CHAPTER – III

Review of Literature

The potential of the World Wide Web on the Internet as a commercial medium and market has been widely documented in a variety of media. However, a critical examination of its commercial development has received little attention. Hoffman et al. (1995) proposed a structural framework for examining the explosion in commercial activity on the Web, firstly by exploring the role of the Web as a distribution channel and a medium for marketing communications; secondly by examining the factors that have led to the development of the Web as a commercial medium; evaluating the benefits it provides to both consumers and firms keeping in view its attractive size and demographic characteristics and thirdly by discussing the barriers to commercial growth of the Web from both the supply and demand side perspectives. Their analysis lead to a new classification of commercialization efforts that categorizes commercial Web sites into six distinct types including 1) Online Storefront, 2) Internet Presence, 3) Content, 4) Mall, 5) Incentive Site, and, 6) Search Agent. The first three comprise the "Integrated Destination Site" and the latter three represent forms of "Web Traffic Control". The framework, argued in the context of integrated marketing, facilitates greater understanding of the Web as a commercial medium and allows examination of commercial Web sites in terms of the opportunities and challenges firms face in the rush towards commercialization.

The tremendous growth of the Internet and particularly the World Wide Web, has led to a critical mass of consumers and firms participating in a global online marketplace. The rapid adoption of the Internet as a commercial medium has caused firms to experiment with innovative ways of marketing to consumers in computer-mediated environments. These developments on the Internet are expanding beyond the utilization of the Internet as a communication medium to an important view of the Internet as a new market (Ricciuti, 1995).
The Web is a massive global network of interconnected packet-switched computer networks. Krol and Hoffman (1993) offer three (mutually consistent) definitions of the Internet: “1) a network of networks based on the TCP/IP protocols; 2) a community of people who use and develop those networks; [and a] 3) collection of resources that can be reached from those networks”. It is noteworthy that there is no universally agreed-upon definition because the Web is at once a set of common protocols, a physical collection of routers and circuits, distributed resources and even a culture of connectivity and communications.

According to Hoffman et al. (1995), the most exciting commercial developments, from a business and marketing perspective, are occurring on that portion of the Internet known as the World Wide Web (www). The www is a distributed hypermedia environment within the Internet which was originally developed by the European Particle Physics Laboratory (CERN). Global hypermedia allows multimedia information to be located on a network of servers around the world which are interconnected, allowing one to travel through the information by clicking on hyperlinks. Any hyperlink (text, icon or image in a document) can point to any document anywhere on the Internet. The user-friendly consumer-oriented homepages of the www utilize the system of hyperlinks to simplify the task of navigating among the offerings on the Internet. The present popularity of the www as a commercial medium (in contrast to other networks on the Internet) is due to its ability to facilitate global sharing of information and resources and its potential to provide an efficient channel for advertising, marketing and even direct distribution of certain goods and information services.

Anecdotal evidence suggests that Web-based commercial efforts are more efficient and possibly even more effective than efforts mounted in traditional channels. Initial conjectures on efficiencies generated by online commercial efforts suggest that marketing on the Web results in “10 times as many units [sold] with 1/10 the advertising budget” (Potter, 1994). It is about one-fourth less costly to perform direct marketing through the Net than through conventional channels (Verity & Hof, 1994). This fact becomes especially critical in the face of
shrinking technology and product life cycles and increasing technological complexity (IITA, 1994), considering the example of SunSolve Online, which saved Sun Microsystems over $4 million in FAQs alone since they "reengineered information processes around the www" (Neece, 1995).

Firms use various media to communicate with their current and potential customers. Marketing communications perform three functions: to inform, to remind, and to persuade (Anderson and Rubin, 1986). The traditional one-to-many marketing communications model for mass media is shown below in Figure 3.1. In this passive model, firms (denoted by F) provide content through a medium to a mass market of consumers (denoted by C). The first two functions of marketing communications may be performed by a traditional communication model. However, the persuasion function necessary for differentiating a product or brand is limited by the unidirectionality of traditional mass media.

![Figure 3.1 (Traditional one-to-many marketing communications model)](image)

The Internet, a revolution in distributed computing and interactive multimedia many-to-many communication, is dramatically altering this traditional view of communication media. As Figure 3.2 below indicates, the new many-to-many marketing communications model defining the Web offers a radical departure from traditional marketing environments (Hoffman & Novak, 1995).
Figure 3.2 suggests that the Internet offers an alternative to mass media communication. Some applications on the Internet (e.g., personal homepages) represent "narrowcasting" to the extreme, with content created by consumers and for consumers. As a marketing and advertising medium, the Web has the potential to change radically the way firms do business with their customers by blending together publishing, real-time communication broadcast and narrowcast.

Hoffman et al. (1995) identified two major categories of sites: "Destination Sites" and "Web Traffic Control Sites". Under destination sites; Online Storefronts, Internet Presence Sites and Content Sites comprise the ultimate "destinations" housing a firm's virtual counterpart. The purpose of Web Traffic Control Sites is to direct consumers to these various Destination Sites. There are three major categories of Web Traffic Control: Malls, Incentive Sites and Search Agents. Hoffman et al. (2000) argued for considering their framework in the context of "integrated marketing", in which various communications vehicles are coordinated to create a single, strategically appropriate marketing effort to maximize customer response (Schultz et al 1992; Tynan, 1994).

As a commercial medium, the Web offers a no. of important benefits which can be examined at both the customer and firm levels. In this way, both demand and supply issues can be addressed. Buyer benefits arise primarily from
the structural characteristics of the medium and include availability of info., provision of search mechanisms and online product trial, all of which can lead to reduced uncertainty in the purchase decision. Firm benefits arise from the potential of the Web as a distribution channel, a medium for marketing communications and a market in and of itself. These efficiencies are associated with Web tech. and the interactive nature of the medium (Hoffman et al., 1995).

One important consumer benefit associated with marketing on the Web is the access to greater amounts of dynamic information to support queries for consumer decision making. The Hermes survey of Web users found gathering purchase-related information was the most preferred Web activity (Gupta, 1995). Further, the interactive nature of the Web and the hypertext environment allow for deep, nonlinear searches initiated and controlled by customers. Hence marketing communications on the Web are more consumer-driven than those provided by traditional media. In addition, recreational uses of the medium; manifested in the form of non-directed search behavior, can be an important benefit to consumers intrinsically motivated to use the medium (Hoffman & Novak, 1995).

