dalgic 1994; Gummesson 1996; Nantel 1996, etc) suggest that from the 1950s on, Fordist mass production became less suited to the actual social context of demand as consumers were given greater choices in their consumption. This disjuncture has widened with the diffusion of information technologies and today calls for

the present strategy of identifying key consumer groups and building life-long relationships with consumers in smaller niche markets. This represents a shift from Fordist economies of scale to post-Fordist economies of scope which offer low margins but high volume business. Branding is a means by which firms are able to spread horizontally across the market by utilizing consumer loyalty in one domain to leverage their entry into others.

Far from harmonizing contradictions, however, this perspective rationalizes contradictions by making a number of assumptions which are internalized into operational practice. From a critical standpoint, this perspective expresses a technologically and economically deterministic account of Western consumer culture which grounds itself in the existence of the marketplace. In the first place, it assumes that market demand is a naturally occurring phenomenon, not an institutionally stimulated activity. It furthermore suggests that demand is the same thing as consumption and that consumption is constrained in the absence of markets and technological innovation. Secondly, there is the assumption that markets form and organize themselves around this naturally occurring demand—which is certainly not the case particularly where consumption is a commodity itself to be bought and sold as in the case of the audience commodity. Thirdly, it is assumed that demand is better understood and met through the application of technology—specifically information technology. If this is the case, it has yet to be demonstrated in the context of Internet advertising where it is highly doubtful of ever succeeding without radical re-engineering of the network environment within which consumer participation takes place. And finally, it is assumed that the expansion of

markets enabled through information technologies will mutually enhance the satisfaction of all marketplace agents, consumers and producers alike.

These assumptions are precisely those adopted by advocates of the digital marketplace. It is hardly surprising that the Internet has been subject to a great deal of speculation regarding its potential as a commercial medium. From the perspective of enthusiastic digital entrepreneurs, the Internet provides a means to expand their markets and compete in the global market while focusing on core specializations and building lifetime relationships with targeted consumer segments (Bishop 1996, 1998; Westland & Clark 1999). Entrance costs are low, the reach is broad, and feedback is easier than ever. On the demand side, the fragmentation of the market into a panoply of specialized Internet markets provides consumers with a new medium in which their choices are infinite and minutely customizable to suit every taste. On the supply side, technology provides the means to better co-ordinate the distribution of products and product information than ever before.

To stress the assumptive and institutionally generated nature of these pre-suppositions, it would follow that if these assumptions about consumers are erroneous in whole or in part, then the principles upon which market pursuits are mobilized serve not as the basis of a social relationship, but rather serve as a means to create and maintain institutionally useful social relations. Contradictions would detrimentally affect both consumer choice and market growth. In short, what would inevitably ensue is the kind of market failure witnessed in the collapse of Internet industries.

To return to Ang, just as audiences are “overdetermined” through the goals and operations of the commercial media (1996, p 41), so too have Internet users been assigned a static set of desires and behaviours converting them into a “construct...onto which large-scale economic and cultural aspirations and expectations, policy and planning schemes are projected, allowing...institutions to realize their ambitions to govern and control the formal frameworks of [the Internet’s] place in contemporary life” (1991, p. 2–insertion added).

Recalling the central paradox with which this section was introduced—that user recalcitrance in the face of commercial expectations calls for a renegotiation of one form or another—it is evident that solutions to this situation are limited. Either institutional assumptions about the nature of the Internet user need to be re-examined so that institutions can adapt to the context of its heterogenous users and uses; or the Internet itself needs to become a place where there is a reasonable chance that existing expectations can be fulfilled. Looking ahead to subsequent chapters, it is clearly the latter path which is being pursued through the institutional technological reconfiguration of the network from a stateless technological and social medium to a commercial state space.

3.4 Conclusion

The emergence of the Internet provides the opportunity to gauge the transformation of a communications medium from a social and technological apparatus to a commercial apparatus. It is the perspective adopted here that Internet advertising represents a stepping stone from what the Internet is to what the Internet will ultimately become—a

state space which defines users as consumers and which limits their participation on the medium through the foreclosure of the open nature of the network of networks.

Delivering more sophisticated content to Internet users such as voice communication, video-on-demand and rich media advertisements requires finding methods to limit the negative effects which stateless packet-switching has on the quality of the particular service in question. In addition to the variety of technological means presently used to impose a kind of state space on the Internet, there are many more under development at present which will extend the ability to measure, control and employ the variables of the Internet system.

Existential philosopher Soren Kierkegaard, speaking of the mid-19th century Danish press in the quotation which began this chapter, regards media as effecting a separation of individuals from the worlds they negotiate for themselves through their day to day interactions with their environment. The media abuses our subjectivity, enclosing us within an arrangement of representations customized according to interests which are not of our own choosing. His observation is particularly relevant to the commercial enclosure of cyberspace, an environment which has, at least to a greater extent than other media, granted participants the ability to engage with the information universe on their own terms. Only the conditions of this transformation are discussed in this research, not its effects on individual consciousness or human relations. But for Kierkegaard, this transformation is the leveling out of heterogenous subjective experiences of human beings forcing alienation from the products of our own media participation: consumer agents in a commercial state space.

Chapter Four

The Commercial Development of the Internet as an Advertising Medium

As outlined in previous chapters, perceptions regarding the social, technological and commercial utility of information networks have undergone a number of transformations over the last several decades. Perspectives remain divided, as evidenced from a variety of issues stemming from the development of global digital information networks as mass communications media. Among the many commercial applications adapted for this new medium, the institution of advertising is a critical development—both for the Internet and for the mass media as a whole.

The Internet represents a novel turn in the ongoing saga of the commercial mass media. On the one hand, by every recognized principle of media advertising, the Internet is better suited for commercial content publishing than any media heretofore developed. It is cheap, widely used, easily monitored and it also makes it possible to sell goods right through the screen. Information technologies have always played a central role in commercial enterprise. It is therefore no surprise that the widespread social enthusiasm for the Internet sparked enthusiasm regarding its impact on the speed, efficiency and growth of global commerce.

Users, however, have proven unwilling to lavish their attention and income supporting any particular commercial strategy. And because the Internet provides a host

of opportunities for commercial exploitation, it has also attracted a variety of competing interests to the medium. This has led to the situation where the pie is much smaller than everyone thought, and competing interests are arguing over the thickest slice. While not the sole reason for the explosion of commercial investment in the Internet, commercial sponsorship of Internet content production has been a significant catalyst.

This chapter examines the development of Internet advertising, focusing in the first section on its emergence and the divide between users and commercial uses of the Internet. It then goes on to examine the division between publishers as audience producers and advertisers as audience buyers by looking at the respective interests of each party regarding the best uses of the medium and the way in which the value of the Internet audience commodity should best be extracted.

4.1 The Development of Advertising on the Internet

The biggest single barrier to the success of Internet advertising and Internet business as a whole has been the disparity between commercial expectations about Internet users and their observed behaviour. This section focuses specifically on the development of advertising as a major industry on the Internet and highlights user response to this development.

The year 2001 set a somber tone for the advertising industry—and not just for the Internet. Speaking to industry representatives in early 2002 about the outlook for advertising in the coming years, senior advertising executive Martin Sorrell had little to offer in the way of comfort. As CEO of diversified advertising conglomerate WPP,

Sorrell described how his own firm—owner of longstanding leaders in the field such as Ogilvy & Mather, J. Walther Thompson, and Young & Rubicam as well as public relations firm Hill & Knowlton—saw revenues drop by US\$6.57 billion forcing cutbacks of 4000 jobs and a renegotiation of the firm's global strategy (Garner 2002). The market, according to Sorrell, had reached saturation. From now on, growth in the industry would come from expanding geographically into Asian and Latin American markets and by swallowing up struggling competitors available at bargain basement prices). From the perspective of one of advertising's most powerful figures, the industry's future lay in expanding market share through takeovers, not in refining the value of existing markets through new technologies.

That such a message should come from Sorrell is notable. Just two years earlier, with the market value of AOL in excess of the combined value of the entire US newspaper industry, old media providers were being told either to get online or go out of business. There were good numbers to suggest that this was sound advice. Between 1993 and 1998, the share of advertising revenues won by newspapers in the US dropped from 24.4% to 21.5% (*Economist* 1999a). According to one analyst from within the newspaper industry:

Newspapers risk falling behind just when the Internet is on the verge of becoming a true mass media....Current estimates are that the Internet will reach a critical mass for general acceptance in around five years [i.e. 2003]. It is already accepted enough to begin draining serious audience attention from our traditional media. (*Internetnews* 1998a—insertion added)

With increasing popularity throughout the 1990s, and given its potential for the digital transmission of all forms of media, it seemed natural that the Internet would outgrow and out-source all other media providers. Market analyses frequently depicted the growth of the Internet's audience relative to that of traditional media and highlight the migration of media audiences from television to the Internet (*Internetnews* 1998b). At AOL, television was regarded as the chief competition which they were actively seeking to emulate and replace by monitoring user activities relative to television schedules (*Internetnews* 1998c; Wolff 1998, p. 208), and by reducing the complexity of the medium down to a few buttons—just like a television remote (Cassidy 2002, p. 109). It was also the common perception that the Internet would sooner or later become the prime destination for advertiser investment (*Internetnews* 1998d).

The growth of Internet advertising was remarkable, outstripping the comparative growth rates of all other media over the short span of its existence (PWC 1998, 1999, 2000). Between 1996 and 2000, Internet publisher revenues from advertising grew at a rate of 150% per year (Hu 2000). With the marketing budgets of high-tech and Internet sectors expanding (Table 4.1, p. 95), Internet monitoring firms such as Jupiter Media Metrix and Forrester Research estimated that revenues from Internet advertising would balloon to as much as US\$33 billion by 2004 (*Economist* 1999b)—despite coming in at slightly under US\$ 2 billion in 1998 (PWC 1999)—with the bulk of the increase coming at the expense of old media publishers.

To offline media producers, numbers such as these demanded swift response. The Internet promised to do what they themselves could not—measure and monitor advertising

usage. And given the low costs for entry into the market, not only did it make sense for “old” media to get “new”, it was a matter of their survival to get online before they were forced off the map by upstart newcomers. Newspapers and other media firms looked to expand their reach to the Internet, sometimes independently and sometimes through partnerships and mergers in a converging media marketplace.

Table 4.1

High-Tech/Internet marketing budgets 1998/9 (million US\$)

Company	1998	1999	% change
Amazon	\$132.7	\$413.2	211%
eBay	\$36	\$96	167%
E*Trade	\$117.3	\$301.7	157%
Yahoo!	\$124.7	\$209	68%
Cisco	\$1,600	\$2,400	50%
AOL	\$623	\$808	29.7%
Microsoft	\$2,800	\$3,200	14.3%
Apple	\$5,700	\$4,500	-21%

Source: Behar 2000

The idea of using information networks to expand audience reach was not only a strategic response by media owners to adapt to new technology. Audience-buying advertisers also saw potential for the development of information networks to enhance the value of audiences. The idea of globally networked, user-monitoring cyber-societies had been explored many ways in speculative fiction ranging from George Orwell’s *1984*

(1948) to William Gibson's *Neuromancer* (1984). In 1992, before the development of the first Web browser, while the NII was still being considered, and while the Internet was still the domain of researchers and hobbyists, advertisers were speculating about how this network could be used to target specific users with commercial information.

Taking its cue from the cyberpunk genre of science fiction, advertising periodical *AdWeek* hit upon the concept of a "courtesy worm" proposed in David Brin's *Earth* (1990) which invaded the systems of impolite users warning them to amend their conduct. In *AdWeek*'s opinion, Brin's hypothetical virus fell short of its most practical use: advertising—"...wouldn't it be fascinating if there were ways of designing adviruses that truly enhanced the value of the program they were infecting?" (*AdWeek* 1992). The article went on to speculate that program designers might actually design their applications for the express purpose of attracting viral sponsorship. The prescience of the article surpassed Brin's own.

No doubt, some people will be virulently anti-advirus. They'll want software that scours and disinfects their PCs of any adviruses. The future of advertising may well become an epidemiological battle between the forces of digital commercialism and those who can't stand the idea that commerce has any place on The Net...(*AdWeek* 1992).

The article concluded that the outcome of this yet-to-be initiated controversy was a foregone conclusion: "Of course, we know who'll win that battle, don't we?"

With awareness growing over subsequent months, greater attention was paid to the Internet by advertisers and marketers who were eager to begin exploring its new possibilities. "There's a uniquely American network that's growing faster than John

Malone's TCI ever did; that's even more global than Ted Turner's CNN; and is light years more interactive than Barry Diller's QVC....It's called Internet. Advertisers and agencies take note: It has the potential to become the next great mass/personal medium" (*AdWeek* 1993). All the medium required was its own "Bill Paley" to take control and make advertising its central subsidy mechanism.

By 1995, for media owners the Internet promised considerable advantages over existing distribution channels for content production and audience aggregation. Once the initial hardware was secured, content was relatively quick and inexpensive to produce. In the case of traditional media providers, branching onto the Internet was simply a matter of repackaging offline content. Distribution costs were virtually nil by comparison to those offline. Of particular importance was the medium's interactivity. It allowed for user monitoring and instant feedback on the basis of which content could be customized to augment demand. This also promised to give publishers greater control over advertising rates by monopolizing user-data collection without having to deal with third party ratings bureaus. The Internet potentially provided publishers with new revenue sources from pay-per-use content billing and direct product sales.

Factors such as these, along with the widespread faith in the manifest destiny of digital media, conveyed the belief the Internet was *the* ideal medium for commercial publishing. From a strictly business perspective, it lowered operational costs, raised its audience-commodity value, enhanced the value of its information commodities, and potentially offered them a new role as commodity brokers for other industries (Yuan et al. 1998; Gordon & De Lima-Turner 1997; Rao 1997; Soh et al. 1997).

However, inasmuch as the Internet seemed to provide new opportunities for commercial publishing, it also provided a number of serious disadvantages due to a surge of competition from across the industrial spectrum. It also opened up their own regional markets to international competition. Publishers also had to compete for audience-share with the vast archives of information and user-generated content made available free of charge or from advertising. For this reason, while the costs of content distribution were lower than with other media, the costs of competition were very high requiring significant labour investment to keep content fresh and users coming back (Arparna 2001).

But despite the respective interests of advertisers and commercial publishers in the medium, figures depicting user response to advertising in terms of click-throughs (clicking on an ad to go to an advertiser website) cast shadow over their ability to use the medium as an advertising or a direct marketing tool. Response rates typically hovered around 0.2-0.3% (Figure 4.1, p. 99¹). To the extent that advertisers regard audience attention as “interest”, click-through figures notified them that users had little interest in advertising. Major advertisers like Proctor & Gamble, one of the largest media advertisers in the world, regarded data such as this as an indicator that it had no need to start investing in the Internet for product sales. Other major advertisers followed suit, creating an ad market in which a great deal of money was being spent on audience generation, but none was being earned through audience sales.

¹ The data contained in Figure 4.1 is drawn from a variety of sources including ratings bureaus and media reports of bureau-published data. As measurement methodologies are bound to differ, individual values cannot be established as concretely accurate nor regarded as comparable to one another and are provided only to indicate the industry-acknowledged trend of the low and declining user response to Internet advertising.

Figure 4.1
Banner Ad Click-through Rates 1997-2002

Sources: Microsoft 2003; Gutzmen 2001; Albert 2000; Gold 2000; Nielsen/Netratings 1999-2000; Hamilton 1998
 (data inclusive)

Users, it seemed, had little interest in the applications developed for commercial purposes. On the contrary, when asked about their uses of the network, it is still the case that electronic mail surpasses all other uses on the Internet. Information searching and research on topics of personal interest and health also figure prominently in surveys of user activities. Commercially relevant activities such as shopping or comparative pricing typically fall further down the list of preferred user activities (Ipsos-Reid 2003; UCLA 2003, p. 18; Winseck 2002, etc.).² The disparate interests of users seem to have little to do with seeking out and paying for access to information already available to them in a variety of forms offline. Then as now, these sorts of network uses are often overlooked in surveys designed to judge user behaviour in terms of commercially useful activities. Non-market oriented data revealed that, contrary to assumptions about their attitudes towards commercial activities, users were often involved in seeking out free information sources and services. Furthermore, as detected by the Pew Research Centre, while market-oriented surveys tend to track user activities in terms of long term usage behaviour, when tracked on the basis of day-to-day usage, participation in commercial Internet applications plays a very small role in user activities (Figure 4.2, p. 101). Information from other sources provides an even more unsettling picture of user interests

² The 2003 UCLA Internet Project Report for the 2002 survey year lists respondents most popular activities as: 1) e-mail or instant messaging (87.9%); 2) Web surfing or browsing (76%); 3) reading news (51.9%); 4) accessing entertainment information (46.4%); 5) shopping and buying online (44.5%); 6) hobbies (43.7%); 7) travel information (36.2%); 8) medical information (35.5%); 9) playing games (26.5%); and 10) tracing credit cards (24.2%). The industry-sponsored study also notes a year-after-year decline in online shopping interest (UCLA 2003, p. 18).

Figure 4.2
Daily Internet Activities

Source: Pew 2003

with the most commonly used search terms seeking access to copyright protected information (Table 4.2).

Table 4.2

Top 10 Google search terms in 2000

Rank	Search term
1	sex
2	software cracks
3	MP3s
4	hotmail
5	yahoo
6	napster
7	chat
8	warez
9	gnutella
10	porno

Source: Boutin 2000

This disjuncture between commercial interests and audience usage became harder and harder to deny between 1995 and 2000 and is ultimately at the root of the widespread collapse of the high-tech investment sector. For hundreds of dot.com businesses representing trillions of dollars in public and private investment, revenues from advertising were taken for granted. Of the thousands of sites offering commercial services to users, few had business plans that amounted to much more than “post content, sell ads” (*Economist* 2001; Kait & Weiss 2001, p. 115). The latent assumption was that sooner or later users would start clicking on the ads and moving their consumption to the Internet.

But inasmuch as dot.coms and other digital media firms expected advertiser subsidies, they themselves were the largest online advertisers (*CNET* 2000; *Internetnews* 1998e). And in the race to float IPOs, many dot.com firms spent heavily on public relations and advertising in print and broadcast media—as much to create investor awareness of their value as to create consumer awareness of their services (Cassidy 2002; Kurtz 2000; Wolff 1998). Marketing expenditures for Internet start-ups frequently exceeded their income. Kait & Weiss relate the case of one start-up, Hotjobs.com, spending everything it had on a thirty second Super Bowl spot in its efforts to go public (2001, p. 129). Most dot.coms followed the same pattern, providing temporary advertising revenues for other online publishers which eventually dried up as these advertising sources went out of business.

According to author Douglas Rushkoff, the money burned by Internet firms marketing themselves as the future of new media during the dot.com rush effectively demonstrated “that they themselves were meaningless” (Kait & Weiss 2001, p. 130). Their operating capital was completely dependant on investment, and investment was awarded on the basis of audience share. So long as the focus was on the potential of the new technology, investors rewarded dot.com publishers for their spending on marketing. Meanwhile, offline media giants and high tech firms were also hyping and investing in this new medium, restructuring their operations, building excess capacity, and—as was subsequently revealed in the case of many firms, Canadian telecommunications equipment manufacturer Nortel being only one—adopting creative accounting practices to justify expenditures and hide losses. According to journalist Douglas Hunter:

Nortel (with perfect legality) capitalized on long-term receivables, isolated them from current assets, and, in the process improved the overall appearance of its operating cash-flow and day-sales rate....Nortel did not have a single profitable year between 1997 and 2001 (Hunter 2002, p. 6).

As the Internet economy spiraled down the drain, it became apparent that the promise of the Internet as an advertising vehicle had been the plug keeping the water in the bath tub. With many stock pickers recommending Internet buys on the basis of non-financial indicators such as “audience-share” or even “mind-share” (Morgenson 2001), the whole market was fixated on user reception of the medium’s commercial applications. The failure of Internet firms to attract audiences, the absence of offline advertiser interest, and the expenditures devoted to on- and offline marketing were all major factors in the collapse.

The analysts behind *Wired* magazine's own stock index (which dropped 41% between 2000 and 2001) agree—much of the decline of the electronic marketplace can be rooted in the failure of online advertising (*Wired* 2001a). They suggest that advertising was to blame because the models used were too closely styled after broadcast and magazine advertising which were unsuited to the information rich environment of the Internet. They also noted that issues of “identity, privacy and the value of commerce in everyday life” (*Wired* 2001a) may not have been given their due attention in the rush to bring advertising to the Internet.

