

# Cybermarketscapes and consumer freedoms and identities

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Article originally appeared in European Journal of Marketing, Vol. 32, No. 7/8, 1998, pp. 664-676.

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Sign on cyberstore front:

Sorry, we're closed, the humans are temporarily down for maintenance.

#### Introduction

When examining the issue of consumers in cyberspace, there appear to be two recurring narratives. One refers to the unidimensional perspective of marketing and how marketing tries to annex the cyberspace and regards the consumer as fair game in its profit seeking enterprise. The second narrative views consumers as trying to use cyberspace as a place to exercise their freedoms, establish their identities and use the cyberspace as a lifeworld in a Habermasian sense (Habermas, 1987). This paper is an attempt to explicate this tension.

# **Cyberspaces and cybermarketscapes**

Cyberspaces are spatial and temporal configurations that are formed out of electronic environments. They are usually described as parallel spaces to the physical spaces. Benedikt (1991)[1] in his introduction to his edited book titled, *Cyberspace: First Steps*, gives 11 descriptions/definitions of cyberspace ranging from the technical to the metaphorical and to the whimsical and one of them may be reproduced here as being the most relevant to the present paper:

Cyberspace: A new universe, a parallel universe (parallel to the physical universe) created and sustained by the world's computers and communication lines (p.1).

In spite of its spectacularized images in popular imagination, cyberspace is essentially a product constructed out of the new technologies of communication, information and computerization. It is in this constructed technological space that we have to envision the everyday life of the individual and the social/cultural order.

Different people configure cyberspace differently. Cyberspace is a public space, a community space, as well as a private space (Shields, 1996; Turkle, 1995). It is a commercial space as well as an aesthetic space. It is a

A longer and modified version of this paper appears as a chapter in Sherry, J.F. (Ed.), *Servicescapes: The Concept ofPlace in Contemporary Markets, NTC* Business Books, Chicago, II,, 1998.

dimensionless space and a negotiated space. The transformation of public space into a commercial space means that the individual is both a citizen with civic identity, as well as a consumer with desires and needs, and, therefore, a "target" for marketing. Much reference is made to the multidimensionality as well as non-dimensionality of the cyberspace - that it is a space of information flows, databases and networked/hypertextual links to people and places, that it is nurtured on the one hand by profit-seeking corporate presence and on the other hand by people driven by community concerns. At another extreme is the notion that it is also a place for homonoids, replicants, prosthetics, in other words, a place where artificial life might emerge. With so much going on in the cyberspace, perhaps it makes sense for us to introduce some focus or crispness to the idea of cyberspace as we look at it from a consumer/marketing perspective.

# The construction of the cybermarketscape

It was Appadurai (1990) who first employed a typology of "stapes" in his analysis of the global cultural economy. He identified the global cultural scene in terms of five "stapes", finanscapes, mediascapes, technoscapes, ethnoscapes, and ideoscapes. As used here, the cyberscape may be said to be a combination of mediascapes and technoscapes but also something more that is created within the context of electronic environments. The most dramatic manifestation of the cyberscape is the Internet and its associated technologies including various on-line services, Netscape, Explorer, etc. For a comprehensive analysis of issues related to Internet and user perspectives see Carroll and Rosson (1996), Hoffman *et al.* (1996), Kraut *et al.* (1996), Venkatesh (1996). For previous work in this area I refer to Vitalari *et al.* (1985) and Venkatesh and Vitalari (1990). A particular form of cyberscape that we address in this paper lies at the intersection of electronic markets and consumers. We shall call it the cybermarketscape.

Before discussing the cybermarketscape, I shall begin with the more general term, cyberscape. For our purposes I have sketched four key elements (Figure 1) that encompass the cyberscape:

- (1) the new and rapidly evolving cybertechnology:
- (2) the larger social order;
- (3) the cybermarketscape or the realm of marketing and commerce impacted on by cybertechnology;
- (4) the cybercitizen/cyberconsumer as the adopter of new technology and a participant in the marketscape.