The ability of the Web to amass, analyze and control large quantities of specialized data can enable comparison shopping and speed the process of finding items (Wallace, 1995). The Web facilitates trial and provides instant gratification; customers can test products online which may stimulate purchase. There is also the potential of wider availability of hard-to-find products and wider selection of items due to the width and efficiency of the channel. In addition to the above, the advantages for industrial consumers are reduced costs to buyers from increased competition in procurement as more suppliers are able to compete in an electronically open marketplace. This increase in competition leads to better quality and variety of goods through expanded markets and the ability to produce customized goods (IITA, 1994).

Firm benefits arise partly from the use of the Web as a distribution channel. First, the Web potentially offers certain classes of providers participation
in a market in which distribution costs or cost-of-sales shrink to zero. This is most likely for firms in publishing, information services or digital product categories (Jones, 1995). For example, digital products can be delivered immediately, hence such businesses may encounter massive disintermediation or even the eventual elimination of middlemen (Michalski, 1995). Moreover buyers and sellers can access and contact each other directly, potentially eliminating some of the marketing cost and constraints imposed by such interactions in the terrestrial world. This may also have the effect of shrinking the channel and making distribution much more efficient (mainly due to reduced overhead costs through such outcomes as uniformity, automation, and large-scale integration of management processes). Time to complete business transactions may be reduced as well, translating into additional efficiencies for the firm. However, such potential efficiencies must be tempered with market realities (Kline, 1995).

Second, business on the Web transfers more of the selling function to the customer, through online ordering and the use of fill-out forms (Michalski, 1995), thus helping to bring transactions to a conclusion. This permits a third benefit in the form of capture of customer information. The technology offers the firm the opportunity to gather market intelligence and monitor consumer choices through customers' revealed preferences in navigational and purchasing behavior in the Web. However that there are many social, legal and technological issues and drawbacks at the present level of technology which prevent firms from fully capitalizing on this benefit (Caruso, 1995).

Most firms use the Web primarily to deliver information about the firm and its offerings and for both internal and external communication (Magid, 1995; Sharples, 1995) with other firms and consumers. The interactive nature of the medium (Hoffman & Novak, 1995) offers another category of firm benefits since it is especially conducive to developing customer relationships. This potential for customer interaction, which is largely asynchronous under current implementations, facilitates relationship marketing and customer support (Cuneo, 1995) to a greater degree than ever before possible with traditional media. Web
sites are available on demand to consumers 24 hours a day. The interactive nature of the medium can be used by marketers to hold the attention of the consumer by engaging the consumer in an asynchronous "dialogue" that occurs at both parties' convenience. This capability of the medium offers unprecedented opportunities to tailor communications precisely to individual customers, allowing individual consumers to request as much information as desired. Further, it allows the marketer to obtain relevant information from customers for the purpose of serving them more effectively in the future (Hoffman et al., 1995).

The simplest implementations involve engaging customers through the use of email buttons located strategically on the site. More sophisticated implementations may involve fill-out forms and other incentives designed to engage customers in ongoing relationships with the firm. The objective of such continuous relationship-building is dual-pronged: to give consumers information about the firm and its offerings and to receive information from consumers about their needs with respect to such offerings. Hence, effective customized advertising, promotion and customer service (Berniker, 1995) is the fifth benefit that the commercial Web offers to the firm.

Most importantly, the Web offers opportunity for competition on the "specialty" axis instead of the price axis. From a marketing perspective, it is rarely desirable to compete solely on the basis of price. Instead, marketers attempt to satisfy needs on the basis of benefits sought, which means pricing is dependent upon value to the consumer, not costs. Such opportunity arises when the offering is differentiated by elements of the marketing mix other than price. This results in the delivery of value-laden benefits, e.g., convenience through direct electronic distribution of software or enjoyment through a visually-appealing and unusual Web site. As evidence that this is occurring, consumers indicated that price was the least important product attribute considered when making online purchases (Gupta, 1995). The ability to compete on dimensions other than price will become especially critical in categories where brands are perceived as substitutes, since it allows for more opportunities to differentiate along other dimensions.
Operational benefits of Web use for industrial sellers are reduced errors, time, and overhead costs in information processing; reduced costs to suppliers by electronically accessing on-line databases of bid opportunities, online abilities to submit bids and online review of awards. In addition, creation of new markets and segments (Schrage, 1995), increased generation of sales leads (Krumenaker, 1995), easier entry into new markets (especially geographically remote markets) and faster time to market is facilitated (Wilder, 1995). This is due to the ability to reach potential customers easily and cheaply and eliminate delays between the different steps of the business subprocesses (IITA, 1994).

A main reason the Web is “hot” as a commercial medium is because of its current size and future growth prospects and exceedingly attractive demographics. The www-name host is most prevalent on the Net, implying that many hosts are Web servers. Observers credit NSCA Mosaic (introduced in the Spring of 1993) for jump-starting the growth of the Web. This stunning growth is a classic example of a rapid diffusion process (Rogers, 1983) where adoption is fueled by word-of-mouth communication, an internal influence (Bass, 1969; Mahajan et al 1993). Word-of-mouth centres around the uniquely interactive nature of the Web. Hoffman & Novak (1995) discussed the unique characteristics of the Web medium as computer-mediation, hypermedia, machine-interactivity, network navigation and telepresence.

Computer-oriented consumers are “techno-savvy” and PC penetration in the United States being significant, the PC market is “young”, since 58% of PC owners have had their PCs for less than two years (Zeigler, 1995). The non-representative Georgia Tech/Hermes survey of Web usage (Graphic, Visualization and Usability Center, 1995; Gupta, 1995) based on 13,006 responses reveals a decidedly upscale profile of Web visitors. The fact that Web visitors are primarily upscale may account in part for the premium they apparently place on convenient and reliable content and their relative indifference to price as a factor in commercial transactions. Web visitors also tend to be employed in the professional and computer-related occupations.
SRI's (1995) psychographic analysis of the Web population gave further insight into the Web visitor and identified two broad categories of the Web “audience”. The first group called the “upstream” audience represented 50% of the Web population and estimated to represent 10% of the U.S. population, comprised of 77% male, educated (97% have at least some college education) and upscale users. Members of this group are what SRI terms “Actualizers”, successful men and women with high self-esteem and active “take-charge” lifestyles. Upstream Web visitors typically receive institutional subsidies for Web usage and represent the pioneer Internet users. Because most upstream users are already online, future Web growth must come from the “downstream” segment.