Others disagree, including DoubleClick founder Kevin Ryan who maintained that the problem was that there was simply too much information for it all to succeed (Kait & Weiss 2001, p. 85). His claim was that people liked commercial content and actively

sought it out, but could only consume so much. Hence, the problem was not user indifference, it was the competitive marketplace. His perspective is ironic given his own firms heated engagement with users over privacy (discussed in Chapter Six) which would tend to indicate that users were very far from passive receptors of the means used to extract value from their activities. But his comments are also notable considering the reorganization of the Internet advertising business now underway and discussed in the next chapter.

Deserving of an award for inscrutable understatement in the face of gross miscalculation, the *Economist* reported in 2001, “The view of web advertising circa 1999 has turned out to be mistaken” (*Economist* 2001). Indeed it had. Paradoxically, the reason for its failure has yet to be acknowledged either by the industry or its observers. According to the same article, “unless advertisers work harder to make more of the Internet, consumers will continue to reject most online advertising; but until consumers start clicking more, big advertisers will not spend much to improve their offerings” (*Economist* 2001).

On the contrary, all available evidence suggests that the single biggest barrier to the success of Internet advertising are users themselves whose “interests” seem not to conform to standard. Nevertheless, despite the collapse of the Internet bubble, the flawed assumption which served as its basis—that users want advertising as much as advertisers—is still at the root of the industry’s present restructuring.

This then is what online advertising participants are faced with: a medium with tremendous potential but little practical value due to the lack of user co-operation.

However, those remnants who comprise what is referred to here as the Internet advertising “industry” formulate their problems somewhat differently. User reception is not an issue which they can afford to address—except, that is, when a new technique for acquiring user attention comes along and is hyped on the basis of its superiority over other methods (Merriman et al 1996). The viability of the medium as an effective advertising channel is a given. According to one marketing consultant speaking on behalf of the IAB:

The better informed know that Online advertising generates sales...Online advertising can perform better than Television and Magazines...Online’s share of the total advertising budget should be increased from the current range of 2 to a 4 percent to a 10 or 20 range (Biggs 2002).

Sentiments such as these are typical of those who seek to attract advertising investment to the medium. Those on the opposing side have simply looked at their sales figures and decided accordingly.

The failure of the Internet to live up to prior expectations about its value as mass media has resulted in the present cleavage between advertisers and publishers over the value of the medium for advertising, despite their mutual interest to utilize it for this purpose. At stake are the standards which need to be developed in order to work out an equitable split between advertising buyers and sellers over audience value. As defined by ongoing debates within the industry, the problems can be broken down into a variety of issues. While not identified as such, each of these issues relates to the central problem of the audience commodity developed in the previous chapter. The various perspectives on these issues reflect an assortment of interests as to how the medium might best be used to

extract the value of this commodity.

4.2 Information Commodity vs. Audience Commodity

Many groups participate in what can be collectively referred to as the Internet advertising “industry”: online media producers, advertisers, advertising agencies and ratings bureaus and a host of industry associations. While each defines its interests in online advertising differently, the main division between the various perspectives is between those who wish to attract investment in the medium and those with money who want to see a return on their investment. This division generally parts down the line between Internet publishers and media advertisers, this is not always so. Nor have the interests of the various groups remained constant over the brief period of the commercial development of the Internet. This section examines perspectives within the industry regarding the Internet as a self-sufficient producer of information commodities or as a sponsorship dependant producer of audience commodities.

Content subsidization through subscription has the potential to lessen the need for advertising thereby reducing publisher incentive to co-operate with advertisers over rates and exposure. It has often been expressed in numerous ways that digitization benefits users by enhancing the quality and availability of information from a particular source. This is the “selling wine without bottles” or “pay-per” model (Barlow 1994; Mosco 1989) which construes information as the primary commodity of digital networks which could be produced and sold to users on a flat-rate or micro-payment basis.

Confident in the ultimate success of the medium and of their accrued advantage

from being among the earliest adopters of new technologies, Internet publishers initially looked to alternate revenue models to advertising, particularly through paid content subscriptions. Early successes and investment cash flows during the novelty phase of commercial online publishing often led publishers to be inflexible in the terms they imposed on advertisers for placement (Hobson 2001). The hype surrounding the explosion of the Internet sustained the perception that advertiser access to the digital audience would be on publisher's terms and that the status of placement on key Web properties would be a competitive commodity handed out to the highest bidder (*Internetnews* 1998f).

As discussed in Chapter Two, the maxim "content is king" signaled that the value of the Internet would be derived from the content it carried rather than in carriage itself. By 1995, AOL had re-structured its business to become a branded information provider which it sold through online access. Time Warner was attempting to extend its audience into the virtual domain with its Pathfinder "Internet destination" and Microsoft was playing catch-up to try and wrest control over the primary portal to the Internet from its rival, Netscape Communications, to ensure that regardless of how you answered its question "Where do you want to go today?", Microsoft would be the ones taking you for the ride.

Traffic along the information superhighway seemed to be traveling at sonic speeds, but in the early 1990s, its on-and off-ramps were still being constructed. As mentioned in Chapter Two, interactive television appeared on the horizon in 1994, offered by Time-Warner who was experimenting with its Full Service Network in Florida

(Port 1994). The benefits to the media company from such a service were significant, including revenues from enhanced pay-per-view offerings, home shopping, and other pay-per-content transactions. In effect, it was a network which could enhance the value of its audience for media providers without necessarily passing this value along to advertisers.

Developments such as this, promised by the further integration of network and content services under the proposals of the NII, provoked advertisers to take a closer look at how technology would alter their ability to access consumers. The position of Proctor & Gamble was presented in a speech for the Association of American Advertising Agencies in September 1994. Written by executive Bob Herbold and presented by Chairman and CEO Edwin L. Artzt, it elaborated the firm's interest in maintaining access to the television audience.

...in a given year, [Proctor & Gamble] has to sell 400 million boxes of Tide....The only way you can achieve that kind of impact is with broad-reach television -- which is why we spend almost 90 percent of our \$3 billion advertising budget on TV . . . and why we simply must preserve our ability to use television as our principal advertising medium (Artzt 1994).

Artzt was speaking specifically in reference to what was believed by media owners to be the future of technology-enabled interactive media. At the time, it was thought that the future would be television. This perspective was outlined in Artzt's multimedia presentation which cited John Malone, CEO of cable giant TCI, and Time Warner CEO Gerald Levin offering their perspectives on what they each felt to be the future of media. In their opinion, it was going to give broadcasters and network operators new forms of business through content customization and direct product sales.

Citing the effects of the VCR and the remote control for time-shifting and channel surfing on the erosion of advertiser access to audiences, Artzt directed attention towards a shift in the balance of the advertiser/publisher relationship in favour of broadcasters and cable operators who were in a position to move away from advertiser support by offering many more channels, pay-per-view events and enhanced subscription services such as home shopping and online gaming. In his own words, "If user fees replace advertising revenue, we're in serious trouble" (Artzt 1994).

But at the same time Artzt also spoke of opportunities for advertisers to use interactive media and issued a strategy to mobilize the industry to find new ways to "grab all this new technology in our teeth once again and turn it into a bonanza for advertising" as it had previously done with the newspapers, radio and television.

We can use interactive technology to engage consumers in our commercials...We can provide direct consumer response. If a consumer wants to know which Cover Girl nail polish matches the lipstick she saw in our commercial, we can tell her on the spot...We can target not just demographic segments but individual households. If a family has a newborn baby, we can make sure they get a Pampers commercial...We can use games, infomercial, video shopping malls. We'll have a whole bag of tools to engage and inform consumers, and if we do that right, we can keep people in their seats when the commercials come on (Artzt 1994).

Artzt urged the industry to work together to influence providers to preserve the role of advertising in an interactive future. He also urged action at the legislative level to promote protecting competition in the ongoing NII process so as to avoid monopoly control over the audience and ad rates by a single television provider.

As events transpired, it turned out that television was not at that point destined to become an interactive medium. Time Warner's Full Service Network faced many delays before being released and found the response of subscribers to be much lower than they had anticipated (Albright 1995). The experiment racked up significant losses before finally being pulled in 1997 and converted into a high-speed link to the Internet (AP 1997).

Artzt's speech is still regarded as a "watershed" which prepared the advertising industry for the future of interactive media but it has been criticized for failing to anticipate looming changes to the media scape (Neff 2000). Herbold, who left Proctor & Gamble shortly afterwards to head Microsoft's advertising division, defended the Internet oversight arguing, "It was an appropriate thing to do given everything that was known at that juncture" (Johnson 1997). It was a statement of what advertisers wanted from new media. It recommended that advertisers be ready for new opportunities to persuade consumers through interactive ads, learn more about consumers through demographic and household profiling, to sell to consumers directly through virtual portals, and to find ways to hold audience attention during these interactive commercial messages.

The key issue at the time was to exploit new opportunities for advertising while at the same time avoiding competition with network owners and media publishers who advertisers regarded as their chief rivals for audience value. The meaning of this pivotal speech was that new media should work in the interests of advertisers and that new media providers should be eager to accommodate. As Artzt indicated, advertiser interests are not challenged by interactivity; on the contrary, interactivity provides many benefits. The

danger at the time was the threat of a shift in the balance between audience buyers and sellers in favour of media owners. From the advertiser perspective, an interactive medium with the reach of television and a better deal with media providers would be the ideal arrangement. As will be discussed below, the Internet proved to be little threat to advertiser interests, but advertiser interests towards the Internet remained virtually unchanged.

To date, few subscription supported publishing sources have been able to generate sufficient interest from users to make this revenue model viable. As a result, the paid content model has been widely abandoned and publishers find themselves desperate for ads.³ There are some exceptions however. Internet magazine Salon.com, who absorbed BBS community The Well when it formed in 1995 (*PR Newswire* 1999), receives high monthly traffic but only 45,000 subscribers to its premium content—a low but acceptable subscriber base (Liedtke 2002). Its revenues are evenly split between advertising and subscription income. iVillage, an Internet portal geared to “women’s interests”, boasts 65,000 subscribers to its various services, many of which are sponsored by commercial health, fitness and diet service providers—including Proctor & Gamble (Nottage 2002).

Specialized information providers such as the *Wall Street Journal* are able to draw readers from across the globe to their republished online content which is subsidized from

³ Although one notices that recent publicity from the Online Publishers Association (OPA) has once again taken up the cause of paid-content (OPA 2003b)—a reversal from the tenor of its public releases only three months ago which argued strenuously that the Internet was an effective advertising medium (OPA 2003a). This can be attributed to the desire on the part of publishers to maximize audience value through selected, enhanced value content offerings for which subscriptions provide both income and salable demographics about users.

print revenues. The *WSJ* is regarded as the single largest success story of content subscriptions, having a subscriber base of nearly 700,000. The company is presently looking for ways to combine online user-value with advertising sales in its national and international print editions (*Business Wire* 2003). The porn industry has always been able to obtain an acceptable margin given high demand and low delivery costs (Cone2002; Lane 2000; Rose 1997). None of these sources as yet use the micro-payment subscription method which is infamous for its complexity but is nevertheless how the offline print media would like to charge for content (OPA 2003b). And as is suggested by the examples provided of the few successes in subscription-based content provision, advertising is still a crucial element of online revenues.

In the end, the course of commercialization along the lines of developing information commodities has not succeeded. Early reluctance to deal with advertisers has dissolved after incontestable revelations about the limitations of the medium to provide stable revenues from non-advertising sources. Quite the opposite perception is now the norm. "They've gone from an attitude of rejecting whatever advertisers wanted to do, to a situation where they have to woo them" (Hobson 2001). Unfortunately for publishers, advertisers are now in a position to dictate terms and place more pressure on Internet publishers than those elsewhere to generate an audience commodity and take up a share of responsibility in guaranteeing its value.

4.3 Direct Marketing vs. "Branding"

While publishers are clearly in no position to dictate the terms of advertiser access to the Internet audience, neither have advertisers been successful in utilizing the medium in the manner envisioned by Artzt. The main advantage the Internet gives advertisers is in identifying “sales leads” for direct marketing. However, using the medium for sales has also proven to be ineffective. Hence, advertisers would like to recruit publishers to help them in this regard which opens the way in which advertising should work on the medium and how the costs and benefits should be distributed.

Closely related to the issue of information versus audience commodities is how the value of the audience commodity should be reaped—either by using the Internet for product exposure or for product sales. The Internet’s dual capacity for user measurement and commercial transactions makes calculating the return on investment (ROI) of an Internet ad far more precise. Advertisers are far better able to measure dollars spent on ads in terms of dollars earned in sales. Given their lack of revenues from other sources, publishers on the Internet are in a much weaker position to exert their influence over these calculations than their offline counterparts.

From the advertiser’s perspective, advertising on the medium is not a means of increasing consumer awareness, it is a tool used to “direct users to sources of potential value” (MSI 2002, Wired 2001). They regard the Internet as a direct marketing channel and advertising as a measurable and cost-effective means to gauge user interest and bring them to the point of sale (*Internetnews* 1998g). Taking advantage of the technological capacity to unbundle ads from content, those who think along these lines see the media changing from audience commodity producer to sales agent. According to figures from

Nielsen//Netratings and the IAB, most advertisers tend to think along these lines, insisting more often than ever that ad rates be scaled to click-through (CTR) and not cost-per-thousand viewer (CPM) measurements as is the case elsewhere throughout the medium (Buchwalter & Martin 2003, p. 22; PWC 2003).

This issue of direct sales is itself tied up in the much larger cause of global electronic commerce which has received significant attention—not only from media owners and digital entrepreneurs. National governments and international economic bodies conferred over “Dismantling the barriers to Global Economic Commerce” (OECD 1998) and “Building a Borderless World” (OECD 1999a). Speaking at a Ministerial Conference on October of 1998, Canadian Prime Minister Jean Chretien articulated the role of national governments in facilitating the growth of global electronic commerce:

The Growth of Electronic Commerce gives us a chance—as nations and as a community of nations—to build from the ground up....To build confidence in this new marketplace. To clarify the rules. To remove existing barriers. And to refrain from erecting new ones. To develop new approaches with business. To build the infrastructure needed to sustain digital commerce. And to make sure that all countries benefit” (OECD 1999b, 32)

According to the Business Interest Advisory Committee (BIAC) in a report to the OECD, barriers to e-commerce include national laws and legislation over individual privacy and intellectual property. In the former case, BIAC has encouraged governments to recognize industrial self-regulation as the best means of facilitating the growth of the emerging information economy and administering the right of consumers in the marketplace. It suggests that contract law, not constitutional law should protect user

privacy but that governments should play an active role in educating the public in the uses and utility of information technologies (1999a, pp. 11-12, 19). In other words, the report recommends that governments lessen regulatory costs to business while at the same time providing the added value of training a skilled workforce.

Recommendations such as these—typical of neo-liberal formulations of the role of government in business—would change the character of citizenship in many regions of the world.⁴ With regards to marketing and advertising ethics, BIAC similarly endorsed industry self-regulation and encouraged governments to harmonize international standards according to standards set within the industry (1999a, p. 14)—which, at least in the case of the Internet, are far from settled.

Events in the domain of electronic commerce have demonstrated that except in isolated cases, users again respond in insufficient numbers to justify the expense of appealing directly to their wallets. Reports showing user response to electronic commerce in terms of what consumers are willing to spend (Ipsos-Reid 2003; UCLA 2003, p. 41) differ dramatically from actual online spending. Recent figures from the OECD show that business to consumer sales (B2C) represent a minimal percentage of total consumer purchasing—less than 1.1% at peak periods even in the most active national markets with the highest levels of Internet penetration (OECD 2001).

So while advertisers would prefer to use the Internet as a virtual store front and pay ad-sellers only for the business they bring in, the lackluster success of electronic

⁴ For a far more complete analysis of the effects of neo-liberal regulatory regimes in telecommunications on regional development across Canada, see Bodnar (2001).

commerce has given weight to the argument that the tangible short-term marketing benefits of electronic commerce are less important than the intangible long term benefit of building brand awareness (Biggs 2002; DoubleClick 2002; eMarketer 2002; MSDW 2001; AvantMarketer 2001, etc.). In pursuing this tack, industry advocates are positioning the medium alongside traditional mass media as an effective audience commodity producer.

It is well known to advertisers that individual consumers exhibit brand loyalty to certain products and that this influences long-term purchasing patterns. It is also known that consumers will often pay more for a product based strictly on brand packaging regardless of other considerations. In the words of an executive at Guinness, owner of Johnny Walker:

We have massive amounts of research which show that people cannot tell the difference between one Scotch and another. Though they swear total allegiance to one product and would never dream of drinking Brand X, in blind tastings Brand X is more often than not what they select (Financial Times 1993, in Doyle 1995, p. 25).

Branding is a “marketing solution” to the need for product differentiation to capture niche consumer segments (Grønhaug 2002; Dalgic & Leeuw 1994; Browlie & Saren 1992, etc). While on the one hand it is an attempt to inculcate consumer loyalty, it also uses this repeated-purchasing behaviour as a means to spin off line extensions of the same product at various price points in order to take advantage of what a consumer is willing to pay. It is a means of minimizing consumer surplus by adding intangible product value (Doyle 1995, p. 25). One of the primary drawbacks to this technique,

however, is that it does not stand up well to competition requiring dominant or monopoly market share to fend off brand competition on a price-value, quality-value, or (arguably) novelty-value basis (Doyle 1995, 26, 28). Despite much recent popular attention to “branding” (e.g., Klein 2000), it is only one of many product marketing strategies. Nevertheless, it is an “easy sell” offering substantial advantages to goods and service producers who can focus on attracting new customers to their brands. This implies monitoring and measuring consumer behaviour in order to determine which are “brandable” candidates for recruitment (Johnson 2001; Domegan 1996; Dmbkowski & Hamner-Lloyd 1995, etc).

Knowing users is something that Internet publishers can do better than their offline counterparts (*Internetnews* 1998h). Hence, it is on this basis that those looking to attract advertiser investment to the medium base their appeal. This position consists of two arguments: a) that brand impressions on the Internet are lifted, recalled, and considered in purchasing decisions; and b) that Internet branding provides excellent ROI in terms of the comparable “cost per lift” available from offline media (AvantMarketer 2001; MSDW 2001). Furthermore, the argument is extended by some publishers—particular those offline publishers who make up the bulk of the Online Publisher’s Association—that users display site loyalty as well. Therefore, users of a particular information source having an identifiably marketable value can be accessed again and again by bundling advertising with their content (OPA 2003a). Hence, these arguments conclude that not only does Internet advertising generate positive ROI for advertisers, it generates a better ROI than all other media.

While a critique of the empirical and statistical methodologies employed in the research used to support these conclusions is far beyond the reach of this particular examination, it is worth noting the irony of attempting to sell the medium on the basis of intangible “branding-value” when its most commercially significant property is its measurement capability. Examples such as “user loyalty” measurements, which reflect the time spent and repeated visits by unique users to an Internet site (OPA 2003a), project untestable cognitive motivations upon users and by no means demonstrate the ability of publishers to produce a captive audience. To go further to suggest that exposing this “captive” audience to advertising messages creates an actionable impression upon the user’s consciousness pushes the whole theory behind branding to the furthest reaches of abstraction.

But regardless, the publisher case has done little to sway advertisers. In the case of Proctor & Gamble, since the form taken by interactive media proved to be far less disruptive to its media planning than it had feared in 1994, it approached the medium aware of both the opportunities it provided and their influence over its future. When the company finally began to include the WWW in its media purchasing in 1996, it was in a position to dictate terms rather than bend to speculative thinking about the medium (Taylor 1996). Upon announcing its intent to develop its own web presence and purchase advertising from publishers, it also declared that it would compensate publishers strictly on the basis of CTR performance, rather than by CPM measurement.

Wolff (1998 p. 51) credits Proctor & Gamble with bringing “an executive management focus to the wild entrepreneurialism which characterized business on the

Internet". The company was skilled in bringing media to heel and dealing on its own terms. Critics reacted with shock. In the words of Silicon Alley journalist and entrepreneur Jason Calcanis, "Publishers are responsible for aggregating an audience, not running campaigns. Period" (AvantMarketer 2000). P&G's announcement was decried by publishers who at the same time knew they were in no position to decline the offer being extended given their desire to tap into the company's US\$3.3 billion total advertising budget—the largest of any US corporation at the time. Yahoo! was among the first to agree (EAMR 1997).

By demanding click-through performance, the company was insisting that publishers participate in generating sales rather than audiences if they wanted to receive advertising investment. It was the evolution of the position expressed in 1994; however, if Proctor & Gamble's interests were not going to be threatened by the Internet in 1996 then the company saw no reason why, if it invested in the medium, the Internet shouldn't function in its own interests.