Let us address the issue of the impact on the consumer. The consumer is not only a consumer of the new technology (Figure 1) (II) and its products but a consumer of the market processes which are themselves affected by the new technology (D. The consumer has a dual technological charge, as it were, he/she has to become technologically literate so he/she can function as an effective

member of the social order, but he/she is also required to respond to the market as the market attempts to incorporate new technological developments into its processes. So, for example, the consumer has to decide what new computer to buy, what new on-line service to acquire, what telecommunication connections to obtain, all of this in reference to the arrows designated by H and I (Figure 1). At the same time, the consumer has to decide how to negotiate the market exchange process (J), that is, how to order goods and services in the cybermarketscape [C], and how to be cybermarket literate. Obviously, there is a connection between how the consumer responds to technology (H/I) and how she responds to the cybermarketscape (J).

# Everyday life of a cybercitizen

Let us construct what I consider to be not an untypical day in the life of a cybercitizen in contemporary American society. Ms K. is a self-employed mother who works at home part-time. She gets up in the morning at 6 a.m. and makes coffee on her coffee machine which has a built-in computer chip. While the coffee is percolating, she turns her Web-TV on for the latest morning news. As she is switching her channel she finds that on channel 6 there is a show on how to do business on the Internet. She also finds that her news channel has two commercials, one for the latest, fastest multimedia computer manufactured half a planet away. She quickly logs on to check for e-mail messages and attends to urgent business mail. She would come back later in the day to attend to more routine personal mail. At 6.45 a.m., her daughter Ms C. wakes up and goes through a rapid-wash-change-of-clothes sequence in ten minutes, dashes down to the kitchen for a glass of orange juice and dried toast, all of which takes about 17 minutes. She climbs back to her room where she finds the computer still running since last night when she went to bed at 1 a.m. preparing her latest class report on "The vanishing tribes of northern Utah". She makes last-second corrections and prints her report on the ink-jet printer which she recently inherited when her mother bought herself the latest laser printer. All of this takes additional 11 minutes. She springs out of the door and off she speeds on her bike to her school which is a six-minute ride. At about 8.30 a.m. Ms K. makes herself a light breakfast and heats her coffee in the microwave oven which also has a built-in computer chip. At 9 a.m. she is at her home-office desk

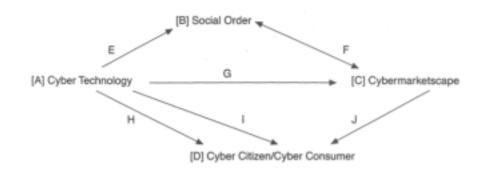
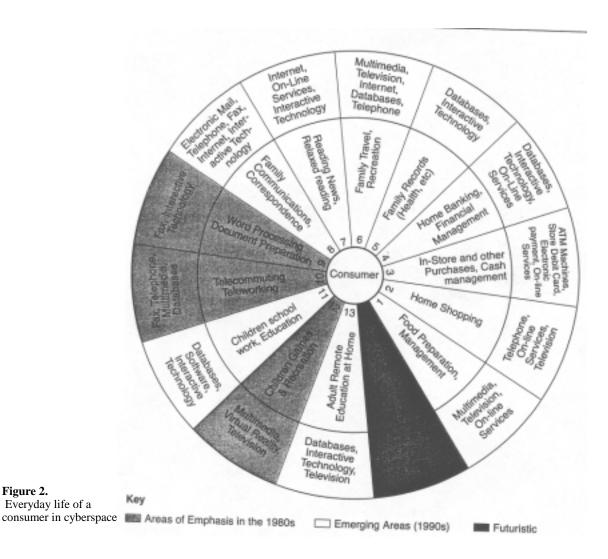


Figure 1.