If the SRI analysis is valid, then the rate of adoption of the downstream or “Other Half” of the Web will determine when and if the Web achieves critical mass as a commercial medium. The other half (already online today) represents the lead users of the other 90% of United States society. This group is noticeably less gender-skewed than the upstream group (64 percent male and 36% female), younger (70% are under 30) and on its way to being just as educated (89 percent have at least some college education) as the group is comprised of students or recent college graduates. The other half are predominantly made up of what SRI refers to as Strivers and Experiencers. According to SRI, Strivers are unsure of themselves and seek approval from the world around them. In contrast, Experiencers are enthusiastic and impulsive, seeking variety and excitement from life. An interesting finding is that some of the downstream Web visitors appear not to find the Web valuable. However it is noteworthy, that the results of such surveys are not population-projectable, nor necessarily representative of the “typical” Web visitor. However, these early demographics surveys suggest that current Web consumers are leading-edge early adopters (Freeman, 1995).

The barriers to consumer and firm adoption impact critical mass (Oliver et al, 1985). Accumulated industry experience and anecdotal evidence strongly support the contention that the primary barrier to consumer adoption of the Web as a commercial medium is ease of access. Convenience of access is at the core of
the adoption of any technological application and determines its ultimate success (Gupta, 1995). In the context of the Web, ease of access is a multidimensional construct and includes high speed access (the "bandwidth" problem), ease of finding a service provider and the diffusion of the computer hardware/software/modem bundle into the home. The secondary barriers are ease of use, price and risk, including such factors as privacy and security. Ease of use includes issues such as the user-friendliness of the software, ease of software installation and the like. The marketplace will weed out even technically feasible Web applications if they prove too complicated for the average consumer to use (Seaman, 1995). Hence attempts to develop technology that is user-friendly are as important as the development of the technology itself.

There is a great deal of concern regarding the security of financial info. transmitted over the Web and its impact on consumer willingness to buy or sell products (IITA, 1994). This limitation is critical to mass adoption of the Web, especially since surveys of Web users indicate that vendor reliability and security of financial transactions are important to users (Gupta, 1995). The majority of consumers use the Web to browse or search, much more than actually to purchase something (Booker, 1995).

The barriers to firm adoption arise from the Web measurement problem (Donaton, 1995b). Firms are unsure of the number of people on the Net and how many people use the Web and this uncertainty makes investment decisions difficult. In addition, there are no established criteria for judging the success of Web sites (Bellafante, 1995). Hence, researchers need to develop concepts to shape standards. Such standards are critical to demonstrate the viability of the Web as a commercial medium and provide mechanisms for measuring investment opportunities and business success.

The commercial success of a firm’s Web site depends in part on accurate information on market potential and consumer needs (Donaton, 1995b). The Web provides multiple ways to reach a diverse and exciting set of markets.
Determining the appropriate set of target market segments and evaluating the penetration of Web access technology in each market is the first step in developing an integrated marketing strategy.

Because critical mass for interactive technologies is "all-or-none", (Markus, 1987), the Web will not be successful as a commercial medium until it achieves critical mass. An important first step in any marketing program is therefore the determination of how many people are on the Web and what they are doing there (Hoffman and Novak, 1994). It is also necessary to define and estimate segments of Web behavior based on customer need. The economics of the Web can then be examined for each specific case to determine if the return on investment meets financial targets.

Some sites attempt to capture data to address the above objectives by providing the option for visitor "authentication". In this process, visitors may register as subscribers in order to use the site fully (e.g., to search for specific content or to make a purchase). This enables the marketer to use demographic data and info. on new and repeat visit patterns to strengthen its (and sponsors') marketing programs on the site. Ultimately, marketers may build detailed databases and tailor marketing programs specifically to individual visitors or groups of visitors. There is no doubt that a great deal of commercial activity exists on the Web and that this activity is increasing. However, the proliferation is confusing. Two questions are especially relevant: What sorts of business models are being implemented? Are some better than others? (Hoffman et al., 1995)

Profitability from commercial activity on the Web includes productivity savings, marketing and sales savings and incremental or new revenue streams. Productivity savings arise from reduction in order and processing costs and more efficient inventory management. Increases in productivity on the "soft" side through more efficient personnel may also lead to productivity gains. Savings may also be realized from efficiencies in the marketing and selling functions. The Web shifts more of these functions to the customer; savings result through
reduced brochure printing and distribution costs and reductions in order-taking as customers use fill-out forms to prepare their own orders. As control is also effectively transferred to the customer, customer satisfaction might actually be increased (Hoffman et al., 1995).

Finally, incremental or new revenue streams are available for firms participating in digital commerce, through, e.g., online sales, advertising revenues or information brokering. Incremental revenues may be achieved for those firms who use the Web to expand into new channels of distribution and new market segments. Corporate training, electronic distribution and maintenance provide additional revenue opportunities for appropriate firms. However, secure mechanisms for transactions are necessary to fully exploit the revenue-generating opportunities of the Web (Donaton, 1995a).

Although we can address the potential for profitability, the question of whether anyone is making money on the Web remains largely premature. However, a careful examination of where the opportunities are can be undertaken. Despite the current frenzy of activity, there is little info. on the types of business models in use and whether some have the potential to be more effective than others. Strategic insight is therefore needed into how sites are differentiated, how they may be designed more effectively and how to attract customers to sites (Hoffman et al., 1995).

In integrated marketing programs, marketing managers combine elements of various media in order to maximize the effectiveness of a communications program (Belch, 1995). Despite the intense interest in such coordinated efforts (Duncan & Everett, 1993), there is yet to be widespread adoption and implementation of the concept (Cleland, 1995c; Schultz, 1995).