Speaking in May 1998 at the @d:tech conference in Chicago, the company's Vice President of Worldwide Advertising Denis Beausejour more clearly articulated Proctor & Gamble's designs for the Internet in a speech which in many respects served as an addendum to that delivered by Artzt in 1994 concerning interactive television. While expressing optimism for the future of the Internet as an advertising vehicle, Beausejour explained that "the advertising opportunities we currently have on the web are really pretty limited. Simply put, the current state of web advertising just isn't effective enough to warrant any truly meaningful investment from us" (Beausejour 1998).

If his predecessor was concerned about the possibility of P&G losing its influence over television, Beausejour's main concern was that the Internet didn't resemble television closely enough. He cited three problems with the medium that made it in his opinion not suitable for advertising investment from his firm: 1) the bandwidth available did not allow for the "richness and depth" the company wanted from its advertisements; 2) audience measurement standards were inconsistent and not interpretable in the terms established for traditional media; and 3) the company had doubts about the "brand-sell" capacity of the medium, instead wanting "meaningful two-way bonding experiences" which would allow the company to communicate with and sell to users directly.

In short, what Proctor & Gamble wanted was for the Internet to become what they expected of interactive television in 1994. The difference in 1998 was the company was now clearly in the position to direct the future of interactive media rather than wait for the medium to get there by itself. Again citing the precedent set by advertisers in the historical development of commercial media (as did Artzt in 1994) Beausejour encouraged publishers and network operators to build an Internet that Proctor & Gamble could use:

If we can truly leverage the unique capabilities of interactive marketing, it will dwarf the power of traditional media to build relationships with consumers. And if that happens, of course, those of you who are the architects of this exciting new space will reap enormous rewards (Beausejour 1998).

As with Artzt's speech, this latter appeal was heralded as a landmark address within the advertising industry which made Beausejour "the poster boy of new media

advertising” (*Internetnews* 1998i). It showed the consistency of P&G’s desire for interactive media. But in 1998, the speech was not a plea that advertisers prepare for the future, it was a notice to online publishers that their future was in the hands of major advertising firms such as his own.

He concluded his speech by calling attention to the issues of privacy, security and universal access—all of which are still major issues with consumer advocacy groups but which also have major impact on advertisers to the extent that these issues are usually cited as the reason for consumer avoidance of the Internet. He also announced a summit later that summer for major advertisers such as Proctor & Gamble, Coca-Cola and AT&T as well as advertising associations including the Association of American Advertising Agencies (AAAA) and the IAB (*Internetnews* 1998j, 1998k) to “figure out what it will take to transform the web into the space we feel it can be” (Beausejour 1998). The summit led to the formation of an organization known as the Future of Advertising Stakeholders (FAST) which represented a range of major advertisers and advertiser associations as well as many Internet publishers in trying to set out guidelines for advertising on the medium.

Despite demands for direct marketing based ROI standards, it would nevertheless be a mistake to suggest that advertisers are not also interested in the wider Internet audience or in the ability of publishers to aggregate and sell audiences. The Internet has given them the ability, however, to change the balance of benefit in their favour. This shifting balance is reflected in the ongoing negotiations to develop measurement standards which will best suit advertiser interests. They have not lost interest in utilizing

the Internet to develop an audience commodity, but when it comes to paying for it, they want to make sure that they are the ones setting the price.

4.4 Measurement

Measurement standards are the fulcrum in the relationship between audience sellers and buyers. Standardized measurements will determine value calculations. Hence, negotiations over standards are as rivalrous as negotiating costs. There are to date no such standards on the Internet to which both advertisers and publishers agree. At stake throughout these negotiations has been the persistent theme of whether audience buyers or audience sellers will win a greater share of acquired audience value through measurement standards.

In the words of one exasperated commentator, “Many of Internet advertising’s statistics have about as much backing them up as a city street on the Universal Studios lot” (Catalano 2000). While the Internet gives many parties—advertisers, agencies, publishers, ISPs and ratings bureaus—the ability to collect detailed information on Internet traffic and refine this information into usable marketing data, there is no established procedure to attach a value to any of this information aside from that negotiated between buyers and sellers. This problem is exacerbated by the range of metrics which the various participants of online advertising would like to apply when determining rates. There is even disagreement between advertisers, publishers and others regarding the meaning of such basic terms as “impression” and “user” (Catalano 2000).

As has already been mentioned, CTR and CPM are the cost-metrics most

frequently employed in determining the cost of ad placement (Tedeschi 1999). The former is generally preferred by advertisers since it is a measure which gauges advertising performance. The latter is preferred by publishers who regard their primary task as attracting audiences with content. The CPM metric based on site traffic rewards publishers for site popularity and is commensurate with publisher assertions that the Internet is a “branding” medium. It is the idea that better content leads to increased site traffic which in turn leads to greater exposure for advertisers. According to one publisher with reference to performance pricing:

As publishers, we’ve already taken a huge risk in developing content and a qualified audience. I should be able to get a price I can make a living from for delivering a quality audience to advertisers (EAMR 1997).

Publishers are very opposed to the use of CTR measurements in determining advertising contracts because they feel that as content producers that they have no control over the effectiveness of advertising campaigns. Poorly created ads will generate fewer clicks it is generally agreed. Therefore using CTR as the basis of payment penalizes publishers for ineffective marketing (Biggs 2001). Whether this is the case or not, the payments they receive for click-throughs are inevitably lower than CPM by virtue of extremely low click-rates in general. And there is also the additional issue of site traffic loss from users clicking through to advertiser sites. According to Silicon Alley publisher Seth Goldstein:

I believe an advertiser's dollar is better spent pushing their own product or service into the media channel as opposed to pulling the user away from the media experience and into an advertiser's Website (Maddox 1997).

For publishers, the CTR measurement is a lose-lose situation. The actual payment trigger—when a user clicks on the ad and goes to the advertiser Website—is rarely executed and when it is the publisher loses site traffic and revenue from other advertisers paying on a CPM or hybrid basis.

Because of this preference for CPM, CTR numbers are infrequently reported by publishers (Kane 2001). In 2001, ad market monitor CBS Marketwatch (owned by CBS television) announced that it would no longer report user click-through numbers on the grounds that they were not reflective of the value of online advertising. This was immediately following its own published numbers indicating that click-through rates had fallen to 0.15% (Mahoney 2001; Kane 2001). However, according to the most recent published figures by the IAB, 35% of all advertising contracts with publishers in the first six months of 2003 were delivered on the basis of straight CTR. This is up from 12% in 2001 and 21% in 2002 (PWC 2003, 2003b). Over half of all advertising contracts maintain at least partial click-through performance for payment.

As has already been discussed, advertisers would prefer to use the Internet for sales. For them, click-throughs represent the value of the medium as a whole and they do not want to pay for anything other than sales. Calculations of advertising value are often expressed using a cost-per-sale formulation.

Assuming an average rate of \$10/CPM (a fairly low card rate) and a CTR of 0.5% (a fairly high rate of response), the cost to the advertiser for every exposure of an advertisement is a relatively low \$.01 per viewer. By comparison, a full page advertisement in a major media publication such as *Vogue* would cost advertisers about

\$.03 per view (Cassidy 2002, p. 93). However, since the objective for advertisers on the Internet is to bring users to the point of sale, “they care about how many people buy the offer....It doesn’t matter how many click” (Biggs 2001). Hence, they put even less value in how many people see the ad but do not click.

Measuring the cost of this ad on a click-through basis, only five users proceed through the ad at a cost to the advertiser of \$2 each. This cost rises when “click-outs” indicating accidental or unintended clicks are discounted. Conversion rate measurements are then used to calculate the cost of advertising for every sale generated in this manner. Again, conversion rates are quite low and are never published, so standard industry procedure is to assume a rate of 1% (*UKWorld* 1999). This means on average that one sale will be made for every 100 viewers clicking through the banner. Given that in this scenario the cost-per-click is at least \$2, the cost to the advertiser to complete a single sale is \$200. This is extraordinarily high, particularly if the product being offered is relatively inexpensive.

Another issue in the CPM/CTR debate is that comparative data provided by publisher content servers and advertising servers rarely tally. Hence, before billing can take place, not only do advertisers and publishers have to agree on a price, they also have to agree on traffic numbers (Parker 2003). This is the result of a number of factors often beyond the control of either party. Acquiring data on site usage from server logs can be skewed by the common practice employed by ISPs of caching popular Web sites on local servers to speed up page delivery to their users. This depresses calls to the publisher or ad server yielding artificially low site counts. On the other hand, automated “bots”

operated by search engines and other web-polling organizations which probe and archive every element of sites across the Internet can artificially inflate hit counts leading to higher advertiser rates (ARF 2002; FAST 2000). As well, there is also the issue of when to count a “hit” as a billable “impression”. Counting at the start of the advertisement download does not guarantee that it is actually seen by the user who could well click on to another page or abort download before the ad is finished loading (Catalano 2000).

Despite the disagreements between publishers and advertisers over payment metrics and counting, there is nevertheless the consensus that delivering a “qualified” audience is the primary objective of each. But advertisers also want some kind of guarantee beyond publisher assurances that the audience they are selling is indeed qualified. For this reason, most large advertisers prefer to deal with audience measurement through third party ratings firms (FAST 2000).

The largest obstacle to date to the use of third party measurements online is the number of different measuring firms and the different methodologies they use (NUA 2001; Wells 2001). Nielsen//Netratings, for instance, employs survey panels of users whose online activities are measured and monitored as they surf. Other ratings organizations collect data from ISPs or are, in fact, ISPs themselves who retain the data provided by users and sell it either to advertisers or other third party ratings firms (Wells 2001). The different methodologies employed can yield dramatically different results as to the amount of traffic a particular site receives and the smaller the sample size, the more variability there is between site ranking from month to month (NUA 2001). Determining ad rates on the basis of these measurements is therefore unreliable. Trends in the ratings

market are discussed in more detail in Chapter Four, but present indication is that convergence in that marketplace will ultimately lead to dominant market share for a single firm thus completing the means to determine audience commodity to the same degree as offline media.

Developing measurements standards was one of the key objectives undertaken by the Future of Advertising Stakeholders. Its measurement panel, convened under the direction of Advertising Research Foundation (ARF) president Jim Spaeth, sought to resolve difficulties in online measurement while at the same time developing measures that would make online ad rates comparable to those offline. According to its preliminary measurement report:

Recognizing the unique character of online media, these principles...encourage the development of more advanced measures which fully express the value of the medium....Underlying these principles is the expectation that online media measurement will migrate over time from their current state to a state comparable to traditional media and then a state beyond traditional media (FAST 2000).

In order to reach equilibrium between advertisers and publishers, the report suggested among other things that measurement be carried out by a third party firm, that the standardization of measurement should apply in all markets across the globe, and that the medium be used to its full potential to acquire as much information as possible about the “active media universe”(FAST 2000).

The model which this panel worked to develop, described by Spaeth in an issue of the ARF newsletter *Inform* was an attempt to reconcile online media buying with offline buying and to make publishers more responsible for advertiser sales. Recognizing the

value of the Internet for advertisers, Spaeth noted that “it has promised to be more accountable to advertisers than other media” (ARF 2002).

The FAST model identified three separate measurements: site-centric which reflected site usage, ad-centric which measured “unbundled” advertising usage, and user-centric which was a measurement of unique user demographic properties. The conflict between advertisers and publishers arose over the use of ad-centric measurements which meant that measurements such as these would bind publishers to producing sales for advertisers, not just audiences.

The plan called for an eight-stage model outlining advertiser interest in online media. At the bottom of the model were the reach and exposure of publisher content. Up the scale, the stages went through advertising reach and exposure, the communication value and persuasiveness of the advertisement, up to user response in the form of sales. Advertisers wanted a better deal from Internet content producers by getting more value out of the audience than they were able to get elsewhere. Publishers did not accept this scheme and the measurement guidelines developed by FAST were ignored. According to Spaeth, “traditional media have been avoiding measurement above stage two of the model forever. Agencies have been avoiding accountability forever. The game is up!” (ARF 2002).

FAST itself disappeared quietly, many of its participants reforming soon after into the Digital Marketing Coalition (DMC2) in 2000. This shift marked a change in the posture adopted by advertisers towards the Internet as they moved to step out of the steering process to leave it to industry associations (Larkin 2000). The occasion called

for yet another Proctor & Gamble executive, this time interactive marketing director Vivienne Buchtold, to address the industry as a whole, this time through the trade magazine *Advertising Age* (2000). The company's message on this occasion was that publishers should recognize the value of co-operating with advertisers:

In addition to all the other things it was, the FAST summit was our industry's challenge to itself to untie the Gordian knot of special interests that was holding back progress in digital media...there's a huge upside potential with simply setting guidelines and getting on with life (*Advertising Age* 2000).

This organization itself disbanded and again, participants reformed into the Interactive Marketing Initiative (IMI) which merged with the ARF as its online research wing. Meanwhile, the opportunity to participate in a new initiative led by the IAB announced in the summer of 2003 was declined by both the ARF and the Association of National Advertisers (ANA)—the two bodies primarily representing the interests of advertisers in all the previous initiatives.

The measurement debate reflects the issues relating to subscriptions and to the value of the medium for branding. The issue is how the audience of the Internet is to be valued—as consumers or as potential consumers, and of what products. What the debate over measurement reveals is publisher insistence that the audience commodity is their property. However, market conditions for Internet publishers are far from stable, forcing concessions in terms of click-through payment and the overall absence of advertising revenues from major advertisers. Ultimately, negotiation on these points will likely be made redundant by conditions in the converging Internet market.

4.5 Conclusion

The foregoing discussion indicates that the development of the Internet as an advertising sponsored content medium is still ongoing. However, a number of trends become apparent through analysis of the emergence and issues associated with online advertising which will play a significant role in future developments of the Internet as a whole.

In the first place, the conclusion can be drawn from the evidence provided above that users have demonstrated minimal interest in advertising and other commercial applications brought to the network. This is consistent with the argument developed in Chapter Two which traced the origin and uses of the Internet as a stateless technological medium permitting maximal user agency in its uses as a communication and information medium. This perspective is further supported by the argument presented in Chapter Three which outlined the disjuncture between the commercial objectives applied to the mass media as a whole and audience negotiation with these uses.

It is a further conclusion of this chapter, building on the perspective developed in Chapter Three, that this rupture between user preferences and commercial objectives, while it has had significant consequences for the development of the Internet as a commercial communications vehicle, has factored little into ongoing commercial planning for the medium which is at present focused on negotiation between the various stakeholders of Internet advertising as to the proper distribution of audience resources between advertising sellers and purchasers. It is also revealed that interest from major media advertisers such as Proctor & Gamble has been significant and that both audience producers and audience buyers have a significant stake in the future development of the

medium.

In conclusion, the issues discussed represent the common desire on the part of all interested parties to bring the medium into closer proximity with the mass media as a whole as a means of producing audience commodities. With technological monitoring and measurement available to an extent unavailable to all other media, the incentive exists to continue with efforts to fully capitalize on its commercial potential. However, this will require co-operation—either through negotiation or integration—between content, advertising and network providers. Progress along this trajectory is the subject of the next chapter which discusses the present state of the Internet advertising industry and the means by which it is being shaped into a viable media channel.

Chapter Five

The Industry and Techniques of Internet Advertising

In spite of the many problems faced by the Internet advertising industry, Internet advertisements have proliferated, even in the context of poor user reception and disagreements over objectives and standards between the medium's audience producers and audience buyers. Present discussion within the industry is more focused on its growth and organization rather than on the more important questions of its effect and effectiveness. This chapter looks at the present state of the industry which is characterized by convergence and the increasing domination of online publishing from offline sources. It then goes on to look briefly at present trends in advertising delivery which denote a definite preference for offline advertising models which at the same time facilitate user profiling.

The effects of the dot.com crash on the industry cannot be overstated. It is the single most important factor in the present terrain of advertising supported Internet publishing. The evacuation of capital from the medium has given those with offline media holdings greater leverage in the online market. Meanwhile, advertising support from major national advertisers is actively sought. The former Silicon Valley single survivor market strategy has given way to a recognized need for long term investment and growth. As such, there is a much greater degree of collaboration in order to shape the medium into an environment in which returns can be generated (Regan 2002).

In terms of advertising practices, a significant proportion of web content now taxes user computer resources with ads in a variety of forms including banners, interstitial placements, and the all-but universally despised pop-up screens. The percentage of commercial e-mail traffic traveling across the network is over twice that of inter-personal messaging (Pew 2003). Usenet receives thousands of ads a day cross-posted to hundreds of newsgroups at once. Search engine rankings are sorted according to advertising criteria, and software created for Internet use is frequently designed to secretly facilitate user monitoring and ad delivery (Stern 2002).

What appears through this discussion of the emerging structure and techniques of the medium is the emulation of and integration with offline media advertising. This is both a highly significant shift from earlier industry posturing as well as an indication of the future direction of the commercial exploitation of the Internet.

5.1 Internet Advertising Participants

At this point, even the most enthusiastic supporter of advertising on the Internet is forced to concede its persistent lack of success and the presence of a number of obstacles which still need to be overcome. Lack of user response, low interest from advertisers, the collapse of the Internet bubble, disagreement over standards and practices, controversies over user privacy, and a number of other factors have all cast doubt on the legitimacy and future viability of the enterprise. Although the term “industry” is used here and throughout for the sake of convenience, the relationship structure which characterizes traditional mass media advertising has yet to evolve on the Internet. This process is now

underway and includes on- and offline media publishers, advertisers from a range of industries, digital and Madison avenue advertising agencies, media ratings firms, and industry associations. What is evident in surveying the current landscape of the industry is the extent to which the aura of digital transcendence has faded, bringing the industry—and by extension the medium itself—into the orbit of commercial mass media.

5.1.1 Publishers

The current stabilization of Internet advertising is due to both a high degree of concentration and to vertical and horizontal integration within the shrinking pool of ad-selling Internet publishers. For the purposes of discussion, “publisher” is any producer of information for online consumption. This includes portals, search engines, news and entertainment sites, electronic commerce sites (to the extent that these are often portals in themselves), and so on (PWC 2003). As it pertains to advertising, publisher information is produced to generate user traffic which can then be sold to advertisers. However, the advertising function can play a greater or lesser role depending on the on- and offline vertical and horizontal arrangements existing for a particular firm.

Despite the high degree of concentration, there are nevertheless hundreds of smaller publishers competing for advertiser attention across the Internet. Figure 5.1 (p. 136) provides a snapshot of content genres on the WWW and publisher’s average non-negotiated cost per thousand viewer (CPM) rates for a standard banner advertisement between 2001 and 2002 for each category. These “card-rates” reflect what publishers

Figure 5.1
Standard CPM Rates by Content Genre 2001-2002

Content Genre

Source: Nielsen//NetRatings 2002

believe to be the value of the audience they have for sale. In practice, these rates are negotiable and advertisements are usually purchased at a significant discount—up to 80% in some cases (Nielsen//Netratings 2000; AvantMarketer 2001). This would tend to indicate the much lower assessment of the value of the Internet audience by advertisers relative to that of publishers.

The first trend immediately indicated by Figure 5.1 is the overall decline in rate card asking prices between 2001 and 2002 which averaged -31% across the board but was as high -50% or even -80% in some categories—the asking price on “incentive” sites designed to attract users to subscription based information sources (Buchwalter & Martin, p. 16) by offering free samples made the greatest drop from US\$16.86 in 2001 to US\$2.98 (-82.33%) in 2002. Asking rates for “games” sites dropped 53%, shopping sites dropped 51%, and sites devoted to television and movies dropped 40%. These trends would seem to indicate declining demand for general Internet traffic. The major drop in the “incentive” category also presumably reflects the shortage of conversions from casual browsers to paid subscribers.

Exceptions to the overall downward trend were evident in the “community”, “computing and technology” and “portal” categories in which rates increased marginally—average asking rates in the “community” category of sites which cater to specific communities of users (the most notable being iVillage.com which publishes specifically for female users) rose nearly 16% from US\$16.42 to US\$18.98 over the course of the year. As well, asking rates for “local and regional” sites and search engines dropped only marginally at less than 3% each. These moderate gains (or at least tolerable

declines) reflect the enhanced market value of key user demographic segments. As discussed in the following chapter, targeting users is the Internet's greatest strength as a mass medium as well as a priority for marketers. And as will be discussed further below, search engine placement provides the additional benefit of targeting advertisements to user search requests.