Cyberscape

taking care of business correspondence and other details. At 11 a.m. she drives her car to the nearest strip mall where she extracts some cash from a computerized ATM machine. She also attends to other banking business on a recently-installed vending machine located next to the old ATM machine. She walks to the grocery store, negotiates the grocery cart - loaded with a computerized screen displaying special items on sale - through the aisles, and uses her grocery card which she runs through a computerized cash register cum scanner machine. She is back home at about 12.30 p.m. and has a salad and yogurt for lunch. After a short rest, she reads the daily electronic, personalized, newspaper on the Web and notices the flashing icon inviting her to examine some new software. On a note of slight distraction, creature of habit that she is, she could not resist scanning the newspaper that is delivered to her home every morning by a speeding delivery van. The article on home-office catches her attention. She realizes that the US mail must have just arrived and as she examines it, she notices that it consists of business mail, personal mail, magazines and junk mail. Most of the junk mail is computer-oriented subscriptions for a new Internet magazine, new software which does things quicker and better, new game software for children, an invitation from the local bank for a free trial on their computerized banking service, a floppy disc that gives her access to a database on "everything you wanted to know about the latest stocks", and similar material. Not content with just looking at the mail, she decides to call an 888 number that provides access to a lot of information by pressing the appropriate numbers on the telephone dial. A computerized voice guides her through some astonishing detail. Exactly five minutes later, she is a proud owner of a new computer service...

The above tale is slightly stylized but nevertheless a truthful caricature of contemporary experience of a cybercitizen. All of this may not have happened on a single day but could easily happen within a matter of days. The telling point is how much we are surrounded by technology and in this case the technologies of cyberculture. More formally, we have presented this everyday experience in Figure 2. In the middle of the figure is the consumer and in the first circle of the figure is a variety of activities performed by the consumer that have technological application or significance. On the outer circle is a set of technologies of cyberculture that are utilized in performing these activities. The way to make sense of the figure is to read a specific activity diagonally and refer to the associated technology that is indicated in the segment in the outer ring. To illustrate, let us take an activity, home shopping. The associated technologies are telephone, on-line services and television. While the Figure is a static or a structural representation of a cybercitizen's activities, one can theorize about these relationships. For example, under what conditions does a consumer use a particular technology for home shopping? Or what type of consumers use TV for home shopping as opposed to Internet. What happens when these technologies merge? Such questions will depend on specific research issues involved and the motivations of the researcher in understanding



various phenomena under investigation. The purpose of Figure 2 is to give an account of the ubiquitous nature of technology in the daily life of the consumer.

New technologies and the cyberconsumer - some theoretical issues We shall now return to Figure 1 and discuss the technology/user issue as it unfolds in the context of cybermarketscape. In Figure 1, a distinction is made between the impact of the information technology on the individual as a member of the social order (citizen, student, household member, educator, politician, office worker/manager, author etc.), and as a consumer in the sense of a member of the market system. It is the latter relationship that has recently captured the attention or the imagination of the marketers. The marketing profession has become interested in this relationship because it opens more doors for consumer participation in the market-exchange system directly. It is

Figure 2. Everyday life of a one thing for an individual to buy a computer to pursue his/her profession. It is another thing to buy a computer so that he/she can buy a service, download a television programme, record a recipe, gain access to information, open a bank account, purchase a holiday gift for a family member or acquire a similar consumable item. In these examples, the individual is not using the technology to fulfil a social role but as a generalized cyberconsumer satisfying several of her daily needs. The ultimate irony of this relationship of course is that now one can buy a computer using a computer. That is, the consumer is responding to the cybermarketscape.

Conceptually speaking, the market system is a system of exchange between the producer and the consumer, as well as a communication system between the same two entities. I shall contextualize and analyse this relationship with three technologies with which we are familiar, the telephone, the automobile and the television. Using the schema in Figure 1, we might say that each of these technologies was acquired by individuals as consumers of the technology. Let us now ask the question, what market impact do or did these technologies have? For example, as consumers, we do use the telephone to buy products and services (e.g. reservations), and sometimes seek information prior to the purchase of a product/service, and communicate problems if the product/service is not satisfactory. Similarly, on a limited basis, a certain amount of direct marketing is done via the telephone by marketers, when, for example, calls are made by vendors to households (especially at dinner time) selling their wares. None of these behaviors prompt us to say that the telephone radically altered the principles of the consumer-oriented market system although we can argue quite successfully that the telephone has had a revolutionary impact on the social order (Figure 1, B), and certainly on the workings of the business market system (Figure 1, C).