The concept of integrated marketing holds appeal and promise for business efforts on the Web, because the Web offers enormous potential for developing customer relationships and customizing the offering to individual
customers. The main challenges for marketers are to attract visitors to the site and generate significant repeat visits (Williamson & Johnson, 1995). Awareness leads to trial or the initial site visit so that the trial problem depends on “Web Traffic Control” (Hoffman et al., 1995). However, sites will only be successful in the long run if they generate repeat traffic, which is far more difficult to achieve than trial. The repeat visit problem is partly a function of Web site design (Saloman, 1995) and depends to a large extent on customer need.

Online Storefronts are Web sites offering direct sales through an electronic channel via an electronic catalog or other, more innovative format. Online storefronts cover a wide variety of offerings. Opportunities abound for the Online Storefront model as it combines elements of direct marketing with in-store shopping and has the potential to be vastly more efficient than either. In this approach, there are tremendous opportunities for customization and relationship marketing. A much broader definition of product and service categories becomes possible in this environment. The ultimate developments are those products that can exist or be consumed only on the Web (Hoffman et al., 1995).

However, the Online Storefront model poses a number of challenges. Current access speeds can make online shopping frustrating and tedious. Additionally, the terrestrial approach to shopping necessarily sets the standards for online offerings. In many cases, the online versions pale in comparison to real-world experiences of flipping through glossy catalogues or shopping in department stores. Because the technologies for secure transactions (e.g., online payment) are not mature yet, security and privacy are major issues that are yet to be addressed satisfactorily in this medium. Finally, the consumer behavior issues are completely unknown. E.g., marketers have little idea how to stimulate “trial” and “repeat”, do not know yet what the most effective segmentation bases will be for online shopping and understand little about the impact of marketing tools like custom-designed incentives. (Hoffman et al., 1995)
Internet presence sites provide a virtual "presence" for a firm and its offerings. They may also serve to signal to current and prospective customers and competitors that the firm is on the cutting edge, possibly driven by "mimetic isomorphism" (DiMaggio & Powell, 1983).

Flat Ads are single page electronic flyers with no hypermedia links. They could just as easily appear in a newspaper or magazine, though a flat ad is decidedly less sophisticated than its print counterparts. The evolution in this category may lead to inclusion of hypermedia, particularly as Web browsers like Netscape integrate real-time audio and video (e.g., Sun Microsystem's Java multimedia language (Johnson, 1995).

In Internet Presence Image sites, the consumer appeal is emotional rather than rational. Information about the product, if any, is provided in the context in which the product is consumed or has meaning to the consumer. Such sites appear to be especially suited to products that have low hard-information content. Information sites provide detailed, rational information about the firm and/or its offerings. Internet Presence Information sites can take on innovative and sophisticated forms and are best suited to offerings with high degree of hard-info content (Hoffman et al., 1995).

Decision aids can be used to facilitate navigation. One objective of such sites is to build a relationship with the consumer even before the need to purchase the product or service arises (Rechtin, 1995). Opportunities for Internet Presence sites include the ability to reach motivated customers with an information or image-rich communications message. Because the entry barriers are so low, smaller firms can set up Internet Presence sites as well (or in some cases even better) than larger firms. It is believed that Internet Presence sites represent the future of advertising and marketing communications on the Web.

Challenges include the actual execution, i.e., what is the best way to implement such a concept? Executonal challenges are greater for image sites, but
the rewards may be greater, as well, since image sites are possibly more likely to
generate flow, the "glue" holding the user in a site (Hoffman & Novak, 1995). A
final challenge is how managers can evaluate the effectiveness of such sites.

In Fee-Based content sites, the provider supplies and/or pays for content
which the consumer pays to access. Fee-based content sites are proliferating as
secure payment mechanisms are being implemented. However, the model has met
with only limited success, perhaps because consumers may be unwilling to pay
for content delivered in this manner. A recent trend is toward info.-brokering and
usage-based pricing, where visitors are able to access news summaries at no
charge, but incur a small fee for the full text of a story (Hoffman et al., 1995).

Sponsored content sites sell advertising space to reduce or eliminate the
necessity of charging fees to visitors (Donaton, 1995b). Thus, as with magazines
in the terrestrial world, advertising appears from a variety of sources and
underwrites the editorial content. A recent trend is toward sponsored
"entertainment" content and sponsored search agents.

In the third type of content model, merchants or advertisers pay a provider
for info. placement in an organized listing in a Searchable Database. The unit of
analysis is a person, service or info. source, all of the same type. This is the
inverse of Fee-Based content model. Opportunities abound for content sites, as
they closely parallel traditional media models reaching vast advertiser-coveted
audience. In addition, such sites may provide meaningful exposure otherwise lost
in the unstructured clutter that currently typifies the Web (Cleland, 1995b).
Additionally, content sites can demonstrate innovation, are efficient compared to
their terrestrial counterparts, and are, in theory, easy to implement.

However, the challenges for content sites arise due to this perceived ease
of implementation. The close parallels to traditional media represent significant
execution hurdles for content sites. How best to measure and optimize consumer
response to advertising in sponsored content sites is completely unknown (Hoffman et al., 1995).

The Mall site typically constitutes a collection of online storefronts, each of which may contain many different categories of goods for sale. The provider charges rent in exchange for the virtual real-estate and may offer a variety of services to the storefront (Gaffin, 1995). Some malls also accept advertising.

The Incentive Site represents a unique form of advertising that attracts a potential customer to a site. The objective is to pull the user to the commercial site behind it, thus helping marketers generate traffic to their Web sites (Cleland, 1995a). The content may be transitory in nature and may appear to serve as a "public service announcement" or offer incentives. From the context of web traffic control, Incentive Sites serve the same function as Malls. Some efforts may be especially sophisticated, as in directory services.