To date the medium's largest advertisers are also its largest publishers—mainly the largest surviving Internet firms as eBay, Amazon.com, Yahoo!, AOL and Microsoft (Buchwalter & Martin 2003, p. 5, 7, 10)—who for the most part need not depend exclusively on advertising income. As a result, net advertising revenues for these publishers are difficult to ascertain making it unclear what value exists in Internet advertising as a whole. Software giant Microsoft, for instance, reports online advertising revenues through its Microsoft Network (MSN) business which operates a web portal, an electronic commerce platform, and an Internet service provider (ISP) (Microsoft 2002).

Microsoft reported revenues from this business unit within MSN responsible for Internet advertising at US\$270 million for its year ending June 30, 2002 (Microsoft 2002). As reported by *AdAge* the company as a whole spent nearly half that much buying its own Internet ads during the same period (US\$131 million in 2001 and US\$126 million in 2002) and over US\$900 million across all media in 2002 (AdAge 2003).

Microsoft—a company which in the last four financial quarters generated nearly US\$33 billion in revenues, nearly US\$10 billion in net profits, and which has a market capitalization of nearly US\$280 billion (Barcharts.com 2003)—is worth many times more than the entire Internet advertising industry as a whole (see figure 5.3, pp. 157 for

publisher revenue figures). Selling advertising on the Internet is a very small part of its business. This is not the case with the web portal Yahoo! which competes with MSN and which is arguably the Internet's largest publisher in terms of content production, audience share, and proportion of revenues obtained online.

In its year-end filing to the Securities and Exchange Commission for 2002, Yahoo! reported that 61% of revenues for that year totaling over US\$651.5 million came from online advertising sales (Yahoo! 2003). Meanwhile the company spent over US\$431 million buying its own ads elsewhere to maintain the brand awareness the company feels is vital for its continued existence. "If we are unable to maintain or enhance customer awareness of the Yahoo! brands in a cost effective manner, our business, operating results and financial condition would be harmed" (Yahoo! 2003). Further statements from the same document indicate how the company's dependence on advertising makes its entire business vulnerable.

Given the general downturn in ad rates and advertisers, Yahoo! recognizes that it needs to expand and enhance its user-base but recognizes the risks it faces in doing so. "Because of the rapidly changing market we serve, period-to-period comparisons of operating results are not likely to be meaningful. You should not rely on the results for any period as an indication of future performance" (Yahoo! 2003). Questions of effectiveness aside, numbers comparing advertising income and advertising spending from these firms suggest that the marginal value of Internet advertising for the largest online publishers is highly volatile and not as significant as might be expected in the relatively more stable environment of other ad supported media.

Data on industry concentration is published in the IAB's annual Internet Advertising Revenue Report which shows that over the last five years, upwards of 70% of total advertising revenues on the Internet are concentrated within the top ten publishers (72% in 2002) and over 90% within the top 50 (97% in 2002) (PWC 2000, 2003). In terms of content categories, 50% of total advertising revenues in the industry go to portals and search engines with Yahoo! and Microsoft accounting for 80% of the total investment there (Buchwalter and Martin 2003, p. 14; Martin and Ryan 2001)—in other words, 40% of all money spent on Internet advertising in 2002 went to these two companies. However, despite their shared dominance of the online advertising marketplace, the advantage is clearly on the side of Microsoft as this market develops.

Although AOL figures prominently in advertiser spending estimates, it is rarely included in official industry estimates of publisher site traffic and revenues despite being potentially the single largest traffic generator on the medium (Buchwalter and Martin 2003, p. 15; PWC 2003). This is due to the fact that AOL operates a proprietary network with only limited conduits to and from the Internet—something like a Net within the Net, an arrangement very much like a “walled garden” (Winseck 2002). AOL retains exclusive ownership over its user-base—which accounts for nearly one third of all hours spent on the Internet in the US (Rose 2002)—denying unaffiliated publishers access to information about its users. Outside the network, all AOL user traffic traveling across other publisher sites is recorded as a visit from the company's headquarters in Virginia (Hansell 2000).

While the comparison between Microsoft and Yahoo! is extreme—Microsoft

dwarfs virtually everyone in the high-tech market—companies whose business is mainly offline have a major advantage over those who do business exclusively on the Internet. In a significant reversal from earlier expectations about the transfer of advertising to the Internet from offline publishers and broadcasters, over the past year offline media publishers such as CNN (owned by AOL-Time/Warner), *The Wall Street Journal* and *The New York Times* have become highly successful online advertising sellers (Buchwalter & Martin 2003, p. 14; Businesswire 2003; Marcum 2002). These trends demonstrate the concentration of the industry as well as the gradual shift of the Internet into the orbit of the offline media advertising complex.

5.1.2 Advertisers and Agencies

Both analysts and ad sellers agree that attracting money from offline “bricks and mortar” business is essential for the continuing success of Internet advertising (Buchwalter 2003, p. 15). “Advertiser” as it is used here refers to any producer of goods and services using the Web or other Internet applications to reach a mass or target audience with information about its products. Another indicator of the instability of the Internet advertising industry is the relative lack of investment on the part of major offline advertisers in online advertising vehicles. In 2002 advertisers spent over US\$236 billion on media advertising (AdAge 2003, p. 2). As indicated in Figure 5.2 (p. 142), of the top media advertising buyers in the United States most devoted less than 1% of their advertising budgets to Internet advertising in 2002.

According to *AdAge*, the Internet’s small share of the advertising market fell

Figure 5.2
Top 25 (2002) U.S. Advertiser Internet Spending 2001, 2002

Advertiser (ranked by total spending in all media 2002)

Source: AdAge 2003

between 2001 and 2002 to approximately 2.4% of total advertiser spending last year (AdAge 2003, p.2). Advertisers who do make use of the Internet are mainly those whose business intersects with the medium in some way or who have been able to incorporate the medium's inexpensive publishing and capacity for electronic commerce to their advantage—most prominently from the media, consumer electronics, finance and automotive sectors (PWC 2003). According to Buchwalter and Martin (2003), the two single largest Internet advertisers in 2002 were AOL and MSN (p.10). Other major advertisers for that year included online retailers Amazon.com and Barnes and Noble. European media company Bertelsmann was also among the leaders for Internet advertising buying in 2002 (pp. 5-15). Table 5.1 (p. 144) shows the largest advertisers in terms of exposure between 2000 and 2001 were firms with exclusive or extensive online businesses. The concentration of Internet advertisers within Internet-active firms indicates that most advertisers regard the Internet as having marginal value as an advertising medium.

Another factor to consider is that the Internet permits advertisers to maintain their own publishing presence. Of the money spent on the Internet by traditional “bricks and mortar” firms, there is little to suggest that this money is going to support online ad-sellers. As has been indicated in previous chapters, Proctor & Gamble has always led the way for major national advertisers on the Internet. As a company which produces and maintains hundreds of separate products, Proctor & Gamble has returned decisions for media buying back to its brand managers. The central agency within the company responsible for planning digital marketing as a whole was cut back in 2002 from a staff of

Table 5.1
Top Advertisers by Impressions - 2000-2001 (million impressions)

sixteen to only three (Neff 2003).

In the words of P&G marketing director Vivienne Buchtold, Internet advertising is “not the big ideal” everyone thought it would be (Neff 2003). Disagreements between advertisers and publishers over measurement and the overall aims of advertising likely figure prominently in her assessment. But the other problem is that contrary to its prior expectations, Proctor & Gamble could not “grab all this new technology in our teeth once again and turn it into a bonanza for advertising” (Artzt 1994). Speaking five years after the 1998 call for advertiser solidarity, Denis Beausejour, who has since left P&G, noted, “...with the distributed power and access that characterizes the Web, perhaps we were hoping for too much from the old ‘command and control’ mode” (Neff 2003). The dominant mood within the company now is to “get back to basics”—that is, television. (Neff 2001). Referring to the Internet as an advertising medium, Michael Zeisser, a consultant for FAST, noted “It’s much more different from TV than people five years ago thought (*Advertising Age* 2003).

This is not to say that P&G has retreated from the Internet. It has merely limited its advertising purchases from Internet publishers. The company’s spending on the Internet increased from US\$13.6 to US\$17.2 million between 2001 and 2002 (Adage 2003), but its Internet activities included maintaining an extensive array of over three hundred product Web sites and cultivating its own direct marketing customer lists. It has found its highest-value audience to be teenaged girls which it cultivates through its own Websites such as BeingGirl.com—a site which the company claims attracts 30,000

“queries” per week (Neff 2001).¹ The company also maintains relations with Web publishers such as iVillage which is capable of producing a “qualified” audience for its products (Nottage 2002).

Meanwhile, the majority of Internet advertisements are purchased by small firms and in limited quantities and for only short advertising campaigns (Buchwalter & Martin 2003, p. 15-17). While this would tend to suggest a positive trend for publishers who stress the value of the medium for branding and targeting niche markets, this is not the case. These types of deals do little to ensure revenue stability since they do not provide long term contracts (Yahoo! 2003).

On other hand, some major long term campaigns have made themselves conspicuous in the absence of other major campaign advertisers. 2001 became the year of the X.10—a spy camera. Its manufacturer took advantage of low advertising rates for untargeted placement and indiscriminately plastered the Internet with billions of pop-up advertisements for its product (Anderson 2002; Keizer 2002). The advertisements were hardly subtle, displaying the product along with images of women and empty rooms. But then, given the success of the Internet pornography business, perhaps the ad was simply a reflection of what the manufacturer considered to be the value of the Internet audience as a whole.

All the while advertisers have avoided the Internet, advertising agencies, the firms who make media buys on their behalf, have suffered. Much of the initial hype

¹ Although what they mean by “queries”—whether direct response from customers or simply user hits—is unclear. The former seems unlikely, at it would imply an unprecedented volume of user response.

surrounding the advertising potential of the Internet was very much focused on these new digital agencies which included most prominently such firms as DoubleClick, L90 and 24/7 Media. In the market collapse of 2000-2001, most of these money losing investment dependent firms lost over 90% of their share value. 24/7 Media's shares dropped from a high of US\$65.25 in early 2000 down to US\$0.63 by the end of the year—over 99% of its share value (*CNET* 2000). Industry concentration, the lingering effects of the dot.com crash, and the gradual subsumption of the Internet into the commercial media complex have all contributed to the decline of the Internet advertising agencies.

For the most part these agencies operated by aggregating Web content sites within “virtual” networks to which access could be sold as a package to marketers on a performance basis. Virtual advertising networks also provided the capacity to track and target ads to individual users. The emergence of these agencies attracted criticism from publishers who tended to sell their own advertising and charged on a non-targeted CPM basis (Kornblum 1997a). By offering performance based rates, agencies placed themselves in direct competition with existing web publishers for advertising investment (EAMR 1997). Meanwhile, privacy advocates were concerned about the monitoring which took place whenever an ad was placed on a user's screen (Kornblum 1997b; Interactive PR 1996).

Like other high-tech startups, Internet ad firms depended heavily on investor capital and were very slow to become profitable. Since the dot.com crash of 2000-2001, many of the smaller firms have been forced out of business or been swallowed up piecemeal by other firms. Of the three biggest, 24/7 Media was purchased by streaming

content company RealMedia and has all but withdrawn from Internet advertising sales, focusing instead on developing technology to insert advertising to internet-delivered video (Olsen 2003).

DoubleClick, in addition to poor market conditions and investor fallout, was also faced with a number of state and civil lawsuits and a US Federal Trade Commission (FTC) investigation over its privacy practices in the wake of its 2000 takeover of Abacus Direct, an offline gatherer of consumer information (see Chapter Six). As already mentioned, the firm reorganized between 2001-2002 and extricated itself from the media sales business (CNet 2001; DoubleClick 2002a, 2002b, 2002c). It is now essentially a marketing technology firm which serves advertising and provides advertisers and publishers with information about Internet users.

In 2002, L90 and DoubleClick—who, along with 24/7 Media had battled in court over technology patents (Junnarkar 2000a)—traded assets, with L90 taking DoubleClick's media sales business and DoubleClick taking over its competitor's technologies. L90 subsequently changed its name to Max Worldwide but was quickly overtaken by investor lawsuits and an investigation by the US Securities and Exchange Commission (SEC) over charges that the company had been misreporting earnings in order to inflate profit reports for investors. These actions have led to fines and criminal charges against the company and its management (Morrissey 2003). In March of 2003, the company re-sold the advertising sales business it had bought from DoubleClick to privately held firm Focus Interactive for US\$6 million—small change in comparison to the multi-billion dollar deals of the dot.com boom (Olsen 2003b). Clearly, the business of negotiating advertising

placement is worth little when there are very few advertisers.

Other agencies currently in the business include Overture which specializes in search engine placement and owns a number of search engines itself including AltaVista. This agency was purchased by Yahoo! in 2002 (Glasner 2003) thus further concentrating the advertising market and blurring the line between publishers, advertisers and agencies. And at least one firm, Gator, has exploited the uncertainty in the industry to develop its own predatory business. The company “steals” advertising impressions from publishers by substituting its own clients' ads for those on publisher sites. It does this by infecting user systems with "Trojan" software which installs itself secretly on user machines, reporting user information back to its main server and delivering customized advertisements (Brandt 2002; Stern 2002). In a medium in which publishers act like agencies and advertisers act like publishers, Internet advertising agencies have not done well.

For the most part, the agencies conducting the largest portion of media purchasing online are Madison Avenue firms such as Interpublic, Havas, Universal McCann and WPP who conduct business in much the same way as their offline purchases (*AdAge* 2003b). For these firms, “interactive” is a small part of the media portfolio, not a target medium for advertiser placement. This further indicates a shift towards on- and offline advertising convergence as advertisers prefer to deal with large cross-media agencies as opposed to Internet specialist firms.

5.1.3 Measurement Firms and Industry Associations

Two other groups with a stake in the future of Internet advertising are the ratings agencies and advertising industry associations. As discussed in Chapter Three, the function of an independent ratings agency capable of supplying both advertisers and publishers with consistent data is vital to the operation of the commercial media. On the Internet, there are a number of firms vying to fill this role, the most influential being Nielsen//NetRatings—owned by offline ratings firm AC Nielsen—and Jupiter MediaMetrix (Glasner 2002; NUA 2001; Wells 2001). To date, these firms have met with limited success trying to fill the void which presently exists on the Internet, a fact which each acknowledges is the result of competition within their market.

Jupiter was initially an interactive media company founded by John Harris in 1986 which specialized in multimedia compact disc products. With the emergence of the Internet as a popular communications medium, the company grew into a major Silicon Alley firm and media monitor with its bold predictions about the future of digital media. Its frequently cited projections were always among the most optimistic, often double that of competing industry monitors (Kait & Weiss 2001, pp. 238-9). In the post-collapse industry climate, it shared the fate of many of its Silicon Alley associates and faced severe cash shortages as its former clients went out of business. As a solution to its financial difficulties, the company agreed to an acquisition by Nielsen in 2002 in a move which would have created a single Internet ratings bureau with sufficient market share to take up the dominant position in the field (Glasner 2002; *Wired* 2001b).

Nielsen//Netratings came into being with the acquisition of Internet monitor

Netratings by AC Nielsen in 1999. Its initial client roster included some of the most successful properties online including Yahoo! and TV Guide, as well as offline media networks and advertising agencies such as Cox Interactive and Ogilvy and Mather (Nielsen/NetRatings 1999). Its established offline influence has given it major prominence in the online ratings business (Wells 2001).

Both Nielsen and Jupiter measure Internet traffic patterns by employing survey panels made up of thousands of users hosting monitoring software which records their online activities and delivers the information to the relevant bureau. As discussed in Chapter Four, different survey methodologies employed have often led to contradictory conclusions about Web surfing patterns with the effect of casting doubt not only on numbers produced by competing ratings firms, but also on the use of ratings bureaus for Internet monitoring. Because of this, Nielsen's interest in Jupiter was twofold. On the one hand it wanted to merge its own survey panel and measurement methods with those of its most significant competitor creating a combined research platform. But on the other hand, Nielsen's acquisition of Jupiter would also have combined their client rosters. Hence, the merger would have created a single Internet ratings firm representing a large and harmonized user base and the most impressive list of on- and offline properties on the medium (Glasner 2002; *Wired* 2001b).

The deal was announced in the fall of 2001, prompting opposition by the FTC over its resulting effects on competition which ended the merger. The two firms agreed not to proceed in January of 2002 (Hansell 2002; Glasner 2002). This proved only a temporary obstacle to horizontal integration in the field. Barred from purchasing Jupiter,

the two companies worked out an arrangement in April 2002 which saw Nielsen purchase only the Adrelevance portion of Jupiter's ratings business including its survey panels and technology assets (Nielsen//Netratings 2002). While not the arrangement initially imagined from the outset, it has nevertheless had the same net effect as a merger giving Nielsen//NetRatings dominance over advertising survey methods and obliging Jupiter's former advertising clients to migrate to the new service for Internet measurement.

As already indicated in earlier chapters, there are a variety of means of measuring Internet traffic and hence, the value of an audience commodity. Critics of the ratings method argue that third party ratings are useless in a medium where direct data can be gathered on ad impressions (Wells 2001). However, third party measurement is the method preferred by advertisers who seek comparability with offline media in addition to consistent online measurement standards (ARF 2002; FAST 2000). Nielsen is poised to become the sole player in the Internet advertising measurement market. "We will be the ones left standing," according to the company's sales and marketing director in 2001 (Wells 2001). With online dominance and a huge base of offline clients, Nielsen is now in a position to become the major portal for "bricks and mortar" advertisers on this "bits and packets" medium.

Finally, in addition to ratings firms, the other group of participants looking to bring order and investment to the chaotic advertising landscape of the Internet are the host of online and offline media and advertising associations. With no clear structure presently available to the online industry, these associations have played a central role in establishing co-operation between the various interest groups involved.

The most significant association for Internet advertising is the Interactive Advertising Bureau (IAB) which was formed as a voluntary group in 1996 primarily through the efforts of online publishers and digital advertising agencies. It became a professionally run association, changing the “I” in its name from “Internet” to “interactive” and hiring salaried management in 2001 (Elliot 2001; Olsen 2001b). This association has been instrumental in creating what standards presently exist within the industry including technical properties for ad formats, crucial definitions of advertising metrics, and suggested guidelines for “best practices” (IAB 2003). The IAB also publishes quarterly and annual reports on the state of the industry providing numbers on ad-seller revenues, vehicle distribution, and market penetration.

The effectiveness of the association has been limited, however, by the shifting base of its members over the last several years which has obliged the Bureau to open membership to a range of publishers and advertising representatives from other media (Elliot 2001). Furthermore, as current president Greg Stuart acknowledges, a great deal of the advertising activity on the Internet is beyond his agency’s sphere of influence (Keizer 2002). According to its currently posted mission statement, the IAB's highest priority is representing the interests of “legitimate” online ad-sellers on who’s behalf it lobbies to attract advertiser interest in the medium (IAB 2003).

Two other associations of note are the Online Publishers Association (OPA) and the Network Advertising Initiative (NAI). The former is a consortium of major offline and online media publishers including the New York Times, The Wall Street Journal, Knight-Ridder, MSNBC, and CNET. This association was formed only recently in 2001

to lobby on behalf of a broad set of interests including the viability of the Internet as a branding medium and the viability of subsidization through paid content (OPA 2003c). The NAI is primarily a lobbying association with a handful of members, all of whom are involved in user profiling through on and offline data collection. It formed in the wake of privacy controversies over consumer data profiling online and now stresses its primary goal as educating the public about its “online preference marketing” standards (NAI 2003). Its role in shaping regulatory policy in the US regarding privacy is discussed in the next chapter.

Other associations which have played a significant role in the development of online advertising include the Future of Advertising Stakeholders (FAST) which was made up mainly of representatives from major advertisers who gathered to express their own desires for the medium. The Advertising Research Foundation (ARF), the Association of National Advertisers (ANA) and the American Association of Advertising Agencies (AAAA)—all offline associations—have also participated in various aspects of Internet advertising development, either through FAST or in conjunction with the IAB. This co-operation is evident, for instance, in agreements between the IAB and the AAAA over site counting (Olsen 2002).

The significance of these associations is in the collectivization of disparate competing interests in the Internet advertising marketplace. Whereas the growth of commercial Internet media was characterized by wild investment fostering little regard for profits, the climate has changed demanding more attention to the structure of the industry as a whole. Hence, these associations represent an acknowledgment on the part

of their various stakeholders of the need to organize and develop the medium more fully into an environment better suited for advertising.