Let us now take the example of the automobile. In a similar fashion to the telephone, the automobile has certainly transformed society in fundamental ways, by creating new forms of suburban life, by introducing a new sense of freedom among youth, but one cannot argue therefore that it has altered the market exchange processes.

The third technology is television. In a similar fashion to the telephone and the automobile, television has transformed our social order in unprecedented ways. However, in addition, and unlike the telephone or the automobile, television has had a qualitative impact on the consumer-market system. Television is a technology of communication and entertainment, or a mass medium. As a powerful medium of audio/visual communication, it has changed the way we consume entertainment and news as well as advertising messages. Television has had a major impact on brand marketing and on the overall consumer culture. It has thus changed the content and delivery of marketing communication, created a new institution of advertising and radically changed the marketing practice.

In other words, television seems to have had the most impact on the world of consumption and consumer behavior. Because television, unlike the automobile

or telephone, is a major mass media technology, its central role in the development and transformation of the global consumer culture is widely acknowledged. However, as powerful as television's role has been in changing the consumer culture or adding a new dimension to the marketing practice, hitherto unprecedented, it did not alter the way we think about the marketscape.

On the other hand, what was considered the technology of information has now become a technology of communication - not communication in the ordinary sense but as multi-way communication. Terms such as interactivity, connectivity have further advanced our notions of what the new technology can do. Computers have also created a new space, the cyberspace and new communities of participants, the virtual communities. In other words, it is the recent convergence of communication and information technologies that has created possibilities that were unthinkable only a few years ago. Table 1 gives a brief comparison of all the four technologies:

- (1) telephone;
- (2) automobile:
- (3) television; and
- (4) computer across some key dimensions.

	Symbolism - personal	Symbolism - social	Symbolism - spatial
Telephone	Speech/communication	Time/space substitution	Temporal space
		Social participation	
Automobile	Body/motion	Suburban life	Physical space
		Life style, freedom	
Television	Feelings, emotion, pleasure	Instant entertainment	Visual space
		Temporal entertainment	
		Mass medium	
Computers	Mind/pleasure	Reasoning	Cyberspace
	Information	Information processing	
	Alternative knowledge		

Table 1. A comparison of four technologies

## Consumers and cybermarketscapes - issues and scenarios

#### Consumers and interactive virtual spaces

Cyberspaces provide a culture of simulation, signification, any communication as opposed to realism, representation, and objective participation. Cyberspaces create virtualities of all sorts. Where the cyberspace is most effective in the electronic commerce world is its ability to create a virtual environment where the consumer can experience the as-if physical product or actual service (Burke, 1996). A case in point is interactive retailing. Interactive retailing in virtual environments takes place when customers go through a sequence of steps

leading to product or service purchase. One way to look at interactive retailing is to consider it as regular retailing but done with the help of computers. Interactive retailing may contain elements of the physical store shopping and catalog shopping. In other words, the consumer is able to move through virtual "Nordstrom"[2] in the same way he/she can move through the real store. Obviously, there are limitations to this because the consumers cannot touch or feel or smell objects in the virtual environment. But they can certainly see and hear. In other words, the cyberspace is most powerful in the visual and audio dimensions.

Cyberspace is also a virtual space where the product can be seen in its multidimensionality. The image can be replayed and details of interest can be observed more closely. If a clothing item is of interest, one can examine the clothing more carefully. The 3D image of the product gives a multidimensionality enabling the consumer to observe the products from different angles. On the other hand, it can also contain additional elements which go beyond normal catalog or print-oriented shopping. These include walking through simulated aisles, examining products in three-dimensional spaces, and examining products under different colors, shapes, sizes and other conditions of use, but all of this in a virtual settings. The relationship between virtual and real environments can be represented in three possible scenarios (see Table II). At one extreme is scenario A where virtuality cannot be established and all actions are undertaken in physical surroundings. Scenario B provides a situation where virtuality and physicality are substitutable. Scenario C is the new space completely ruled by virtuality.