The purpose of Search Agent sites is to identify other Web sites through keyword search of a database that extends throughout the Web. Software agents are used to generate and/or assist the search through the database. A recent trend in such sites is the emergence of fee-based or advertiser-sponsored search agents. In terms of opportunities, there are a wide variety of novel ways of generating traffic to a Destination Web site. There is also the potential to model the diffusion of site visitors as a function of the location from which the consumer entered the site. Recently, search agent sites have shown potential as high-traffic vehicles for advertising sponsorship. Web traffic control sites face a no. of challenges. The proliferation of commercial Web sites means that it is increasingly difficult to find anything on the Web, especially if one is not looking for it! Therefore, identifying pivotal cross-linking opportunities will be critical (Hoffman et al., 1995).

Hoffman et al. (1995) argued that the marketing objective is to integrate these sites into a coordinated plan designed to achieve the important marketing
objectives of generating initial visits and securing repeat visits. The systematic categorization also serves to focus strategic attention on:

- **Understanding evolution of sites and structural characteristics over time:** Examining the attributes underlying Web site structure can lead to insight into what makes a successful site.

- **Gaining insight into categories that do not exist yet:** Since site characteristics will change over time, tracking changes will suggest where the development is headed.

- **Keeping an eye on the leading edge to gain differential advantage:** From a developmental point of view, managers need to identify the extent to which firms are following existing models or developing new models. One path to differential advantage will be to create innovative sites in less crowded categories, particularly as sites proliferate.

The identified models reinforce the idea that the firm's relationship with the customer must take advantage of a key feature of the medium, namely interactivity and that such relationships must be updated continuously. The interactive nature of the Web is especially conducive to relationship building and offers marketers new opportunities to create stronger brand identities which have the potential to translate to brand loyalty (Upshaw, 1995).

The Internet, especially the portion known as the World Wide Web, has the potential to change radically the way businesses interact with their customers. The Web frees customers from their traditionally passive role as receivers of marketing communications, gives them much greater control over the information search and acquisition process and allows them to become active participants in the marketing process. However, significant adoption barriers to commercialization preclude predictable and smooth development of commercial opportunities in this emerging medium. Commercial development of the Web must follow the demand ("demand pull"), instead of being driven by "gold fever".
Firms will reap the benefits of innovation in interactivity by being closer to the customer than ever before (Hoffman et al., 1995).

Given the resources needed to launch a retail store on the Internet or change an existing online storefront design, it is important to allocate product development resources to interface features that actually improve store traffic and sales. Lohse and Spiller (1999) identified interface design features such as no. of links into the store, hours of promotional ads, no. of products and store navigation features (independent variables) that impact store traffic and sales (dependent variables). These findings demonstrate that the user interface is an essential link between the customer and the retail store in Web-based shopping environments.

How do people in cyberspace picture one another? More specifically, how do individuals engaged in text-based computer-mediated communication (CMC), with its paucity of visual and auditory cues; form impressions of those with whom they interact? And how do expectations formed online compare with offline experiences? Jacobson (1999) tried to answer these questions, drawing primarily on theories of stereotyping to account for discrepancies between online image and offline reality and found that some participants assume online worlds are fictional and what happens in them is not to be taken seriously; others take them very seriously, arguing they are as real as those experienced offline. Some participants assume others misrepresent their offline gender and other personal characteristics; other participants assume people are like them; sharing attributes of age, race and socioeconomic status. In virtual communities, impression formation is influenced by choice of pseudonym and description of virtual character as well as the content of messages exchanged.

Lee et al (2004) identified key characteristics of Web sites and how consumers perceive them, through a content analysis of three computer manufacturers' sites which showed no major differences in terms of interactivity, information content and attractiveness of design. It is common practice for commercial Web sites to employ varied features in an effort to increase site
effectiveness, though how a Web site is perceived, remains with the consumers. It was found that the subjective user perception of these site characteristics, even if the sites have similar features, may distinguish one site from the rest.

Pavlou & Steward (2000) compared and contrasted traditional notions regarding the measurement of advertising effects with notions that recognize the active role of the consumer in interacting with advertising and the advertiser and found that Interactive advertising poses new and difficult challenges related to the measurement of its effects and effectiveness. The reciprocal communication between marketer and consumer makes it difficult to isolate the influence of any one advertising exposure. This means that the focus of advertising evaluation needs to shift from a focus on outcomes to a focus on both process and outcome. The role of the consumer in selecting advertising, in choosing when and how to interact (if at all) and the goals and purposes of consumers involved in the interaction are important dimensions of advertising that will require new measures and new conceptualizations of how advertising works. As the marketing mix becomes increasingly integrated and the same vehicles assume multiple functions (communication, distribution etc.), it becomes increasingly difficult to conduct relevant research on advertising without consideration of the larger context of the full marketing mix.

Rodgers (2000) provided an integrative processing model of Internet advertising, which incorporates the functional and structural schools of thought. Since most individuals enter cyberspace with some goal, or agenda in mind, a model of online processing should begin with consideration of Internet functions. These functions operate conjointly with the user's mode—ranging from highly goal-directed to playful—to influence the types of ads web users attend to and process. A number of mediating variables, such as skill level are offered as reasons to switch motives. These variables are conceptualized as having either a deleterious effect, as in the case of low skill and high anxiety or beneficial effect, as in the case of high skill and low anxiety, on ad processing.
Electronic marketplaces act as intermediaries between supply and demand. Kollmann (2001) found that buyers are not willing to pay for intermediation costs on the Web. For this reason, the only financing option open to the marketplace operator are fees charged to supply side (e.g. for each ad placed in the database).

Lombard & Snyder-Duch (2001) found that as communication technologies evolve and become more interactive, personal and sophisticated; advertising is being forced to evolve as well. This intersection of interactive advertising and presence will become increasingly relevant as tech. (especially the foundation, i.e, bandwidth capacity) quickly evolves and the use of realistic, dimensional imagery, artificial intelligence and virtual reality become more common. The potential of current and future tech. to enhance consumers’ media experiences is exciting; especially for advertisers who want to design effective persuasive messages. However, there are clear ethical dilemmas. Presence-evoking media advertising gives new meaning to “deceptive advertising”.

Sheehan (2001) analyzed why response rates to e-mail surveys have significantly decreased since 1986 and found five influences: the year the study was undertaken, the number of questions in the survey, the number of pre-notification contacts, the number of follow-up contacts and survey topic salience.