5.1.4 Summary

As indicated by the previous discussion, the Internet advertising industry is undergoing a period of convergence with offline media. The continuing struggles of online publishers to generate sufficient revenues exclusively from the Internet has given vertically and horizontally integrated competitors a significant advantage in terms of revenue sources. Lower advertising rates exacerbate the problem and make the online publishing market highly volatile for these publishers. As the industry proceeds, it is the argument presented here that it will involve further dominance from media providers whose primary assets are offline.

In terms of advertisers, there is a demonstrated lack of enthusiasm towards advertising on the Internet. But this does not suggest that major advertisers have retreated from the medium or fail to see the value in the Internet's audience commodity. On the contrary, it conveys (as discussed in Chapter Four) their desire to develop this commodity for themselves. Because of this, it is argued that as the online publishing market becomes less competitive with offline media providers, the two markets are bound to be more tightly integrated. This argument is further supported by the ascendance of large, cross-media advertising agencies who regard the Internet as part of a purchasing portfolio as opposed to a worthwhile destination for investment in and of itself.

In the ratings market, again there is both online convergence and cross media

convergence as Nielsen//Netratings becomes the *de facto* standard for on- and offline measurement. Also as discussed in Chapter Four, advertisers and agencies demand cross-media comparability for advertising investments. The emergence of a single measurement body hastens the likelihood of this possibility.

Finally, industry associations who represent various blocs of interest within the online media environment have had and will continue to have influence over directing the shape of the medium. Co-operation between competitors is also a significant step in the converging on- and offline media environment and these associations provide forums in which this can occur.

In conclusion, the evidence provided above indicates a clear direction for the future of the Internet as an advertising medium. It will progress along the lines of integrating the production of offline audience commodities with the Internet user commodity.

5.2 Indicators of the growth of Internet advertising

Figure 5.3 (p. 157) depicts one measure of Internet advertising's growth in terms of advertiser revenues from advertising between 1996 and 2002. The pattern of ad revenues generally parallels the rise in popularity of the Internet throughout the 1990s. Revenues grew steadily between 1996 and 1998 as awareness of the Internet led early commercial adopters to experiment with developing a workable advertising model for cyberspace. The sharp rise in advertising revenues between 1999 to their peak of just over US\$8 billion in 2000 corresponds to the period of the dot.com boom. Sales figures represented

Figure 5.3
Online Ad-seller Revenues 1996-2002

Source: PWC 1998, 2002

here reflect the heavy marketing investments made by Internet and high-tech firms during this period. The subsequent decline in revenues from 2001 to the present corresponds to the collapse of the Internet bubble and its after-effects.

Estimates published by the IAB suggest that gains at the end of 2002 after seven consecutive quarters of losses were sustained into 2003. This has renewed hopes within the industry for continued growth into the future. Observers attribute the recent growth in revenues to a “stabilizing online advertising market” (Tom Hyland, in PWC 2003). Not reflected by these figures, however, is the marginal return from advertising revenues after operational costs are deducted. Public filings of openly traded ad-sellers such as Yahoo! and DoubleClick (DoubleClick 2003; Yahoo! 2003) indicate that Internet ad sellers are still struggling to attain profitability, so while investment may be increasing, the cost of acquiring this investment often approaches or exceeds its value.

Also not reflected by revenue figures are the sources from which advertising investment is offered. This is partially indicated by Figure 5.4 (p. 159) which situates spending by advertisers on the Internet relative to other media and advertising channels. The year 1996 is isolated as significant given that it was the first year in which data on Internet ad spending were officially recorded. The chart compares spending in this year to spending in 2001 and 2002, the most recent years for which data on advertiser spending is available.

As Figure 5.4 indicates, while advertiser spending on the Internet increased dramatically between 1996 and 2002 from US\$200 million to \$US5.7 billion, the market share of interactive media is dwarfed by that of traditional offline media including

Figure 5.4
U.S. Advertiser Cross Media Spending Comparison 1996, 2001, 2002

newspapers, magazines, broadcast and cable television and the Yellow Pages. This minority market share stands in contrast to prior expectations about the effects of the Internet on traditional media.

Furthermore, while the overall market increased in value between 2001 and 2002, the Internet fell both in terms of market share and posted spending during this period. Aside from losses experienced by the Internet advertising industry resulting from market instability in the high-tech sector, this overall drop would seem to indicate a more widespread disinterest in the medium on the part of advertisers.

The drop could also be attributable to the overall decline in Internet advertising card rates. In this case, the reduction in market share could in fact belie an increased volume of better valued purchasing. But as discussed, while these numbers indicate advertiser spending in particular media, they do not necessarily represent placement purchased from providers. Many prominent advertisers develop their own web content and carry out their online marketing internally. To what extent this is represented in these figures is uncertain.

Nevertheless, despite uncertain profits or commitments from offline advertisers, advertising on the Internet continues to flourish, outpacing the growth of both the Internet's user base and technological infrastructure. Figure 5.5 (p. 161) compares the relative growth rates of Internet users, network web servers, and advertising impressions for a two year period between June 1999 and July 2001. While usage increased 63.5% over this period, and the total number WWW servers nearly quadrupled at a rate of 374%, the total number of ads served during this period expanded 691%.

Figure 5.5
Growth Rate Comparison - Ad Impressions, Web Servers & Internet Users - 1999-2001

Source: (1) CyberAtlas 2003b; (2) Zakon 2003; (3) CyberAtlas 2003a

Volatility in Internet advertising is reflected in this chart by the ups and downs of impressions served which reached its highest point of an 896% increase in March of 2001.

This volatility is attributable to a number of factors: ongoing shifts in the online advertising marketplace; Web advertising campaigns by Microsoft, Apple and AOL who all released major revisions to their core products in early 2001 (Buchwalter & Martin 2003); and to changes in the measurement methodology in commonly published figures during this year which began to depict Internet ad impression measurements on the basis of both home use and work use. It is interesting however to note that while shifts in the industry resulting from the dot.com collapse led to decreased investment in online advertising, this decrease in investment was more than made up by large on and offline firms who were for the most part able to take advantage of declining ad rates to increase total exposure. Table 5.1 (p. 144) provides a list of top advertisers in terms of impressions during this period and shows that the largest beneficiaries of overall market instability in terms of advertising are those firms with sufficient monopoly power to take advantage of the effects on online advertising.

5.3 Means of delivering advertising online

Regardless of the medium, advertising only works when audiences pay attention to it. Because Internet advertising has not yet worked, for advertising participants, this means that audiences are not paying attention. It is the shared perspective both of advertising sellers and advertising buyers that the problems inherent with the medium for advertising

have everything to do with getting and keeping user attention (Beasejour 1998; *Economist* 2001; Anderson 2002; Lane 2000).

Figure 5.6 (p. 164) provides trends in advertiser investment in various Internet advertising formats over the last three years. As it clearly indicates, advertiser investment in older advertising delivery techniques such as banners is waning while investment in more intrusive or contextually relevant advertising methods such as interstitial and keyword search placement is increasing.

While these various advertising vehicles differ in their means of execution, they all share the common elements of attracting user attention by “pushing” information which is very often customized based on information “pulled” from users by a number of means. This section briefly discusses a few of these methods, outlining what are considered to be meaningful trends in Internet advertising delivery.

5.3.1 Banners & Rich Media

Of all the forms of advertising frequently in use on the Internet, banner advertising is by far the most common. It is also becoming the least popular for advertisers. As discussed in Chapter Two, while many commentators have credited the failure of the dot.com boom to a variety of causes, some have gone so far as to blame it specifically on this format of Internet advertising.

Figure 5.6
Advertising Vehicle as Percentage of Total Revenues 2000-2002

Source: PWC 2003, 2001

At the heart of the dot-com bust is the beleaguered banner ad. Popping up on Web sites throughout the Net, it was supposed to usher in the new age of marketing. Advertisers could target their message and count the people who read it. And count they did, on the fingers of one hand. Faced with a banner ad at the top of a Web site, only about 3 surfers in 1,000 actually clicked through to see the advertiser's wares. So after years of great growth and even greater expectations, spending on online advertising tailed off faster than you could say Pets.com. (Hobson 2001)

Sentiments such as these are echoed throughout the online advertising industry by advertisers, publishers, analysts and ratings monitors (Buchwalter & Martin 2003; ARF 2002; eMarketer 2002; Economist 2001, etc.). It is the considered opinion of the industry that it was not lack of user interest that led to the failure of online advertising, but the way the messages were delivered. Hence, so the thinking goes, what is required are better forms of advertising that users will not only be unable to ignore, but that users will actually want to click on.

Banner advertisements are native to the World Wide Web and are typically displayed above or alongside site content. As has already been mentioned, they are thought to provide product exposure and branding opportunities as well as providing the basis for performance-based click-through advertising pricing.

Wired magazine's Hotwired.com news site is credited with the first "official" banner advertisements in 1994 (Bayan 2001); they were however widely in use prior to this by the online porn and gaming industries leading some to suggest that banners—as with many of the techniques employed in Internet advertising—originated from enterprises

specializing in vice (Cyveillance 2001). Banner advertising was the single most important vehicle for selling porn online. Larger distributors were happy to reimburse amateur web publishers on a CTR basis for sending targets to their sites (Lane 2000, p. 138, 202).

While the format of this type of advertising is often described in terms of magazine advertising, on the Internet these ads are not “bundled” to the content in which they appear. They are usually inserted into site content by separate advertising servers belonging to third party advertising firms or by the advertisers themselves (ARF 2002; FAST 2000; Merriman et al. 1996). This is the reason for the often contentious disputes between advertisers and publishers over site impressions as the tallies between ad servers and Web servers rarely match over site traffic and advertisement exposure (NUA 2001; Wells 2001; Catalano 2000).

Banner ads also provide the means to conduct user monitoring by owners of advertising servers through the use of “cookies”—small files, usually encoded, which tag a user and track his or her activities on the Internet every time he or she is made visible to a particular advertising source. This scheme, developed and patented by DoubleClick but widely emulated nonetheless, is discussed more fully in the next chapter along with its implications for user privacy.

Another reason for the popularity of banner advertising is that unlike many other aspects of Internet advertising, they have standard sizes and formats thus making it easier for advertisers and publishers to negotiate over advertising rates. These standards are developed and maintained by the IAB (IAB 2003) and also make site design around

advertising placement much simpler.

In 2001, in order to allay advertiser doubts and to deflect general criticism of the effectiveness of Internet advertising, the IAB issued new, larger advertising formats including the now common “skyscraper” banner which can consume up to a third of a typical browser screen. Responding to criticism that the move was a typical example of “arranging deck chairs on the Titanic,” IAB Chairman Richy Glassberg responded: “The last thing we’re saying is that the banner is dead. We’re saying that the banner is alive and well, and research is telling us banners work, but we need some bigger banners and some interactivity within them” (Olsen 2001a).

“Interactivity” is presently regarded as the key to the future of advertising on the Internet. What is typically meant by this is a greater degree of “rich media” animation within existing advertising formats. The term rich media also refers to a variety of new advertising formats which are far more intrusive and bandwidth intensive than the traditional banner ad. Commonly cited examples of new formats include: interstitials which appear between pages as a user clicks through a publisher Web site; superstitials which are superimposed over content; and pop-ups which appear when a command is sent to the browser to spawn a new advertising window either on top of or behind the window currently being read (Keizer 2002; *Economist* 1999).

In general, these formats add an additional load on system resources. This is particularly the case for ads with animated elements since their size is typically between 70-100 kilobytes—often as large or even larger than the total data downloaded to view a site (CNET 2001b). For this reason they have met with overwhelming negative response

from users—particularly pop-up ads. According to a 2001 Jupiter MediaMetrix study, 41% of users regarded pop-ups as annoying enough that they would avoid a site which hosted them.

Research conducted on user response to these intrusive means of advertising has concluded that not only does it negatively impact traffic to sites using pop-up, people spend less time online as they encounter more of these types of ads (CNET 2003). Web site owners and even Internet Service providers have been affected by these practices. Some publishers such as iVillage have stopped allowing these types of advertisements to their sites (Buchwalter and Martin 2003). ISP Earthlink began offering its users “pop-up killers” in 2002 (Martin & Ryan 2002), and in 2003, AOL decided to no longer allow pop-ups on its network, despite reporting a 42% decline in advertising revenues as a result (*Computerwire* 2003).

For their part, advertisers must be concerned about how the form of their advertising affects what they regard as their brand image. Nevertheless, for many advertisers and publishers, the negative response from users needs to be weighed against the effectiveness of these formats for attracting user attention. Sentiments throughout the industry are echoed by Nielsen//Netratings analysts Buchwalter & Martin (2003, pp. 32-33), “There’s something to be said about having an ad that gets right in the user’s face. Surfer’s may complain, but TV viewers over the years have become used to commercials that interrupt content for about two minutes during their favorite shows.”

The Buchwalter and Martin report (2003, p. 33) indicates that pop-up usage is still quite low but growing—up from 1.9% of all advertising impressions served in 2001 to

3.5% of all impressions in 2002. Statistics such as these belie the actual frequency of pop-ups. A typical Web page will generally host multiple advertisements (five or six is not uncommon). Therefore, comparing the impact of pop-ups in terms of impressions is misleading since the ratio of pop-ups to banners is close to one in five. This observation is confirmed by Internet advertising technology company Cyveillance which counted 30% of the top 100 U.S. based domains as using pop-ups (Cyveillance 2001).

The Cyveillance Report goes on to document further techniques used to “entangle” the attention of user to advertising which include: “mouse-trapping”, or disabling the browser's back button so that the window can only be closed down; unauthorized software downloads which install programs directly onto users’ systems allowing for better ad serving and data collection; and mislabeled links or false system messages to trick users into clicking on the advertisement (Cyveillance 2001). According to the report:

The adoption of such tactics by mainstream sites corresponds with the economic downturn as companies seek to derive revenues by any available means. The use of these aggressive techniques is highly disruptive to the customer’s experience and highlights the short-sightedness, desperation, and inexperience of some online vendors (Cyveillance 2001).

Regardless of such damning criticism, advertisers nevertheless remain convinced that rich media and associated delivery techniques present the best means of utilizing the Internet as an advertising medium (Buchwalter & Martin 2003; eMarketer 2002; ARF 2002, etc). The solution commonly prescribed is the wider implementation of broadband Internet to make delivering intrusive advertisements less of a burden on system resources

(PWC 2003). In other words, lack of user response to existing strategies is not the problem. Nor is their outright hostility to experimental efforts to correct this problem. The problem is the medium itself which needs to be re-engineered or at least opened up significantly to permit commercial users to make greater use of it.

5.3.2 Search Engines

Finding specific information on the Internet would be virtually impossible without the indexing function of search engines. They are among the most heavily trafficked sites on the Internet and are in turn the biggest traffic generators for other sites. Hence, search engines are of key importance to advertisers and advertising publishers both for point of search advertising and click-through traffic (MacDonald 2002). As indicated by Figure 5.6, search engine keyword placement is presently the fastest growing means of advertising on the Internet.

At present, the two most popular search engines are Google and Yahoo! (Buchwalter & Martin 2003). The former is a “web crawler” which catalogues Internet content and matches search terms to web pages based on a number of criteria, relevance to the actual term being only one. Yahoo! is a content destination in itself which offers a variety of services including discussion forums, e-mail services and electronic shopping. Its content catalogue is sorted hierarchically in a subject tree which can be searched by keyword or surfed by category. It should be noted that most engines do not search the whole of the Internet, merely a subset of web content which has been made searchable; sites must be submitted to engines for inclusion.

Search engine advertising is primarily conducted in two ways: paid placement and paid inclusion (CommercialAlert 2003). The paid placement method keys advertising hits alongside “editorial content”, indicating the page returns that are sponsored links. Google presently indicates paid placements in a side bar highlighted in text boxes and with an alternate screen font from non-sponsored hits. Yahoo!’s paid placements are somewhat less distinguishable, being placed at the top of the return ranking under the heading “Sponsor Links.” Other sites can be somewhat less clear. AltaVista places sponsored links both above and below returned hits. Lycos top-ranks sponsored sites, utilizes a side bar, and frames search engine returns with banner advertising. As well, most engines only return a limited number of hits at a time, maximizing ad exposure through the repeated page requests required to obtain a relevant link relevant to the user.

Paid inclusion is the practice of including sponsored links within the returned rankings themselves. Because of the extensive number of pages returned in a typical search request, the most frequently followed links are those displayed in the first page of the results returned. For advertisers, being among the first few links is very important. In 1999, AltaVista (now owned by Yahoo!) put its rankings up for sale promising advertisers preferential placement on search engine returns (Hansell 1999). Company executives likened the practice to the paid placement in the Yellow Pages. However, it is altogether different in the respect that telephone directories are sorted alphabetically, not according to advertising criteria.

Assigning return rank by advertising criteria would practically guarantee that information delivery would be on the basis of advertiser payment rather than relevance to

the user. Because of the practical implications, organizing data in this manner is clearly a freedom of information issue. This prompted the US Federal Trade Commission (FTC) to issue the recommendation that commercial hits be separated from those occurring through algorithmic sorting (Sullivan 2002).

According to current practices, Google frames search returns with paid links keyed to the particular search term. With this scheme, the division between searched hits and advertising hits is clear. However, the search algorithm used by the Google, PageRank, is still far from transparent and is classified by the company as a trade secret. According to its publicly available description (Google 2003), its PageRank system returns hits according to a number of criteria including relevance of the page to the search term, the “popularity” of the page as determined by the number of links from other sites to the site being searched, and according to its rating within Google’s own ranking system. How this unique rating is applied has been the subject of some controversy (Googlewatch 2003); however, the company explains the secrecy is fair given that its technology is reproducible and that knowledge of the inner workings of its system would provide unscrupulous advertisers with the means to skew results (Manjoo 2002).

This type of skewing is an inherent problem of search engines. Older techniques which only examined the header information of HTML documents were easily duped into thinking that, for instance, a porn site contained information about Disney World by deliberately repeated Disney-related phrases in document headers. While systems such as the Google PageRank system have made false hits more difficult, techniques such as “link farming” do result in better rankings on Google searches. The link farming

technique inflates the “popularity” of a site by linking to it from hundreds of dummy pages (Manjoo 2002) which in turn raises its ranking in search displays.

For Google however, such activities represent not so much an abuse of its PageRank system as they do competition for its own advertising sales. Google clearly recognizes the value of its user traffic. Furthermore, Google closely tracks its users by depositing permanent cookies on user systems, making them recognizable to its system every time they return to the site and input a new search term (GoogleWatch 2003). This technique is being used to deliver contextual ads to specific users (Tedeschi 2003). For its own part, Yahoo! has recently purchased the search engine ad agency Overture. A further player in this arena is Microsoft which not only runs a search engine through its MSN network, but is also able to use its majority control in the operating system and browser technology to intercept mis-directed page searches from the browser and deposit users on its own search site.

5.3.3 E-mail

Unsolicited commercial e-mail is among the most despised advertising practices on the Internet, both by users and by network operators. According to the Pew Internet and American Life Project, spam is not only an inconvenience for users, it extends to user distrust and irritation with the medium as a whole. In its 2003 study of Internet-user attitudes (Pew 2003), 70% responded that spam “has made being on the Internet unpleasant or annoying” (p. 28).

Spam has risen in the wake of the dot.com crash, increasing 600% between

January 2000 and June 2001 (*Wired* 2001b). User addresses are acquired by “harvesting” them from the Web, Usenet or other Internet applications or can be randomly generated and sent in bulk to ISPs. Publishers may also gather e-mail addresses from users and make them available to direct marketers. *Wired* attributes the reason for the increase in spam to low delivery costs for direct marketers and to the flood of e-mail addresses that have become available to them in the post-crash bankruptcy market (*Wired* 2001c). Ferris Research believes that present levels will increase five-fold by 2008 (Ferris 2003).

Much of this unsolicited commercial e-mail is simply junk. A 2003 FTC study into misleading marketing practices (FTC 2003) found that of a random selection of 1000 messages contained in their spam e-mail databases, 66% were fraudulent in one form or another—either by providing false sender information, false subjects lines, or through falsity in the text of the message. The study also found that of the 250 e-mail addresses set up for their study and distributed using various Internet applications, 86% were harvested and received unsolicited commercial e-mail. Requests to have these commercial solicitations discontinued were ignored 63% of the time.

Apart from the cost to the medium of declining user interest and trust, it also extracts a far more tangible cost from network owners and Internet services providers. Of the approximately 30 billion e-mail messages traveling across the Internet per day, it is estimated that at least half are unsolicited commercial email (Pew 2003, p. 6). AOL and MSN report up to 80% of their incoming mail is spam (Pew, p. 7). The costs of carriage and blocking is incalculable, but estimates range from anywhere between US\$10 billion

to US\$87 billion per year.² This has led to a number of lawsuits against individual spammers by large e-mail providers such as AOL and Microsoft (Internetnews 1998l, 1998m, 1998n) as well as many attempts to regulate the practice by various governments.