Given the conceptual scheme in Table II, one possible goal of the marketer in the cybermarketscape is to unburden him/herself of the real environment as much as possible, that is, to decrease A and increase B, and ultimately, to consolidate a position in C, the cyberscape. I am not suggesting that it is necessarily a desirable goal, for that depends on the circumstances. I am merely stating that some existing technologies permit such a possibility.

Scenario A Scenario B	Scenario C	Table II.
Unique real environment Common experience space	Unique virtual environment	Relationships between
experience, not possible	experience, not possible in	virtual and real
in virtual space	real physical space	environments

In the context of cyberspace versus physical space what impact does it have on consumers? Regardless of how we conceptualize the cyberspace relative to the physical space, several possibilities emerge. If cyberspace is a mirror image of the physical space, we can think of access to cyberspace being available from any location in cyber or physical space. It means that the customer can visit the shopping mall from anywhere in the world, from multiple locations. Here the

concept of interactive retailing allows the customer to participate actively in the cyber shopping environment. From the marketer's point of view, the cyberspace may be less expensive to build and more easily changeable. Once the idea of a cyberspace shopping mall catches on, the next step is to eliminate the actual physical location completely so that the shopping mall in a physical environment need not exist. This is represented by Scenario C.

If cyberspace is a transformation of our concept of space, we have to assume that there is a close relationship to our sense of time. The greatest revolution in consumer marketing is in terms of real time marketing and customized mass marketing both of which were inconceivable only just a few years ago. In real time marketing, the consumer is presented the material and some of his/her questions are answered on the spot and the consumer can make product selection and make the payment also. That is, many of the conventional steps in consumer purchase sequence are collapsed. Of course, the general idea is not new, for we find some parallels in catalog shopping where the consumer examines product information and is able to order it immediately. However, what is missing in catalog shopping is the notion of interactivity. The information is provided but no queries can be answered. Also missing in catalog shopping is the updating of information in real time.

#### Consumer identity

Another transformational idea of cybermarketscape refers directly to the identity of the consumer. The concept of uniqueness is central to the consumer, that is, to be treated as an individual with a unique self. The idea of personal identity, and not to be treated as part of the mass market go hand in hand. This has also been one of the central problems of advertising over the last century, ever since mass advertising became a reality Advertising is basically a mass enterprise. The historical challenge of advertising has been to create advertising messages which have a "mass appeal" and yet treat each individual consumer as a unique person as if the advertising was meant only for him/her and no-one else. With the emergence of virtual environments, the opportunity to make the individual consumer feel unique has become less daunting. The virtual environments are entered and exited by customers as individuals. There are no other individuals in the virtual environments, at least not as there are in real shopping environments. When the customer is sitting in front of the computer screen trying to negotiate the virtual environment it is clearly the case that the customer is all by himself/herself. This is what we mean by the one to many medium being transformed into one to one medium (Hoffman and Novak, 1996).

#### Cyberspace and consumer freedoms

Consumer freedoms are plenty in cyberspace. In a cyberstore, there are no behavioral norms that one normally encounters in a regular store. In the privacy of one's living room, what takes place is virtual shopping, and with free abandon. In this free-est of spaces, there is no dress code, no regulation

regarding food ingestion while shopping, for cyberspace ensures the personalization of the shopping environment. The consumer can wander from store to store without expending physical energy. Since time is the essence of contemporary life, the time saving is an important appeal that the consumer will appreciate. There are also other issues here. Consumer fantasies can be exploited much more effectively in cyberspace. Consumers can be lured by spectacular promises via computerized images. Objects can be fetishized, colorized, and given phantasmagoric forms. The most effective way to appeal to consumers is interactive imaging. Consumers can test products in cyberspace. Since cybermarketscape is limitless and boundless, it is also an appropriate candidate for tapping into the unbounded desires of the consumer. Cybermarketscape can turn the sovereign consumer into a desire machine.

Of course, what the consumers can do is not the same as what they will actually do. It is too early to tell what the consumers will do in/with cyberspace. Some behaviors have already surfaced but their sustainability and future directions are not clear. Much will depend on what marketers will make them do. At this time we can only speculate on what the possibilities are.