Pennington (2001) found that Interactivity provides marketers with the means to deliver virtual realities custom designed for each consumer, helping in forming virtual societies and cultures. Consumers can be the architects of their virtual realities by selecting attributes. Knowing the simultaneous occurrences of attributes, one can construct a virtual reality that evokes a sense of actual reality when it is imaginary.

Zhu & He (2002) examined the adoption, use and social impact of the Internet as a mass medium in Hong Kong, a dream venue with a well-developed telecommunications infrastructure, a population with both financial resources and bilingual (Chinese and English) abilities and a legal environment with virtually no
government regulation of content. The study found that Internet adoption is affected by one’s personal characteristics, socio-economic status, socio-cultural settings and perceived compatibility of the Internet. Internet use is primarily affected by socio-economic status and perceived compatibility and both adoption and use of the Internet have observable impact on leisure activities and concerns for privacy and other Internet-related negative consequences.

Consumer-to-consumer (C2C) communication about products and services, often known as “word of mouth” (WOM), is an important source of marketplace info. The Web is becoming an increasingly active medium for this type of communication. Schindler & Bickart (2002) argued that those forms that are published on the Internet and are thus “referable” have a considerable potential for expanding the scope and benefits of WOM. Understanding consumers’ motives for seeking out information can aid in the design of sites most likely to attract consumers with specific information needs. Understanding the impact of WOM on decision-making processes can help marketers to better utilize online WOM to encourage purchase and consumption.

Despite increased use of Web surveys, relatively little is known about standards for designing Web questionnaires. Manfreda & Batagelj (2002) found that Question wording, form and graphic layout of the questionnaire are particularly important, since there is no help from an interviewer for the respondent taking a Web survey. The design of self-administered Web questionnaires is even more important in order to achieve high data quality.

McMillan (2002) traced survival of advertising-related Web sites and found that resources are a critical factor for survival. Web sites with shorter addresses are more likely to survive. Managers of failed sites often blamed the site’s demise on external factors. A major implication for advertisers is that technology itself is less important than the ability to adapt to the changes it brings.

Choi & Rifon (2002) examined the effects of (1) website credibility, (2) ad relevance (the advertised product’s relevance to website content), and (3)
Advertiser credibility on ad credibility, ad and brand attitudes and product purchase intentions. The results suggest that source credibility is vital to understanding web advertising effectiveness.

Nocera (2002) suggested that understanding "virtual" life and cultural production within the Net requires balancing the socio-psychological and cultural dimensions of IRC Virtual Communities and Computer-mediated communication (CMC) cultural research should not only be focused on intercultural collision phenomena, but also on cultural construction from inside the Net.

Motivation for Web portal use is an important factor in the continued growth of e-commerce. Yoon et al (2001) found that four motivation factors, viz. feature, personalization, familiarity and searching are highly correlated to trust and satisfaction. Heavy web users and early adopters have a long relationship with and are more likely to use personalized Web portals.

Wouters & Gerbec (2003) concluded that the publicly available search engines lack stability of results, their behavior is not transparent and they do not present the results in a way that is suitable for the creation of data sets. Internet researchers might consider not only to try to develop better search software, but also tools that can archive publicly available mediated interaction in real time at a large scale. Even with improved tools, however, we should not expect that the Internet will give us anything like "total data" about social life. Internet research must be combined with off-line interviews, observation and surveys.

Ha (2003) compared the advertising on the web sites supported by offline media and on the dot.com media, that only have online presence, analyzing the advertising strategies of leading U.S. TV networks' web sites and online portals, (representing web sites with strong offline media support and web sites with no offline media counterparts respectively). TV networks' advertising strategies were identified based on a spectrum of brand extension and brand integration strategies. The results showed that even with the strong offline support of the TV.
networks, TV web sites are much more moderate in their display of advertising than online portals and use primarily brand integration as their convergence strategy. Forced exposure advertising is not common in TV web sites, which is contrary to the captive audience characteristic of the TV medium. Portal sites have a much stronger presence of advertising support. Their advertisers are also more diversified than those of TV web sites. Many TV web sites are still used as a marketing and promotional tool for TV networks rather than as a stand-alone advertising medium for advertisers. Portal sites have emerged as a full-fledged advertising medium completely capable of carrying different forms of online advertising to deliver advertising messages to target audiences for advertisers.

Ryu et al (2003) found policy and market factors responsible for the fast diffusion of broadband in Korea (a stellar case for high penetration rate of broadband Internet diffusion) and identified broadband as a necessary condition for development of advanced online advertising market; advertising being a major revenue source for many media companies. It was expected that online advertising would contribute as one of the major sources of revenue to support various content services, but that was not the case; with web site operators depending mainly on the revenue coming from e-commerce.

Park & Thelwall (2003) identified Hyperlinks as a highly promising but problematic new source of data that can be mined for previously hidden patterns of info., although much care must be taken in collection of raw data and interpretation of the results. Social Networks Analysis tools/techniques form an excellent resource for hyperlink analysis, but should only be used in conjunction with improved techniques for data collection, validation and interpretation.

Chung & Zhou (2004) explored the effects of consumers’ different surfing behaviors in terms of advertising effectiveness in the new media context by answering two primary questions: (1) What effect does interactivity have on attitude and memory? (2) What is the role of individual motivation on clicking behavior on the Web site? Perceived interactivity was found to influence
consumers’ attitudes toward the ad and memory for its contents, which is consistent with literature about the effects of interaction on attitude and memory. Results of this study show a positive impact of perceived interactivity on both attitude and memory.

Xie et al (2004) explored how emotional appeals affect banner ad click-through rates in the presence or absence of incentives and concluded that providing incentives in banner ads is effective in soliciting click-through. When combined with emotional appeals, positive emotions in banner ads enhance the effectiveness of incentives. However, ads with negative or no emotions seem to work better only when no incentives are offered.

Grigorovici & Constantin (2004) using theories from social psychology, consumer psychology and Human Computer Interaction suggested that 3D gaming Virtual Environments (VE) increase users affective engagement with the stimuli/environment content due to their particular structural features (high immersion, presence, etc.).