In the US, where 28 separate laws regarding spam were introduced by legislators between 1999 and 2003 (Sorkin 2003), a recent Senate bill has received passage in October of this year. Dubbed the CAN-SPAM Act of 2003 (United States 2003), the bill make deceptive practices illegal and sets out civil damages for offense, but also reserves the right of claim only for industry and government. It reduces the role of regulatory bodies in governing the practice on behalf of consumers and enshrines the “opt-out” model for user participation over “opt-in” which puts the onus on advertisers to establish user consent before sending unsolicited commercial e-mail. It furthermore overrides stronger spam legislation passed in 35 US states (Sorkin 2003).

While the Act is ostensibly an effort to control spam abuse, from a network governance perspective, the law removes users from the equation altogether and in fact promises to make user interaction with the medium more bureaucratic. Its prescribed remedies are applicable only to spam sources from within that country; hence, the effect on total user reception of spam has yet to be seen. The endorsement of opt-out participation standards puts the onus on individual users to control the flood of unsolicited commercial e-mail on a case-by-case basis and there is no determining whether such requests will be honoured by offshore senders or will simply alert their

³ While the numbers are not directly comparable, it is ironic to note that if these estimates are correct, the cost of transmitting commercial messages to e-mail accounts is between 1.5 and 25 times greater than what publishers earn from placing them on user screens

servers that randomly sent messages have reached valid addresses. For this reason it is doubtful that the law will do anything to lessen the individual inconvenience of spam or restore user trust in the medium.

The primary implication of this law is that it makes spam a legitimate commercial practice. Internet advertisers and publishers lobbied extensively on behalf of the bill's passage (Mark 2003). It makes spam an issue to be settled between advertising interests and network operators. To this extent, the law serves to define the medium as an advertising channel.

5.3.4 Summary

Given the volatile nature of the Internet advertising marketplace, it is assured that the methods of advertising described above and advertiser/publisher preferences for each will likely change many times before a commonly agreed upon set of advertising techniques and standards can be developed. More significant than any particular trend in advertising delivery, however, is the persistency of purpose by which they are governed.

Movement away from the older, print-style banner advertising format towards more intrusive forms of rich-media pop-up advertising indicates a desire to shape Internet advertising into a form similar to those available in other electronic media which interrupt programming content. It also indicates the persistence on the part of advertising stakeholders in the medium that the problem with Internet advertising has little to do with lack of user interest; rather, it is a product of the limitations of the medium itself. Defining users as active consumers, advertisers and publishers seek to find ways to make

their commercials more appealing, but are at the same time placing a heavy tariff in terms of user time and computing resources to make this become a reality.

Paid inclusion and placement in search engine rankings, which is often compared to placement in the Yellow Pages, can be regarded as movement towards providing a commercially arranged channel guide, reducing the vast archives of information available on the Internet to a short list of options relevant to the interests of the advertiser and the search engine publisher.

And developments over the use of e-mail as an advertising delivery system are particularly significant in that US government regulation has served to define the medium as a whole as an arrangement between advertising producers and network operators with users as passive recipients of unsolicited commercial messages.

In summary, what these trends indicate is a desire to limit the medium to a fixed set of uses determined by audience commodity producers and purchasers. Following this path, as trends and patterns are developed more fully in the future, the underlying drive is to transform advertising and the medium as a whole into what can be regarded as an enhanced television advertising model supporting intrusive, unavoidable advertising which is customized to a far greater degree than on any other media to specific users. The implications of this imperative are discussed more fully in the following chapter.

5.4 Conclusion

Taken together, it is argued here that both in terms of the structure of the industry and the means of advertising deployment, there is a consistency of purpose in re-developing the

Internet as a television-style advertising supported medium.

As indicated by present trends within the structure of the industry itself, it is evident that offline media is in a far better position to attract advertising, both on the basis of the stability provided by offline operations and through their added ability to attract their offline advertisers to their Internet operations. Given the reluctance of major advertisers to regard the Internet as worthwhile in itself, it is likely that in the future, offline media providers will serve as the portal to major advertiser sponsorship on the Internet.

Current trends in the area of advertising delivery are also highly significant in that the benefits of the medium for monitoring users and accurately counting advertising response make the Internet highly attractive despite its present lack of effectiveness as an advertising medium. As indicated above, there is a commonly expressed desire on the part of Internet publishers and prospective advertisers to develop more active methods of acquiring user attention, blaming the technological limitations of the medium for this problem as opposed to an actual disinterest on the part of users towards Internet advertising. Since streaming media and advertisements are system and network intensive, the means of implementing these new forms of advertising are presently limited. The decision between the United States government and unsolicited commercial e-mail providers is significant in that by limiting user avenues of appeal to intrusive Internet marketing, the medium has effectively been defined in law as an arrangement between content providers and network operators. Future redevelopment of the Internet itself to provide the means to deliver enhanced content can be expected to evolve along the lines

of shared interest between these two parties.

In conclusion, based on current trends in the industry and on discussion in previous chapters, the Internet is on a trajectory which will integrate it with the commercial mass media as a whole as interests between advertisers and publishers converge. Furthermore, it can be argued that these mutual interests will have a major impact in future negotiations with network operators over the form of the network itself.

Chapter Six

Targeted Advertising and User Privacy

From a commercial perspective, what goes on behind the banner is much more important than the actual messages conveyed by Internet advertising. It is a core principle of marketing that the more one can learn about consumers, the better one can customize messages and rationalize the allocation of resources for attracting them to goods and services. For advertisers, understanding consumer preferences is the key to increasing sales and lowering transaction costs. Publishers and advertising sellers are in the position of having to convince advertisers that they are indeed able to provide this information.

For both audience production and consumer product sales, the single largest advantage of the Internet is the capacity it provides for user surveillance. Controversies over on- and offline information gathering practices by Internet advertising agency DoubleClick have been instrumental in alerting the public to the inherent lack of privacy they have when using the Internet. The resolution to this controversy, far from rectifying the problem of accumulating user information, has given audience commodity purchasers and producers new licence to extend these practices without the threat of public policy interference or legal challenge.

It is the perspective presented here that the implications of user surveillance and consumer production are linked to the discussion developed in Chapter Three of the institutional imperatives implicit in audience creation. The ability to identify

commercially significant user traits will play a major role in shaping both the content available on the medium and the form of the medium itself. Furthermore, given the medium's unique capacity for audience commodity intensification and extensification, the implications of this transformation from stateless network to commercial state space spread far across this single medium and apply to the whole of mass media as well as commodity markets in general.

6.1 Marketing, Surveillance and User Privacy

As discussed in previous chapters, the Internet has provided an arena in which users, audience commodity producers, and audience commodity buyers have all come into conflict. The unprecedented degree of user agency permitted by the Internet's open standards has allowed users to explore new means of communication and interaction using the technology. As discussed in Chapter Four and indicated in Figure 4.2 (p. 101), chief uses of the Internet include searching for information on subjects of personal interest including health, hobbies, news, finance, entertainment and leisure activities, consumer product information and so on. Actual buying behaviour is limited and commercial appeals through advertising have been ineffective. All this would seem to indicate that the value of the medium for commercial uses is negligible. However, this is not the case.

As an interactive medium, information is easily acquired about users as they engage in their daily activities. The volume and depth of this information is unprecedented. According to Johnson (2001), aside from lowering the cost of consumer

research, the advantages of the Internet for marketing include increased monitoring validity, increased sample sizes, globalized sample ranges, and the greater ability to include secondary data revealing trends in consumer attitudes. In the terms used in the present analysis, marketers regard the Internet as a medium which intensifies and extensifies the value of the audience commodity.

Furthermore, the value of “consumer” behaviour online extends far beyond the limited market of electronically offered goods and services. It is a surveillance engine which yields data of use to the market as a whole (Clayton & Stewart 2003). So while the success of commercial activities on the Internet has to date been limited, it is insignificant compared to the overall benefits derived from Internet user monitoring. The key to unlocking the value of this information both for audience producers and audience buyers is to link individual online activities with offline market consumption. This allows both for tracking individual and household consumption and for tracing broader trends in consumption patterns as a whole. Inextricably linked to this however are the issues of consumer surveillance and of user privacy.

The division between advertisers and publishers is again felt in this domain. As indicated by addresses to the industry by Beausejour (1998) and Bechtold (Advertising Age 2000), and by the practices endorsed by the FAST measurement panel (FAST 2000), advertisers feel that respecting user privacy is essential for inspiring consumer trust in the medium. As an extension of this awareness, advertisers generally prefer “opt-in” as opposed to “opt-out” consumer preference marketing (Lawler & Cooper, 2003). They feel that the data acquired through opt-in is more reliable and therefore produces better

return on investment in media planning. This perspective is consistent with advertiser preferences for utilizing the Internet as a sales and customer relationship channel and is also reflective of their preference for performance based advertising measurements.

Publishers, and by extension all other parties with an interest in attracting advertising dollars to the medium, have pushed the envelope on the types of information they have been able to extract from Internet media users. It has also increased the tenor of the urgency in their calls for advertiser investment in the medium. According to one Internet boom-era Jupiter MediaMetrix report, if advertisers did not recognize the value of the information Internet firms could provide on users, they risked losing "a competitive advantage" in the market (Internetnews 1998h).

Internet publishers and advertising sellers prefer the "opt-out" method of user participation. The assumption is that by making no choice to end monitoring or marketing solicitation users are in fact making a positive choice to become consumers (Lawler & Cooper 2003). They also, according to this assumption, make the positive choice to accept information sharing between publishers and advertisers and by other third-parties interested in consumer information (Lawler & Cooper 2003).

These assumptions are frequently justified on the basis of a social contract model arguing that if users benefit from information they receive online, they are tacitly agreeing to accept commercial solicitation (Gordon & De Lima-Turner 1997). Speaking in reference to the rising trend in the user adoption of privacy enhancing software, current Interactive Advertising Bureau (IAB) president Greg Stuart argues, "Users must accept the quid pro quo of advertising....They're getting something for free or at a reduced cost.

And yes, blocking ads violates that implied contract” (Keizer 2002).¹

From strictly a commercial point of view, opt-out models provide advertising sellers with much higher rates of user “participation” which allow them in turn to receive higher returns from advertisers on the audience commodities they produce. Hence, publisher preference for opt-out marketing strategies reflects their interest in securing maximum investment from advertisers by providing as many consumers as possible.

It needs to be pointed out that despite the generally offered explanation on the part of advertisers and publishers that consumer profiling benefits consumers in one way or another, this is not the purpose for which it is conducted. As evident in the discussion regarding consumer markets in Chapter Three and branding presented in Chapter Four, consumer benefits accrued through surveillance are, at best, secondary. The primary benefits are to commodity producers who gain the ability to identify individuals as potential consumers of a class target demographic and adjust product packaging and pricing accordingly (Doyle 1995; Dalgic & Leeuw 1994; Brownlie & Saren 1992, etc).

From the perspective of the Internet user, the difference between opt-in and opt-out strategies is immaterial. Regarding the former, concerns have been raised over the point at which someone using the Internet ceases to be a user and becomes a consumer (Perry & Bodkin 2000): When a product is purchased? When it is registered with the manufacturer? When information about a product is requested? When the user

¹ It is worth noting that a quick perusal of the Internet software download site Tucows.com indicates that the most frequently downloaded program from that site is Ad-Aware, a program which removes cookies and blocks ads. Four of the top ten are ad-blockers and personal firewall applications (Tucows 2003).

demonstrates his or her implied interest by investigating a manufacturers website? On the other hand, with regards to opting out, there is clearly the mutually recognized acknowledgment that users have no idea that they are participating in consumptive practices when they provide information to Web site owners or that this information will be shared and used to make decisions which will affect individual market consumption (described in reference to offline information gathering in Gandy (1993)).

Defining privacy as “the opportunity to consume” is a very limited way to regard the importance of personal information. It was nevertheless the definition adopted in debates over the business practices of DoubleClick, a company which develops profiles on consumers without their knowledge by linking online information with offline data and sharing the information with affiliates and clients. The fact that the company did so deceptively provided the opportunity for legal and regulatory appeal. Users themselves, however, regard their personal privacy in different terms from their assigned role as consumers.

According to the Public Interest Advocacy Center, “Businesses cannot assume anything about consumer consent to secondary marketing” (PIAC 2001). In a report commissioned from Ekos research on consumer attitudes towards direct marketing, 82% expressed the opinion that they themselves should have control over the information collected by marketers on their consumer behaviour (PIAC 2001). Over half were unaware of the extent to which personal information was collected on them by such methods as loyalty programs, credit card purchases and so on. In a study conducted by the Pew Research Center in 2000 regarding privacy on the Internet, 86% preferred

“opt-in” Internet marketing strategies and over half (54%) believed that online user monitoring was an invasion of their personal privacy. The overwhelming majority of those surveyed thought that the practices of user monitoring should be regulated, and that users themselves should be in control of these regulations (Pew 2000).

Only 27% of respondents in the Pew survey expressed concerns about the effects of surveillance in customizing Internet content. From the perspective developed throughout this examination of Internet advertising, this is the most important implication of Internet marketing surveillance. Predicting future buying patterns is essential for marketers. This is best done by identifying not only the right economic classes of users, but also by determining a commercially relevant set of cognitive attributes as well. The vast array of content sources on the Internet provide greater opportunity to learn more about the way consumers think. The conclusions of these types of evaluations plays a role in the type of advertising and content offered on particular media channels.

As an example of this type of research, Foxall (1993) provides a colourful account of his stimulus-response based consumer model. He suggests that consumer responses are based on previous purchasing experiences through which they “learn” how to consume. The most experienced consumers, early adopters or “Initiators”, “have higher social status, greater upward social mobility, and a more favourable attitude toward credit than later adopters. They also show more extensive social participation, are ‘cosmopolitan’, have greater knowledge about innovations and display more opinion leadership” (Foxall 1993). At the opposite end of his hierarchy are “the Laggards” who are, “tradition bound, economically limited, and so conservative as to try new (to them)

products which have been severely tried and tested by preceding adopters” (Foxall 1993).

The opportunities for class-based analysis are virtually limitless. But it is presented here to indicate the orientation of research into consumer behaviour. The Internet extends the ability to develop a far more complete portrait not only of user interests, but of who users “actually” are. Users have no idea how their visits to financial sites, music sites, health sites, and so on are being monitored and used to place them into ideal consumer categories. Once ideal consumer-types are created then the content, the channel, and eventually the medium can all be directed towards providing advertisers with these types of ideal consumers.

From the present perspective, this is the most important consideration of the privacy issue as it pertains to the Internet. Following from the discussion developed in Chapter Three, if media audiences are defined in terms of institutional goals oriented around the production of ideal consumers, then the “surplus meaning” generated through audience engagements with media is truncated and dismissed from decisions regarding the conditions of audience participation.

The open standards of the Internet provide conditions to allow users to reap the benefits of this surplus value. They are able to engage with and through the medium in more ways than can possibly be accounted for. Much of the Internet itself is a product of user surplus which led to the development of most of the applications used to interact with the medium and much of the content accessible through these applications.

The effects of user monitoring for commercial purposes has the potential for a cascade effect. Identifying users as consumers is the first step in limiting the uses

available to users. Developing commercially relevant ideas about Internet consumers hastens the process along. The transmission of dominant notions of commercially useful behaviours spreads across the information environment as interests converge and ownership of the means of acquiring user information become isolated to smaller and smaller groups of actors. Redesigning the conditions of information access encloses the environment within which users can interact. In the final stage, these ideas can be reproduced into the structure of the network itself thus providing maximum network value in a commercial state space.

In this context, privacy emerges as a key issue in the future of the Internet. Strong privacy protection allows users to control the meanings they produce on the network—to retain the meanings they generate for themselves and prevent their participation from being appropriated by others with purposive intentions for user agency. User privacy is an essential cornerstone of the Internet as an open communications medium.

However, in analyzing the development and the outcome of the DoubleClick controversy, it is apparent that the privacy regime left in its wake only enhances the ability to conduct user surveillance.

6.2 DoubleClick

DoubleClick came into being in February 1996 as the result of a spinoff merger between New York ad agency Poppe Tyson (then a subsidiary of Bozell, Jacobs, Kenyon and Eckhardt, and now advertising giant Omnicom) and an Atlanta Internet startup known as the Internet Advertising Network (IAN) (Kait & Weiss 2001, p. 119; *PR Newswire*

1996a). It distinguished itself from its offline partners by promising clients “the ability to customize and target ads to specific users and to measure results” within a “virtual” advertising network which from the company’s creation included such valuable Internet real estate as Netscape, Excite! and Alta Vista (*PR Newswire* 1996; EPIC 2000). It was by far the most influential of the Silicon Alley dot.coms, arguably giving shape to the Alley’s rise and development by being its largest employer and by providing a link to major advertisers for the many dot.coms that sprang up in DoubleClick’s vicinity (Kait & Weiss 2001, p. 113-122). The sign welcoming visitors to the district was emblazoned with the company’s logo, “DoubleClick Welcomes You to Silicon Alley” (Eaton and Blair, 2002).

While a separate company from Poppe Tyson presided over by IAN CEO Kevin O’Connor, DoubleClick nevertheless kept close ties with its parent sponsor which retained 55% ownership and chaired its board of directors. The partnership worked out well, establishing DoubleClick—located at 41 Madison Avenue a few blocks from the largest media buyers in North America—as *the* advertiser portal to the Internet (Kait & Weiss 2001, 114). While company press releases and statements by O’Connor would often hype their firm as “doing more with this medium right now than any other medium can possibly do” (*Interactive PR* 1996b), DoubleClick was always very beholden to the offline Madison avenue company which brought it into being and provided much of its business.

DoubleClick’s advertising system was comprised of two key components: a virtual network and targeted ad placement. The virtual network consisted of what

eventually became over 11,000 participating sites who received their advertisements from DoubleClick (Tedeschi 2000a). With this arrangement DoubleClick was able to bundle and sell websites in content-themed packages to advertisers who received placement across a range of sites at once (Kait & Weiss 2001, p. 116). Its system emulated that of online service providers such as AOL who had always bundled advertising with content on their own network. The DoubleClick network had the advantage of being able to exploit the much broader traffic patterns of the WWW as a whole and incorporate popular destinations only once sufficient traffic was apparent.

By August of 1996, only five months after going “live”, DoubleClick had access to a base of over 10 million users, compared to 6 million for AOL and only 1.2 million on MSN. It was apparently “one of the quickest growth rates in the history of measured media” which earned the company Forbes Magazine’s stamp of approval as one of the “Hip, Hop and Happening Companies of 1996” (*PR Newswire* 1996b).

In addition to content bundling, the other key element of the DoubleClick advertising system was its patented ad targeting and delivery technique. The premise of the patent, filed in October of 1996 under the title “Method of delivery, targeting, and measuring advertising” (Merrimen et al. 1996), was that targeting advertising was more desirable than other methods used on the Internet which were similar to print advertising and generated low response rates. The patent claimed ownership over a means of ad delivery consisting of three elements which it collectively referred to as its “invention”.

...it is a first object of this invention to provide targeting of advertising over networks such as the Internet. It is a second object of this invention to provide control over

frequency of exposure to users for advertisements appearing on web pages over time. It is a third object of the invention to provide the capability to gather information about recipients of the advertisement (Merrimen et al. 1996).

This was the heart of DoubleClick's business—delivering ads on the basis of user information. According to Chief Operating Officer Kevin Ryan, the goal was not simply to match the right ad with the right user, it was to anticipate what ads he or she might want next (Kait & Weiss 2001, p. 121).

The company's Dynamic Advertising Response Targeting (DART) system operates by compiling data on users who visit affiliate sites within the DoubleClick network. In a typical Web transaction, pages are delivered when the user sends a GET to a web server which then SENDs the information for browser display. On a DART enabled site, the request to the Web server is intercepted and a second connection is spawned to one of DoubleClick's advertising servers. The user is recognized by "cookies" on the user's system and matched to a central database record. The record is in turn matched to an ad which is sent to the user's browser and inserted in the Web page being viewed. Information exchanged between the user and the ad server includes the present page being visited, the user's static or session IP number (from which geographic location is derived), the browser software and operating system in use, and the unique computer ID number provided by the operating system. This is all recorded in the user database which over time provides a profile of visits to DoubleClick affiliate sites, ad viewing frequency, ads clicked-through, and other data relevant to the profile such as content category and so on (Merrimen et al. 1996). This is used to customize the ads for

a particular user. At the same time, this information also provides DoubleClick with the undocumented ability to profile an individual's online activities by tracking and analyzing surfing patterns between the growing list of participating sites. It was this possibility which first raised the issue of DoubleClick and online privacy.