# The institutionalization of the cybermarketscape

The institutionalization of the marketscape, the ways of doing business, the practices and the rituals or what Bourdieu (1984) calls the habitus are inscribed in our social memory. The crucial property of social memory is that new consumers can be socialized into the market processes by exposing them to the market processes. Let us take as an example, the inscription of the department store in our social memory. The origins of the department store can be traced to the mid-nineteenth century when the first department store; Bon Marche, appeared in Paris. This was a truly historic moment for it is the model that has been inscribed in our memory, a model for many stores that have evolved since that period. The concept of department store defines the "order of things". For the past 150 years, the department store has become emblematic of the marketscape that continues today in several variations of the same theme including the more recent version, the ubiquitous shopping mall. Of course, retail institutions over this period have changed in character but what is a common characteristic of all the retail institutions in this evolution is their physical geography, that is, they are all physical structures that house consumer goods.

Another aspect of this social memory is catalog shopping which also originated in the nineteenth-century concurrently with the department store. Instead of the physical setting in which mass distribution of goods takes place, the meeting point of the customer and the marketer is the catalog. The catalog is a description of goods, not a storehouse of goods which the consumer can visit in a physical sense. The catalog represents another marketing institution in its own right, a tangible expression of direct marketing which never attained a high status within the marketing discourse and had remained in the shadow

of the more main stream marketing. But it is part of the same marketscape that is part of our social memory.

How does social memory operate? The memory always resides within some body or some institution. To draw on the social memory, we can always appeal to this source which is the repository of such memory. A second aspect of the social memory is that by its very nature, it permits evolution. It operates not on the basis of surprises but through time-honored conventions. What happens when there is no social memory, or when existing social memory cannot be employed effectively? One such situation is represented by the emergence of the cybermarketscape. The cybermarketscape can be compared to the first appearance of the department store or the catalog shopping or similar revolutionary moment in the history of commerce.

When is there no social memory? Or when is existing social memory not serviceable?

One can view human societies as generational structures. The older generation leaves a legacy to the younger generation and the young build on the legacy, changing it to suit the new circumstances and tastes. Imagine situations when the young have no legacies to inherit. In certain cases, the memories have to be reconstituted as in the case of war-ravaged societies. Societies build on histories if there are no memories. In the absence of histories, societies construct their histories or just start from scratch as a mass-scale social bricolage – doing experiments that work on a trial and error basis. In any case, when social memories are obliterated, the burden falls on the new generation. For the new generation, this is both a challenge and an opportunity. It is a challenge because there is nothing to build on. It is an opportunity because something new can be built.

A second situation is when social memory exists but cannot be used. It gives rise to human intervention of a different kind - not because of war-like situations which destroy, but because of the emergence of new technologies or new ways of doing things that create social obsolescence. For example, the invention of the automobile introduced some fundamental changes in family and work lives, in physical mobility and other second order social arrangements. Existing social memories are of limited use because external forces have fundamentally altered the social landscape. The more radical the technological force, the less useful is the existing social memory.

Cyberscape as a disjuncture with social memory

The emergence of cyberscape is of the second type, that is, it has made the existing social memory less serviceable. The older institutional arrangements have no pathways to negotiate in the cyberspace. The old pathways can be followed analogically but they do not always lead to the best results. In fact, whatever social memory exists appears to be a hindrance and for the new generation, the social memory is a burden.

What does this mean in practice? Cyberculture is being nurtured by theyoung, the risk-takers, and the uninitiated, rather than the established guardians of the markets. The risk-takers do not seem to carry the burdens ofthe past. The only burden they seem to be carrying is the burden of constructing the future. Since there are no foundational elements, everything becomes a foundation in its own right.