Yoo et al (2004) examined the effects of animated banner ads, as well as the moderating effects of involvement, on each stage of the hierarchy of effects model and found that animated banner ads prompt better advertising effects than do static ads. Animated banner advertising has better attention-grabbing capabilities and generates higher recall, more favourable attitude toward the ad and higher click-through intention than static ads. Furthermore, an individual’s product involvement moderates the effects of animated banner advertising on recall, attitude toward the ad and click-through intention. However, the study does not provide solid evidence of the feasibility of the traditional hierarchical model (Cognition → Affect → Behavior) in the online banner advertising environment.

Ko et al (2004) investigated the differences in perceived risk (defined as the potential for loss in pursuing a desired outcome from online shopping) between online and non-online shoppers, influencing the consumer purchase
decision process; relating to two culturally different countries (i.e., Korea and the US). The results indicate that the perceived risk is higher for non- (or less-experienced-) online shoppers than for frequent online shoppers and both Korean and US Internet users have a similar aggregated degree of perceived risk toward online shopping; though there are significant relative differences in specific risk items (i.e., social, financial, time, and psychological risk), which reflect the existence of the cultural differences in response to the specific risk factors.

Chen et al (2005) investigated the effects of web site interactivity on consumers' trust in brands and product evaluations and their subsequent purchase intentions in a multi-channel context. Results from the experiment indicate that through greater interactivity, individuals develop greater trust in the vendor and better understanding of its products and that trust and product evaluation carried interactivity's influence onto not only online purchase intention, but also offline purchase intention at a brand-specific business level. These findings indicate that online interactivity can have broad implications for multi-channel marketing.

Wu (2005) reconciled seemingly inconsistent findings regarding the effects of interactivity on communication outcomes such as attitude toward the website in two different interactivity research streams (i.e., actual interactivity vs. perceived interactivity) by proposing that perceived interactivity mediates the effect of actual interactivity on attitude toward the website. Empirical evidence supports the mediating role of perceived interactivity.

Tremayne (2005) reviewed the empirical literature on interactivity; primarily studies based on experimental designs and concluded that two conceptualizations of interactivity are beginning to dominate: the functional and the perceptual. Functional interactivity and perceived interactivity are independent, although certainly related concepts.

How do advertising practices need to adapt and change in order to effectively engage new media consumers? Integration has been an important,
overarching industry response in recent decades. Spurgeon (2005) considered ‘conversational’ interaction with consumers as another technique that has been successfully used to market new media usage; most notably to drive consumer adoption of mobile phone data services; highlighting the international significance of the mobile phone as an immensely popular new media platform, but one which has generally developed “under the radar” of much academic and trade literature. Enabled by the flexibility of new media and communications networks, consumers can also now actively participate as producers of campaign materials.

Based on traditional rational consumer theories about beliefs preceding intent to act and knowledge preceding behavior, Patwardhan & Ramaprasad (2005) proposed a hierarchical path model of decision making in the online environment, focusing on the Internet’s role in two decision stages: pre-purchase search and evaluation and actual purchase and found that an antecedent Internet belief variable (pre-purchase search beliefs) impacted a consequent belief variable (purchase beliefs) and an antecedent action variable (pre-purchase search) impacted a consequent action variable (purchase). Further, the consequent belief variable (purchase beliefs) impacted the immediately following antecedent action variable (pre-purchase search).

Online auctions hosted by newspapers to enhance the media mix are relatively new compared to other models of online advertising. Rosenkrans (2005) investigated the effectiveness of local online auction by comparing the advertising revenue generated from local auctions compared to concurrent revenue generated from online banner ads and how much traffic was increased to the site by way of page impressions. Findings demonstrated that newspapers’ local online auctions’ revenue surpassed banner ad revenue, although traffic was increased to the site.

Nicovich (2005) investigated the relationship between involvement, presence and ad judgment in a computer-mediated communications environment. A popular computer game was modified to incorporate advertisements within the
actual game play. Results indicated that involvement affects ad judgment and the
degree of experienced presence within the environment mediated this relationship.

Due to the increasing penetration of cell phone-only households, survey
administration via wireless devices is gaining attention. Townsend (2005)
examined use of the wireless web for survey administration in conjunction with
SMS (Short Message Service) and found that its survey functionality can mimic
the experience of a traditional web survey although screen size severely limits
information display. One of the most promising possibilities involves the use of
camera phones for ethnography studies and longitudinal diaries.

Kim & McMillan (2005) examined overall strategy (transformational vs.
informational), message strategy (what to say) and creative strategy (how to say
it) of the Super Bowl ads and related Web sites and found that Television
commercials used transformational strategies more than did Web sites. Message
strategies were more consistent across media than were creative strategies. Thus,
campaigns may be integrated in “what to say” even when the “how to say it”
seems different, highlighting the need to tailor messages according to
technological capabilities of the media.

Rodgers et al (2005) replicated the Web Motivation Inventory (WMI)
using consumers from the US, United Kingdom, Australia and South Korea
revealing the same four-factor structure for three of the four countries, providing
evidence of the scale’s global stability. However, the four motives – research,
communicate, surf and shop – differed significantly among the countries.

Bailey (2005) undertook a study to assess consumer awareness and use of
product review websites and found that consumers, generally, are aware of the
existence of product review websites and there is moderate usage of and varied
uses for, these types of websites. Gender and certain individual difference factors,
in particular e-opinion leadership, have an impact on usage and perceptions of
these types of websites.
Swain (2005) conducted a survey among marketing communication executives and educators to investigate perceptions of the present and future status of consumer-controlled interactive marketing communication, the degree of preparation for them, preferences for their measurement and preferences for methods of compensating agencies and found that computer-based interactive media provides the ideal environment for Integrated Marketing Communication.

Fortunato & Windels (2005) examined how digital video recorders (DVR) are being used by the audience and what are the potential threats and opportunities that advertisers must be aware of in adapting to this technology. By easily allowing the viewer to skip commercials the DVR is a device that could have potentially huge implications on advertising creative and placement strategies. The DVR is a clear threat to the advertising industry, but there are some opportunities which exist because of an interdependent relationship between television networks and advertisers in creating a communication environment that is economically beneficial to both entities.