The means by which monitoring is conducted is through the use of "cookies". All major browsers now permit Internet servers to place these small files (usually less than 1 kilobyte) on user systems which can remain active for a variable period. Many cookies are preset to expire when the user leaves a site or shuts down the browser. Others can persist for weeks or, in some cases, years. Cookies were not developed by DoubleClick, nor were they new to the Internet. Computer programs which perform rapid calculations require these bits of data to retain a "memory" of prior operations. It is often more efficient to have the program temporarily store this data ("magic cookies" as they were originally known) in static readable memory rather than retaining them in volatile active memory. Early browser developers saw how cookies could make web surfing more efficient by providing a temporary record of user activities on a site thus keeping communication between client and server to a minimum and increasing the speed of the transaction (Schwartz 2001).

While it was acknowledged by browser developers that cookies might be used to track user surfing patterns, it was not the purpose for which they were intended. According to Lou Montulli, the Netscape software developer who first invented them for the Web in 1994, "We didn't want cookies to be used as a general tracking mechanism" (Schwartz 2001b). On the contrary, seeing how the network would benefit from some

kind of user identification, cookies were regarded as preferable to a unique user code embedded in the browser. Cookies were designed to allow users to remain anonymous to the network despite being identifiable at individual sites. Different sites encode cookies differently and often encrypt them making user tags from one site unreadable by another. DoubleClick overcame this built-in protection by applying uniform cookies across its 11,000 site advertising network—which included many of the Web's most heavily trafficked sites. With data from its affiliates, DoubleClick could create an expansive profile of what a user did online. DoubleClick's application of cookies defeated the privacy protection they were meant to provide. It also removed the secondary benefit of speeding up Web transactions and reducing network load by creating multiple threads between the user, the Web server and the ad server to have advertisements placed.

In addition to identifying users surfing within its network sites, the HTTP transaction also provides web servers with the incoming and outgoing destinations of web traffic, thus providing further insight into individual usage. Cookies can also provide passwords, e-mail addresses and form submitted data. "Data spill" can occur between sites, where information provided by users on one site is carried over to another. DoubleClick had access to a great deal of behaviour about user surfing patterns. As more data was compiled on users, the records provided a nearly complete picture of user activities online.

DoubleClick persistently denied that it was gathering this information in bad faith. However, the threat of its extensive surveillance system made many uncomfortable. In 2000, both the online income tax service Intuit (Junnarkar 2000) and Microsoft's Web

based e-mail service Hotmail (Olsen 2000a) discovered that they had for years been inadvertently passing personal user information to DoubleClick. In the case of Intuit, the data passed along included personal financial information from income tax submissions. DoubleClick was aware that it had received this data but claimed never to have used it. Both Intuit and Hotmail nevertheless cancelled their arrangements with DoubleClick and took active steps to secure their users' information.

Those users aware of cookie monitoring tended to react negatively. Many users began to cover their tracks as they surfed the Web as "cookie cutter" software became available (*Interactive PR* 1997). The Internet Engineering Task Force (IETF), which had formed a special panel on cookies in 1995, ruled that if cookies were to be used to track users then users should be given the ability to block them (Schwartz 2001). Major browsers followed suit and Netscape provided users with the means to see and block incoming cookies in version 4.0 of its browser. DoubleClick insisted, however, that surveillance benefitted users:

There really is no downside to cookies. The information could never be used against you. It could never be tied back to you as a person....People who are really anti-cookies are really anti-advertising. And what they don't realize is that advertisers can benefit the consumer. Anything that can reduce the cost of advertising means a cheaper product (*Interactive PR* 1997).

DoubleClick maintained that since it did not collect personally identifiable information about users, there was no way that individual harm could come to a user through the company's monitoring. Its privacy policy in 1997 read: "DoubleClick does not know the name, email address, phone number, or home address of anybody who visits

a site in the DoubleClick Network....All users who receive an ad targeted by DoubleClick's technology remain completely anonymous" (Kornblum 1997). By defining Internet users as consumers in this way, the company was able to sidestep the much larger questions inherent in user privacy outlined in the previous section. While criticism nevertheless persisted, they redirected the issue to one of technological competence on the part of those criticizing its privacy practices. According to COO Kevin Ryan, "People who have been online for a year, and are using it actively, are much less concerned [about privacy] than people who have just gotten online or who aren't using it at all" (Kait & Weiss 2001 p. 124).

Like many dot.coms the company posted successively greater losses each year (Table 6.1, p. 196) while continuing to expand by drawing on investment capital. By 1998 it had operations in Canada, Japan and much of Europe and in February of that year launched a successful IPO to help fuel its expansion (King 1998). Its success was buoyed by reports that its exposure was the third highest on the Internet, second only to Yahoo! and AOL (Goodin 1998). By the year 2000, DoubleClick was responsible for serving half of all Internet advertising (Economist 2000) and its stock had climbed steeply from US\$17 at its IPO into the US\$150 range (Macavinta 1999). Few users, however, had ever heard of the company to this point.

In June of 1999, the company's position regarding user privacy took an about face when it announced its plans to acquire Abacus Direct (Macavinta 1999). Abacus was a consumer profiling company which tracked the buying habits of approximately 88 million US households through retail catalogue and magazine subscription records (Schwartz

Table 6.1
DoubleClick Annual Earnings 1996-2002 (US\$)

Year	Revenue	Net Income	Accumulated Debt
1997	\$30,597,031	-\$8,356,260	-\$36,544,480
1998	\$80,187,530	-\$18,172,750	-\$54,717,230
1999	\$258,294,000	-\$55,821,000	-\$109,831,000
2000	\$505,611,000	-\$155,981,000	-\$265,812,000
2001	\$405,647,000	-\$265,828,000	-\$548,552,000
2002	\$300,198,000	-\$117,890,000	-\$666,441,000

Source: Mergent 2003

2001a; Olsen 2000b). The data held by Abacus included names, addresses and credit card information, personal hobbies, real estate information and stock portfolios (Tedeschi 2000a). The announcement of the deal invalidated the company's earlier claims that it had no need to develop personally identifiable profiles on individual users. It also announced that it intended to share this information with its affiliates and clients. The deal was completed in November of that year in a stock trade worth over US\$1.7 billion.

The stated purpose behind the merger was to tie offline spending to online browsing. If an Abacus record indicated that a user had purchased tennis balls in the last six months for instance, it could be used to target tennis ball ads over the Internet. Meanwhile, a user who spent his or her time on tennis sites could be added to a list of "tennis lovers" which could be sold to sports retailers (Tedeschi 2000b, Olsen 2000b).

This information had other uses as well, such as employer candidate pre-screening or law enforcement screening of crime suspects (EPIC 2000b). According to Forrester Research analyst Eric Schmidt, data collected by online advertisers (although not necessarily DoubleClick)² was indeed being purchased by credit card companies looking to determine the credit worthiness of card applicants (Tedeschi 2000d). So while the commercial utility of user profiling was attractive to many, the implications even for the limited definition of privacy applied by DoubleClick were extensive.

The announcement of the proposed merger set off a public outcry from privacy advocates including the Electronic Frontier Foundation (EFF), the Center for Democracy and Technology (CDT), the managers of anti-advertising website Junkbusters.com, and from the Electronic Privacy Information Center (EPIC). A week after the Abacus announcement, EPIC issued its own statement indicating that it would appeal to the Federal Trade Commission (FTC) to block the proposed merger from taking place (Reuters 1999). The controversy and threat of a government probe sent the shares of both companies downwards (Tedeschi 2000c).

In order to combat the negative publicity which was having such a disastrous effect on its share values (Tedeschi 2000c), DoubleClick stepped up its public and legislative lobbying campaign in favour of industry self-regulation. In February 2000 the company launched a US\$2 million “public service campaign” including full page

²Although in page 20 of the company’s 2002 10-K filing to the SEC the company lists impending changes to the Fair Credit Reporting Act which contains provision for sharing information with credit providers as having potentially serious implications for their business.

advertisements in major newspapers and banner ads to “educate” users about what it did (Clausen Feb 15, 2000). CEO O’Connor publicly apologized, taking personal responsibility for the incorrect decision to merge on and offline data (Kurtz 2000, p. 274). As well, the company promised that it would not merge online and offline data and that its affiliate partners would give users adequate notice and the option to opt-out of DoubleClick’s user monitoring. It also hired a privacy officer to oversee and enforce the company’s privacy standards.

The company also spearheaded the creation of the Network Advertising Initiative (NAI), an industry association and government lobby group representing the interests of online data collection companies. While the stated purpose of the association was to “educate” consumers about their online privacy, its activities were more involved in trying to steer the regulatory process away from government regulation of the industry (Lohr 1999). The principles adopted by the Initiative required participating members to post privacy policies indicating the nature of online information gathering and the offline collation of this data. Its principles also state that such information will not be acquired unless users consent by abstaining from opting-out of data collection practices (NAI 2003). In essence, the principles adopted by the NAI merely codified practices already in existence.

Despite its promises to leave users anonymous, DoubleClick was nevertheless quick to roll out new services which took advantage of user identities such as a targeted e-mail advertising service (Jacobus 1999a). In early December 1999 it purchased e-mail marketer Opt-In which handled registration information for Microsoft (Jacobus 1999b).

On January 25, 2000, the company openly went back on earlier assurances that personal and user profile data would not be merged in a new privacy policy which read in part, "The leading Web advertising company plans to build a database of consumer profiles that will include each user's name, address, retail, catalog and online purchase histories, and demographic data" (Macavinta 2000). This announcement set off a series of actions against DoubleClick by privacy advocates, a number of US states, and from individual users.

EPIC drafted a complaint to the FTC on February 10th alleging deceptive practices on the part of DoubleClick and calling for an investigation into its business practices. The complaint cited DoubleClick's repeated revisions to its posted privacy statements from 1997 through 1999, all of which indicated that the company did not collect personally identifiable information and that if it were to do so that it would notify users. However, as noted in the complaint, despite its pervasive influence on the Internet, few users knew who DoubleClick was or that by surfing the site of one of its affiliates, they had entered into an agreement to provide DoubleClick with their personal data (EPIC 2000a, p. 6). Many of DoubleClick's partners failed to warn users of their relationship with DoubleClick at all. Alta Vista for instance acknowledged passing information to third parties in its own privacy policy but made no reference to DoubleClick (EPIC 2000a, pp. 8-9). Since users could not know who was receiving their personal information there was no prior knowledge and certainly no consent on the part of users. Other partners such as Dilbert.com acknowledged that DoubleClick served the advertising for the site, but explicitly stated that users remained anonymous and that

personal information was not being collected (EPIC 2000a, pp. 9-10). As a result of EPIC's complaint, the FTC granted their request and launched a probe into DoubleClick's privacy practices a week later.

EPIC wanted the commission to force the company to obtain explicit permission from users on the basis of prior written consent and oblige the company to make the information it acquired available for users to see. It also demanded the destruction of user records accumulated without consent and wanted the FTC to fine the company in the amount of 50% of revenues obtained through the use of this information. EPIC further asked the government to enact strong online privacy protection regulations which would prohibit DoubleClick or anyone else from profiling Internet users (EPIC 2000a, 11).

The FTC initiated an investigation into DoubleClick but dropped the case nearly a year later in January 2001. In a letter to the company it wrote: "it appears to staff that DoubleClick never used or disclosed users' PII [personal identifying information] for purposes other than those disclosed in its privacy policy" (FTC 2001). While the commission cautioned that its decision was not an indication that such sharing may not have occurred, its investigation was not an indication that it had either. It went further to praise the efforts of the NAI's own self-regulatory efforts to ensure "notice, choice, access and security." The only stipulation imposed on the company was that it notify the commission of any new products relating to user profiling.

The results of the investigation revealed that the FTC concerns had little to do with privacy and more with industry self-regulation. The decision sanctioned the weak NAI privacy protection standards allowing site owners to develop their privacy policies

and terms of use (Schwartz 2001a). This remains the position of the FTC on online user privacy (FTC 2003). Apart from the ineffective principles of the NAI, under the present regulatory regime, only NAI members are required to abide by even these limited standards (Smith 2003). Hence, governmental interventions into the issue of online privacy and user surveillance has yielded effective regulatory endorsement of industry interests.

At the same time as EPIC's complaint to the FTC regarding DoubleClick's deceptive business practices, a flurry of class action suits brought against the company alleged that these practices were, in fact, illegal. The first to be launched and last to be settled was that of Harriet Judnick in Marin County, California who sought an injunction to stop the company's online monitoring and the destruction of the user profiles it had already acquired (Junnarkar 2000c). At the same time, a number of suits were launched by US states which were later combined and heard in federal court. These cases claimed that DoubleClick's user monitoring practices violated a number of federal and state laws. The suit charged violations under the *Electronic Communications and Privacy Act* (ECPA) arguing on the grounds that placing cookies on user computers was an unauthorized access to computer systems. It charged violations of the *Wiretap Act* on the grounds that intercepting data between a user and a web server breaks this law. And it also presented claims under the *Computer Fraud and Abuse Act* (CFAA) on the grounds that the company was obtaining protected information through its unauthorized access (*In re: DoubleClick Privacy Litigation* 2001).

Class action litigation did not fare any better than appeals for government

regulation. The combined class action privacy case against DoubleClick was thrown out on March 28, 2001 in a decision handed down by Justice Naomi Reice Buchwald. In her decision, Judge Buchwald dismissed the charge that the company accessed user computers illegally on the grounds that “user” was an ill-defined term under the ECPA. Sidestepping the issue of privacy altogether, it was her determination that since individuals purchased Internet access, usage was a property right. According to this interpretation of existing law, ISPs and Web servers—who also purchased access—were also therefore “users” under the existing definitions of the ECPA. And given that Web sites rely on Internet access for their existence far more than individuals do, it was the judge’s determination that it is they who best fit the definition of “user”. Where information is retained in the transaction between an individual and a Web server, this information is not necessarily the property of the individual. The judge found that DoubleClick’s access to “user” information was indeed authorized to the extent it had contracted with Web servers and ISPs for this information.

On the matter of violations of the Wiretap Act, the judge found that DoubleClick’s intent was not “tortious” (not meant to be harmful) nor that the plaintiffs had demonstrated any interest on the part of the company aside from providing a commercial service. Finally, on the matter of violations of the CFAA, the plaintiffs could not demonstrate that damages had occurred and therefore simply had no case. As for the other charges on a variety of additional state violations, the judge exercised her prerogative not to hear them and dismissed the case “with prejudice” which suggested that it was frivolous and a waste of the court’s time (Plessner & Ingis 2003).

To extract itself from its ongoing legal difficulties, DoubleClick settled out of court in two cases, in March 2002 for US\$1.8 million in the case launched in California (Reuters 2002), and in August 2002 for US\$450,000 with the party of litigants involved in the New York Federal case who had launched an appeal following the first decision (AP 2002). In both cases, media accounts stressed the “tough restrictions” placed on the company in the settlements, but in neither case did it concede more than required by the NAI nor did it acknowledge any wrongdoing. Furthermore, while the company agreed not to merge on- and offline data, there was nothing to stop it from selling the information and letting the purchaser merge the data (Tedeschi 2001).

But while DoubleClick took the heat over privacy violations, its competitors—who were all guilty of the same types of abuses—kept their heads down and tried to avoid public attention. 24/7 Media, a competing Internet ad agency, was also involved in offline user profiling through its agreement with Naviant, a company which processed computer registration information for companies like IBM. Using this data, 24/7 had compiled a database of over 15 million users (Tedeschi 2002b). Yahoo!, which retained offline data on the millions of users who had signed up for its various services, quietly entered into discussion with the FTC in March 2000 about its own privacy practices (Richter 2000). The primary objective of the industry as a whole was to keep the US government out of the business. DoubleClick’s biggest offense from the industry’s perspective was in brining the attention of regulators to the medium (*Economist* 2000) and making the FTC the *de facto* governing body of electronic commerce. The response of government, however, was to simply leave the industry alone and deal with consumers

as they saw fit.

Despite the failures of advocates to preserve privacy through legislative and legal means, the public attention brought to the issue made privacy the new religion for those doing business on the Internet (Schwartz 2001c). Across the industry, new positions for privacy officers were being created by companies such as Microsoft, IBM and At&T. The role of these new officers was largely symbolic, as indicated by the fact that they worked more closely with internal marketing and public relations departments than management and operations. Nevertheless, they were hailed as having the power of “life and death” over contracts with clients whose privacy policies could create more bad press on the issue.

Ultimately however, what brought the issue to an end in the media was the collapse of the dot.com bubble. Not only did DoubleClick’s shares lose 90% of their market value over the year 2000 (Hu 2000), the year also saw many of the dot.com partners it gathered information from and placed ads for go out of business. Meanwhile, many of its other advertising clients became more reluctant to use the Internet at all. Ironically, after having worked so hard to profile Internet users, when it came to sell the information, no one was interested in buying (Hansell 2000).

In 2001 with most of its business gone, the company reorganized into three business units: data, technology and media (*CNET* 2001). In 2002 it sold off its media arm which contained its advertising business to competitor L90, a company which had sold its tech assets to DoubleClick some months earlier (Olsen 2001b; Tedeshi 2002). This move consolidated the interests of each company and took DoubleClick out of

advertising sales and put it exclusively into the ad serving and user profiling business. It was also heralded as the last gasp of Internet advertising. The star player had left the field.

Having posted nothing but losses year after year adding up to a combined deficit of over two thirds of a billion dollars (Table 6.1, p 196), the company's future is uncertain. The company's 10-K filing for its 2002 fiscal year warns investors of its continuing losses, inability to attract new customers, volatility of its market, and that even after seven years in business, "Our business model is unproven, we may not be able to generate profits from many of our products and services" (DoubleClick 2002, p. 9-11).

In the end, the legacy left by DoubleClick in the field of online advertising has less to do with the viability of the medium for advertising and more to do with the framework put in place for user privacy. The FTC's endorsement of the weak privacy policies put forward by the NAI has halted further government regulation in this area and protected its preference for industry self regulation. Meanwhile, the New York Federal decision rendered by Judge Buchwald which defined user information as the property of Internet operators has set a precedent on the basis of which other such cases have similarly been dismissed (Lesser 2003, p. 57). As result, user information resides in the hands of commercial information gatherers according to whatever terms they choose to set.

In the opinion of Seth Lesser, plaintiff's attorney in the New York DoubleClick case, the combination of the Buchwald decision and the ruling of the FTC has set new rules for online user privacy: "The normative rule is not that companies are required to respect privacy, but that they can set their own standards through what they post" (2003,

p. 58). And this only applies if they choose to post a privacy policy at all (Smith 2003).

This essentially makes user privacy a matter of contract between the user and the information gatherer wherein the user need not be informed what information is being gathered about them or how the information will be used.

Developments in the field of advertising led to definitions of users as consumers and eroded even the basic privacy awarded to them on these terms. But even more significantly, it has allowed owners of the medium to set the terms of what privacy means even in this limited context. Information provided by users on the Internet--accessed with no greater awareness of their privacy than when reading a book in a library or tuning in to a program on the radio--is the property of media owners whether users know it or not. Participation on the Internet is no longer an autonomous activity providing the opportunity for user-surplus meaning, it is a means of generating value for media owners as a minutely defined user-commodity.

6.3 Conclusion

Epicurious.com and Style.com, two sites owned by Condé Nast, are today facing a difficult problem--they are running out of space on their site to place ads. As popular Web sites posting food and lifestyle and leisure information, and with cross traffic from offline publications, business is booming from visits by affluent, health conscious consumers. Advertisers want access, and Condé Nast wants more advertisers. The solution, they discovered, is simple. Rather than attaching advertising to site content, identify the properties of unique users to make sure they see offers they might act on. "If

you already know that this user favors healthy foods, then why not send her an ad for a goody-two shoes, feel-good-about-yourself low-fat snack, even if she is on a page that features a zillion-calorie slab of triple fudge cake,” one commentator observes (Smith 2002).

The difference between Condé Nast’s targeting and DoubleClick’s is that Condé Nast is using its own publisher software to track users on their sites. Its scope is more limited, although acquiring user data from on and offline third party information sources assists in determining which users have the most value. On the basis of this detailed demographic information, the company is able to charge high CPM rates for its audience. “It’s managing the audience for profitability,” according to the designer of the software Dave Morgan (Smith 2002). It can now do this in any way it chooses, thanks to the redefinition of privacy made available through the development of Internet advertising.