# **Critical conclusion**

The co-optation of cyberculture by marketing should come as no surprise to anybody who has followed the course of capitalist history in the last four or five decades. The simple truth is, for marketing, cyberspace represents a limitless commercial space. What is also interesting is the rhetoric of the cyberspace that is now appropriated by marketing. Thus, for example, the virtual community of Rheingold (1993) has now become a community of commerce in a piece by Armstrong and Hagel (1996). The title itself, '\_ The real value of on-line communities", suggests that the cybermarketscape is borrowing from outside the marketing field for its imagery. As the footnote to the article indicates, this article is a slightly modified version of a previous article which is, "Real profits from virtual communities". That the *Harvard Business Review* substituted the word "profits" with "value" shows the extent to which the allies of marketing go to sanitize the practices of the discipline. One should not however be misled by the term "virtual community" as used in the *Harvard Business Review* article, for that is not what Rheingold had in mind.

In sum, cyberspace began as an innocuous technological diversion, more as a "life world" outside the "system", in a Habermasian sense, an unintended space for computer hackers who were the master tinkerers residing at the technological edge. Its very novelty and profundity were later converted into a marketing idea. It remains to be seen how the cybermarketscape preserves the idea of the lifeworld in its appropriating role.

# **Notes**

1. It must, however, be noted that it was the science fiction writer, Gibson (1984) who first coined the term "cyberspace" in his playful classic, *Neuromancer*. *To* quote him:

Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators ....A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding (Gibson, 1984, p. 51).

2. Nordstrom is an upscale department store, primarily located on the West Coast of the USA and known for its innovative retailing practices.

## References

Appadurai, A. (1990), "Disjuncture and difference in the global cultural economy", *Public Culture*, Vol. 2 No. 2, Spring, pp.171-91.

Armstrong, A. and Hagel, I111(1996), "The real value of on-line communities", *Harvard Business Review*, Vol. 74 No. 3, May June, pp.134-41.

- Bourdieu, P (1984), *Distinction*, (translated from French), Harvard University Press, Cambridge, MA.
- Burke, R.R. (1996), "Virtual shopping: breakthrough in marketing research", *Harvard Business Review*, Vol. 74 No. 2, March-April, pp.120-31.
- Carroll, J.M. and Rosson, M.B. (1996), "Developing the Blacksburg electronic village", *Communications of the ACM*, special issue on Internet@Home, Vol. 39 No. 12, December, pp. 69-74.
- Gibson, W (1984), Neuromancer, Ace Books, New York, NY
- Habermas, J. (1987), *The Theory of Communicative Action* (translated from German by Thomas McCarthy), Vol. II, Ch. VI, Beacon Press, Boston, pp.113-98.
- Hoffman, D.L. and Novak, T.P. (1996), "Marketing in hypermedia computer-mediated environments: conceptual foundations", *Journal of Marketing*, Vol. 60 No. 3, July, pp. 50-68.
- Hoffman, D.L., Kalsbeek, WD. and Novak, T.P (1996), "Internet and Web use in the US", *Communications of the ACM*, special issue on Internet@Home, Vol. 39 No. 12, December, pp. 36-46.
- Kraut, R., Scherlis, W, Mukhopadhyay T., Manning, J. and Kiesler, S. (1996), "The HomeNet field trial of residential Internet services", *Communications of the ACM*, special issue on Internet@Home, Vol. 39 No. 12, December, pp. 36-46.
- Rheingold, H. (1993), *The Virtual Community: Homesteading on the Electronic Frontier*, AddisonWesley, Reading, MA.
- Shields, R (Ed.) (1996), Cultures of Internet, Sage, London.
- Turkle, S. (1995), Life On the Screen: Identity in the Age of the Internet, Simon & Schuster, New York, NY
- Venkatesh, A. (1996), "Computers and other interactive technologies for the home", *Communications of the ACM*, special issue on Internet@Home, Vol. 39 No. 12, December, pp. 47-54.
- Venkatesh, A. and Vitalari, N. (1990), *Project NOAH.- A Longitudinal Study of Computer Use in the Home*, National Science Foundation Report.
- Vitalari, N., Venkatesh, A. and Gronhaug, K. (1985), "Computing in the home: shifts in the time allocation patterns of household", *Communications of the ACM, Vol.* 28 No. 5, May, pp. 512-22.