But this is not the only advantage of targeted advertising placement. By attaching advertisements to users and not content, content production can be scaled back altogether. If users can be exposed to revenue-generating advertisements without fixing it to a page, content is simply redundant and an expense. All that is required is that which can be calculated to attract users to the site and keep them long enough to ensure that they view the right number of ads. Seldom visited or popular but low revenue generating content can be torn down. Content value can be measured minutely in terms of audience value: “On the Web, you do not need to care about how many people [see an ad], you need to care about how many people I can deliver to your ad campaign” according to the president of Condé Net, the Internet arm of its offline publishing parent.

At present, the model adopted by Condé Nast is still in its experimental stages but is being emulated by a number of content sites on the Internet. But it illustrates a definite trend in Internet publishing and for media content production as a whole. User monitoring allows media producers not only to maximize the value of their audiences, but also to rationalize the costs of content production, producing less information with greater advertiser value. For advertisers, profiling means access to a more qualified audience. For publishers, it means more investment and better margins. For users, it means less content. And for the Internet as a whole, it represents a complete reversal of the open user participation in the medium which characterized its creation and development.

Controversies over user privacy have set the stage for further exploration of limiting user options through profiling. Regulatory and legal decisions have served to restrict both of these avenues of appeal. They have defined Internet users as information consumers, subject to whatever arbitrarily applied standards of conduct information producers choose to adopt for themselves. The debate over privacy has served to significantly seal the trajectory of the Internet from stateless medium to a commercial state space in which the value of user inputs can be fixed and focused towards the objective of maximizing network value through highly refined audience commodification. Just like the commercial mass media, only better.

Chapter Seven

Conclusion

A look at the market fundamentals, and the supporting market research data behind them, indicates that online advertising is destined to grow over the next several years. In the US and around the world, we will see a growing number of Internet users, including upper income professionals who spend more time and money online. More of these users will be accessing through an always-on broadband connection allowing greater interactivity and new possibilities for rich media. And as more people get online, the research shows, they spend more dollars. Meanwhile, the strides being made by the Interactive Advertising Bureau, to create consistent, universally accepted measurements and standards in the industry will contribute to an increase in online advertising (*Forbes* eMarketer 2002, p. 22).

This thesis has attempted to intersect the trajectory of the commercialization of cyberspace, focusing specifically on the emergence of advertising on the medium and its role in the creation of an audience commodity for the Internet. The progress of ongoing developments in this area are described as the transformation of the Internet from a stateless communications medium into a commercial state space. What is implied in this transformation is the subsumption of the medium into the matrix of commercial mass media as a whole.

Through the course of this examination, the technological origins of the network were discussed, highlighting the persistence of intent on the part of its designers to maintain an open technological architecture permitting maximum flexibility and drawing

on the strengths of a heterogeneous mixture of computers, networks, standards and users. Through subsequent experimentation and development by users, the Internet emerged as a robust communications medium permitting maximum user participation through minimally constrained interactions with other users across the network. According to the argument presented here, as the Internet came into popular usage and as it is still widely regarded today, the Internet provides users the opportunity to create “surplus meanings” for themselves unavailable through participation in other media.

The discussion extends to examine the emergence of advertising on the medium which, as a revenue subsidy mechanism for audience commodity producers, has encountered serious difficulties in achieving success on the Internet. While the issues relating to proper means of extracting the value of the audience commodity have yet to be resolved, it is argued that these are of secondary importance to trends implied by the application of the audience commodity framework to Internet users. Users have for the most part regarded commercial intervention on the medium with ambivalence, summoning forth the question on the part of commercial interests only as to whether these users ought best be described as either audiences, consumers, or both. It is the perspective adopted here that neither definition applies and are relevant only due to the institutionally defined objectives of commercial stakeholders in the future of the medium. Nevertheless, it is these definitions of Internet users which will govern the future development of the Internet as a mass communications medium.

As has to be acknowledged from the outset however, advertising on the Internet represents only one path through the commercialization of cyberspace. As indicated by

the excerpt from a *Forbes* market report above, the general and ongoing lack of success of commercial Internet media providers has done little to dissuade progress towards its full commercial deployment. On the contrary, it has demonstrated that the technological apparatus of the network itself requires revision. Higher bandwidth is the key, allowing more information to be sent to users in the form of full motion video and stereo sound while at the same time retaining the secure capacity for financial transactions and providing the added benefit of intrusive (yet appealing) rich media advertising. Revision along these lines is fully underway and is discussed at this point to indicate directions for future research in the area of Internet advertising as well as for research generally pertaining to the commercialization of the Internet as a whole.

7.1 Redesigning the Internet

A prominent television advertising campaign for BCE's Sympatico's high-speed Internet service is instructive for examining the way in which this new, user-active and commerce friendly network is being considered. The advertisement depicts a young musician in a stylish studio apartment creating music over the Internet with other musicians around the globe. With a high bandwidth connection to the Internet, the world would become a real-time virtual music studio. At present, however, the technological capacity to deliver this kind of real-time sound and video over the Internet is not actually available from Bell. Although this type of artistic licence is common in advertising, particularly for high-tech products, the promise of the advertisement has to be acknowledged as false--or perhaps only half false.

Bell Sympatico's "High-Speed Edition" is an asynchronous digital subscriber line (ADSL) Internet connection. Unlike dial-up access, it is a totally digital connection allowing for far faster connection speeds and removing the need for digital/analog conversion at the point of reception. Transmission rates are greater by a factor ranging from the tens to the hundreds. But because the connection is designed to be asynchronous, inbound transmission rates are much faster than outgoing. So while the advertising campaign was false in portraying users creating and uploading streaming content in real time, it was correct in showing the speed at which users could download and interact with this content

Asynchronicity is presently a technological limitation of broadband Internet service. It is not, in other words, a cynical marketing ploy. But more and more often, network operators are regarding it not as a flaw but as a useful design feature. It allows network resources (bandwidth) to be reserved for content delivery while at the same time permitting enough interactivity to keep users engaged in the medium. New applications for the high-speed Internet are being designed around asynchronous delivery. Just like television, enhanced digital media is being designed to flow in one direction.

The advantages of this arrangement for advertisers are many. In terms of bandwidth and speed, it allows for more interactive, more creative—and most of all—*more* advertising than is potentially deliverable based on the limitations of dial up access. (Buchwalter & Martin 2003; PWC 2003; UCLA 2003). As the eMarketer report cited at the beginning of this chapter suggests, research has indeed shown that users with faster connections spend more time engaging in the most popular activities—e-mail, surfing, and

also shopping (UCLA 2003, p. 25). With faster speeds, ads can be sent more quickly and can more commonly include animated and interactive elements. With faster speeds, the Internet can become more like television.

This is what all commercial media stakeholders want out of Internet advertising. It was evident that the 1994 interactive television experiments of Time-Warner inspired fear on the part of Proctor & Gamble that it was about to lose control over its best portal to the audience. That fear came and went as interactive TV gave way to the Internet, which by 1998 simply wasn't enough like television to warrant Proctor & Gamble's investment, leading the company to view the medium as an opportunity to get a better deal from content providers. Presently, both advertisers and advertising sellers are working on better ways to bend the limits of the medium to provide eye-popping advertisements that users just won't be able to ignore. According to veteran Silicon Alley entrepreneur Jason Calcanis: "Look, there is a magic bullet here: full screen ads combined with user pay for ad-free content" (AvantMarketer 2000). That, in his opinion, is what will make the medium an effective advertising channel.

But at present, there is very little user demand for the enhanced services available through broadband. While numerous sources document the year over year increase in household broadband penetration, at present only 17% of households (approximately 10% of all U.S. households) access the Internet via broadband compared to 75% accessing via dial-up connection (UCLA 2003, p. 25). Ipsos-Reid reports much higher penetration figures in Canada, with nearly half of all household Internet connections being made via broadband and a total national reach of 30% (Ipsos-Reid 2003a).

But at the same time however, Ipsos-Reid also reports that of those users in the US connecting via dial-up, over one-third have no intention of ever migrating to broadband and over 80% expressed no interest in converting even if present market rates were cut in half (Ipsos-Reid 2003b). As well, the UCLA Digital Future project found that users were equally satisfied with their connection speeds regardless of the means by which they accessed the Internet (UCLA 2003, p. 77). Numbers such as these suggest that the demand for high-speed Internet services is not coming from users. Rather, it is coming from integrated service network and media providers.

Delivering rich media content will place high demands on the existing network infrastructure. While the cost of information decreases with speed and rewards providers with higher returns, the cost of carriage increases as more information is pushed down the pipe. The question is, with all the advantages available to content producers and advertisers from broadband Internet service, but with the general lack of demand for these services from users, how do they get network owners to build it for them? The answer is quite simple and has been under consideration for some time by network economists and engineers. What needs to be devised is effectively a content/network revenue split.

According to economists Jeff MacKie-Mason and Hal Varian:

...Most of the value of the network is not in the transport, but in the value of the information being transported. For the full potential of the Internet to be realized it will be necessary to develop methods to charge for the value of information services available on the network (MacKie-Mason and Varian 1994, pp. 52-3).

This need is currently being addressed by the IETF working group on differentiated

services (diffserv) which seeks to develop standards for removing the anonymity of packets on the network (IETF 2002).

Recall from the previous discussion that the Internet was specifically designed to require as little as possible from carrier networks allowing most of the work for sending and addressing packets to be done by the servers at each end of the connection. One of the core principles adopted in the design of the network was that the intelligence was to reside at the ends of the network, while the network itself was to remain “dumb”. The Internet was designed as an open system where the form of the network would exert little influence over the content it carried. In order to mutually benefit from the opportunities promised by broadband information delivery, it behooves network owners to examine the reversal of the original design of the Internet to make packets “knowable” so that a proper management framework for information transmission can be developed.

According to a recent RFC (Request for Comment) on the matter of managing diffserv network elements:

Differentiated Services (Diffserv)...is a set of technologies which allow network service providers to offer services with different kinds of network quality-of-service (QoS) objectives to different customers and their traffic streams (Bernet, Blake, Grossman & Smith 2002).

The basis for prioritization under diffserv is to deliver a price-specific quality of service, not necessarily to alleviate traffic congestion or facilitate technological efficiency. The quality of service a packet receives is dependant on an *a priori* management framework applied to packet delivery.

Under one scheme for the implementation of differentiated services, packet

prioritization is based on user payment--those who pay more will get better service.

At each node, packets are served according to a priority rule, so that packets with high priorities will experience less delay and are less likely to be dropped. Users are free to choose the priorities for their traffic, but are charged accordingly by network....It is then natural to assume that users will choose an allocation of packets to prioritize to maximize their net benefit, i.e. their utility minus cost" (Marbach 2001).

What this means in practice is pricing on the basis of service level and measuring network usage on the basis of cost-per information transaction (Wang & Schulzanne 2001).

But again, the technological issues of bandwidth make it necessary to anticipate what users are going to be asking for over the network. Continually opening new connections between numerous content providers increases the demand on the network as users surf channels. Under one scheme, this can be resolved by content caching--no more than ten to twenty video-on-demand broadcasts at any one time according to one group of researchers (Ramesh, Rhee & Guo 2001). Limiting the quantity of content selections to provide the best balance of network value and user preference will be a necessary consideration when developing the means of delivering real-time packet switching video.

With regard to user response to various levels of service pricing, it is generally agreed by network operators and engineers that users will adapt to the new pricing structure and limited content selections available to them, apparently applying the principles of rational and enlightened self-interest to calculate the costs and benefits for various types and levels of service.

However, users need not be burdened with having to make these difficult calculations. In practice, while transmission priority could indeed be assigned on the basis of user payment, information could also be prioritized on the basis of the affiliation of the content provider to the network operator. Similar to the precedent set by the “walled garden” model of AOL (Winseck 2002), vertically integrated network media firms could ensure that content is delivered to users on the basis of whether it adds value to their operations as a whole, not just their network system. In terms of advertising, a differentiated services network would make it possible to allocate bandwidth based on the likelihood that users will explore the particular offer of content sponsors. Inasmuch as advertising on the Internet presently represents an additional load to the content accessed by users, the network could itself become a part of the advertising system, prioritizing commercial messages to specific users.

Perhaps the most notable critic of vertically integrated differential services networks is World Wide Web inventor Tim Berners-Lee. He argues that such arrangements take control of end-user cost/benefit analyses out of the hands of users altogether.

A monopoly is more straightforward; people can see it and feel it, and consumers and regulators can “just say no.” But vertical integration—for example between medium and content—affects the quality of information, and can be more insidious...it could also be possible for my ISP to give me better connectivity to sites that have paid for it, and I would have no way of knowing this: I might think that some stores just seemed to have slow servers. It would be great to see some self-regulation or even government regulation in these areas (Berners-Lee 2000, pp. 130-131).

These efforts taking place alongside the development of broadband networks and the drive for greater audience value create a vision of the Internet which differs greatly from the network as it was designed and came into popular usage. As it is stripped of those elements which made it stateless, the potential exists that content, advertising and users become even more tightly entwined. The result of this redesign will permit every aspect of an information transaction to be calculated on a cost-per-packet basis affecting both content provider access and end-user service. The state space of this Internet of the future will be a commercial state-space, every transaction designed to reduce consumer surplus and increase net value for information and network providers.

According to *Wired* columnist Chris Platt, for the Internet “The future will be fast, not free”:

Ten years from now, when every Palm Pilot can display a video, a webcam is built into every monitor, and full screen clips are commonly sent as e-mail attachments, the broadband metamorphosis will be complete. At that time, the egalitarian Net will be a distant memory—but no one will care....The free ride online is over, but the ride ahead will more than compensate for anything we’ve lost...The Net is dead. Long live the Net! (Platt 2001).

While the exact steps that will need to be taken to get to this new broadband Internet are difficult to assess, both the means and the interests are available to media producers and network providers. It would appear to be more a matter of “when” than “if”.

7.2 DoCoMo

Chris Platt would no doubt be happy to learn that his network of the future already exists.

It is widely available and wildly popular in Japan, Southeast Asia and much of Europe. It offers high-speed Internet-like services over hand-held, multi-media telecommunications devices providing users with games, text-messaging, and access to a carefully maintained information network. The service is called DoCoMo, a play on the Japanese word for “everywhere” and is owned and operated by Japan’s regulated telecommunications monopoly Nippon Telegraph and Telecommunication (NTT).

The service functions in many respects like a normal cellular network. Users purchase provider-subsidized, low cost hand units, pay flat rate subscription fees, and are also billed on a per-minute basis for usage. The differences, however, are that this wireless network, like the Internet, utilizes packet-switching using the Wide Area Protocol (WAP) wireless protocol standard for packet transmission. It also operates at a much higher frequency—in the 3GHz band—than normal wireless communications which provides greater transmission bandwidth (Batista 2003; Rose 2001)

Users of the system have access to a range of information applications including e-mail, full motion video (the hand units themselves are digital cameras), games, “ring tones”, and a small information network of carefully selected content sources. In 2001, this content network—drawn from its acquisition of AOL Japan (Borland 2000)—consisted of 46,000 “unregulated” sites and 1,800 “official” sites which charged between 100 to 300 yen per month, 9% of which is paid as a tariff to DoCoMo in carriage fees. Sites are selected for their ability to add value to the overall service, hence, despite the simplicity of the modified HTML used to design content, content provision is limited to relatively few producers (Rose 2001).

At present, the service has 40 million members—nearly 30% of the entire population of Japan (Batista 2003). Company revenues in 2000 were US\$39 billion with profits of over US\$3 billion which they have invested in other wireless telecommunication providers around the world including a 16% ownership share in AT&T Wireless (Charny 2001). In 2002, the company began to be openly traded on the New York Stock Exchange (NYSE) under the symbol DMC and between 2001 and 2003 opened operations in China, Taiwan, France, Spain, Germany, Belgium and Greece. It is presently in negotiations to licence spectrum in the U.K. but has not, as of yet, made significant inroads into the North American market (AP 2003)..

According to *Wired* columnist Frank Rose, DoCoMo's overwhelming success is due to "packet switching, HTML, a billing service, fair revenue split, smart marketing, careful monitoring of content, [and the] ability to make manufacturers tow the line" (Rose 2001). In addition to the range of services provided over its network, the company has also made deals with game designers such as Nintendo to deliver downloadable and network gaming (Sharma 2003). And just recently, the next generation of DoCoMo units will also incorporate "smart card" technology which will allow for automatic debit transactions over the network between offline vendors and banks to permit automatic transactions for services such as groceries and train tickets (*Dow Jones Business News* 2003).

Clearly, DoCoMo has an enviable network business model. All transactions over the network are monitored, measured and billed. Furthermore, the system is building the capacity to handle extra-network transactions, opening up a whole new avenue for

network revenues. As for advertising, smart-card technology presents a wealth of opportunities for targeted advertising by allowing vendors and advertisers to locate the physical proximity of the user to paying goods and service providers and notifying him or her with localized “push-to-place”, “just-in-time” marketing messages over the handset (Bennahum 2001). The system is presently plagued with a spam e-mail problem, but in terms of the network as a whole, advertiser subsidies provide greater value by providing an alternate means of content revenue, increasing the proportion of commercial content, and therefore the total value split between network content and access providers.

While at present, North American Internet access is less than 9%, as new services and arrangements between competing carriers are rolled out, we could very well see DoCoMo become the model for the future of the Internet. Users will again have to learn to adapt. According to Sprint vice president of business development Paul Reddick “We admire what NTT DoCoMo did in Japan. We want to learn from that and then leapfrog what they did” (Bennahum 2001).

This represents more than the commercialization of cyberspace, however. It is the “commercial cyber-spatialization” of real space. The Internet is succumbing to the will of commercial information and network providers and is in the process of conversion into a commercial state space. But the process need not stop there. With further development and co-operation, real space itself can be made virtual. The progress of Internet advertising demonstrates, however, that this path is neither wanted nor particularly intelligent. Decision of which path to follow, however, is not likely to be left to those supposedly destined to benefit from the course.

7.3 Conclusion: The Legacy of Internet Advertising

All of the observations above, although they reflect trends currently evident in thinking about the Internet, are speculative and provided to indicate areas for further examination within the field of Mass Communications research.

Contrary to prior hype-fueled expectations, the Internet has not changed everything like it was supposed to. It is not a thing. It has no causality. It creates no effects. On the contrary, rather than changing anything, it has been used to enhance existing ideas about media, consumption, audiences and technology. The Internet has changed nothing, but it *is* being changed.

Its effect has been felt most through its pivotal role in the economic collapse of the high-tech market and in the subsequent concentration within the Internet sector. This implies that while the Internet will persist, the scope of influence wielded through concentrated ownership will in all likelihood be more focused around efforts to maximize the value of the medium. The means for measuring and evaluating audiences on the medium will be central to this reorganization, creating virtual space where all activity produces value for advertisers and media owners.

In the course of controversies over targeted advertising and user privacy, Internet advertising has given commercial information providers enhanced legal and regulatory approval of industrial self-governance. Individual privacy is presently defined as the private property of commercial information providers. This definition has harmonized a variety of potentially conflicting privacy-protection statutes within various regions of the US, creating a single privacy regime across that country. Efforts to harmonize

international standards will spread these practices further.

Internet advertising has catalyzed co-operation among competing interests in many related industrial sectors which has coalesced into an undivided front as to what the Internet is to become--a commercial state space providing an end-to-end marketing channel which will allow media producers to increase the value of its audience commodity.

All of the above convey that the Internet has been a catalyst for the growth of commercial influence over social life. The Internet has changed nothing. The commercial uses of the Internet have given commercial information providers more opportunity to increase their marginal returns and reduce consumer surplus in ways that would not have been possible without the prospect of an interactive advertising supported mass communications medium.

A final aspect which has been assiduously avoided throughout this discussion is the issue of remedies for the variety of potentially detrimental implications arising from the widespread commercial restructuring of cyberspace. This area represents additional opportunities for further research on a number of topics including: a) the economic foundations of media user-participation as consumer surplus value and as network marginal utility; b) the sociological implications about the role of media in the development of individual and social consciousness; c) the political economic evaluation of private and public institutional ownership of information networks in erecting barriers around discourse over cultural and class formations at the regional and global level, and; d) policy alternatives applicable through legal, regulatory and constitutional analysis

around such issues as privacy, freedom of information, freedom of speech, and universal access. It has been the perspective provided here through an analysis of the commercial transformation of global information networks has participated in the reduction of public and the increase in private influence over national and international institutions and social groups. Hence, ongoing examination, discussion and implemented alternatives are an urgent imperative.

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