Hupfer & Grey (2005) found that an Internet banner that advertised a free sample generated higher click-through than a banner ad with information only. The ad attitude and site focus of experiential users were positively affected by the sample offer, but this incentive had a negative effect on goal-directed searchers, who appeared to regard the sample-offer banner as a distraction that interfered with search goals and reduced satisfaction experienced at the host site. Beliefs about bias in the site information were unaffected and goal-directed searchers expressed more favorable return visit intentions than experiential users.

Online interpersonal influence or electronic word-of-mouth ("eWOM") is an important aspect of e-commerce. Consumers give and seek opinions online in much the same way as they do offline, thereby affecting the sales of many goods and services. Goldsmith & Horowitz (2006) measured consumer motivations for
online opinion seeking and found 8 distinct factors— to reduce their risk, because others do it, to secure lower prices, to get info. easily, by accident (unplanned), because it is cool, because they are stimulated by off-line inputs such as TV and to get pre-purchase info. Confirming its importance in e-commerce, it also found that: (1) the scales measuring these motivations are free from social desirability response bias/acquiescence, (2) other consumers’ info. is more important than advertising, and (3) consumers are likely to continue to seek WOM online.

Sellers’ reputation, as conveyed by consensus information, influences consumers’ trust in the company. Benedicktus & Andrews (2006) investigated the effects of consensus information on consumer trust and found that trust varies positively with the valence of a firm’s reputation and is similarly dependent upon whether the trend decreases or increases over time.

Porter & Golan (2006) examined and defined a division of electronic Word-of-Mouth (eWOM) known as viral advertising and found important differences between viral and television advertising. Significantly more than traditional advertising, viral advertising relies on provocative content to motivate unpaid peer-to-peer communication of persuasive messages from identified sponsors. While emotive content has always been the key to capturing audiences’ attention, viral advertising relies on increasingly raw content for actual distribution. This added reliance on titillation for distribution has a number of implications both for advertisers and the ultimate consumers of advertising.

Thorson & Rodgers (2006) examined the effects of a political candidate's blog— a form of eWOM— on attitudes toward the website, attitudes toward the political candidate and intentions to vote and found that interactivity in the form of a blog significantly influenced attitude toward the website, but not attitudes toward the candidate or voting intention. However, perceived interactivity influenced all three dependent variables, but did not interact with interactivity, suggesting that these are two separate constructs. The effects were mediated by parasocial interaction.
Steyer et al (2006) described the way word-of-mouth information follows a power law which points to asymmetries in relation to power, influence and contribution between group members within large social networks. Vilpponen et al (2006) found the structure of an electronic communication network is different from the traditional interpersonal communication network structure as it leads to early adoption of innovation.

The important influence of peer recommendations on consumer purchases has been strongly established. However, recent growth in electronic discussion boards has increased the potential for electronic word-of-mouth (eWOM) between people who have never met. Fong & Burton (2006) compared the extent of eWOM on electronic discussion boards within U.S. and China based websites and found similarities and differences in the info. giving/seeking behaviors, with U.S. participants more likely to provide info. than the Chinese, resulting in the U.S. based discussion boards containing a richer source of info. relative to requests.

Using Psychological Reactance as the framework, Morimoto & Chang (2006) explored consumer attitudes towards 2 major direct marketing techniques: unsolicited commercial e-mail and postal direct mail, using audience perceptions of advertising intrusiveness, perceived loss of control and irritation regarding the direct marketing techniques. The results indicated that recipients perceived unsolicited e-mails as more intrusive and irritating than postal direct mail.

Cauberghe & Pelsmacker (2006) investigated the knowledge, perceptions and intentions of advertising professionals toward the introduction and use of Interactive Digital TV (IDTV) as a marketing communication tool and found that their knowledge about the possibilities of IDTV was still very limited one year after the launch. The intention rates measured just before the commercial launch of IDTV, were relatively promising, but did not increase one year after its launch. The growing perception of the low effectiveness of advertising on IDTV in combination with technological concerns that are rising after the first real-life tryouts may be the reasons for this threshold to use IDTV.
Advergames are increasingly being used as part of a marketing campaign to promote products and brands. Winkler & Buckner (2006) examined the level of recall of products, brands and companies in advergames and whether the acceptability of product placement in advergames is related to attitude towards advertising in general. The investigation show recall of products and companies is high and that being negative about advertising in general has a stronger influence on attitude towards product placement in advergames than being positive about advertising. Advergames might work more effectively for products and brands that are already known to the game players and may be more suited to enhancing and altering brand impression rather than building awareness of products that are new to the target audience.

Chen (2006) developed and validated a Website Personality Scale (WPS) and found the presence of human and brand personality attributes as well as information characteristics in over one hundred websites. These attributes correlated with overall attitude and liking of the websites, which helped to validate the scale. The findings suggest that the WPS is both a reliable and valid measure of website personality.

Location-based advertising (LBA) is not new but being able to access it through one’s mobile communication device is. A scale provided by Bruner & Kumar (2007) is likely to become central to many studies: attitude toward location-based advertising (Alba). Support for scale’s psychometric quality came from a preliminary study and a two-stage analysis of a large, national sample.

Mobile advertising has become one of the most popular applications in mobile commerce, particularly in the form of text advertising through SMS (Short Messaging Service). Drossos et al (2007) investigated the significance of a number of factors associated with SMS advertising effectiveness and found that incentive, interactivity, appeal, product involvement and attitude toward SMS advertising in general directly influence attitude toward the advertisement, attitude toward the brand and purchase intention. The results of the study suggest
that a stronger focus on these factors is necessary to improve the effectiveness of SMS advertising campaigns.

The emergence of mobile phones as the leading personal communications device portends their attractiveness as a potentially lucrative media platform for marketers. Unni & Harmon (2007) presented initial consumer evaluations of mobile Location-Based Advertising (LBA), described as a free, opt-in service from cell phone service providers. LBA is a new form of marketing communication that uses location-tracking technology in mobile networks to target consumers with location-specific advertising on their cell phones. The researchers found that privacy concerns are high and perceived benefits and value of LBA are low. LBA was relatively more effective when it becomes available upon explicit request by the consumer than when consumers are alerted to location-specific advertising or promotions for preferred product categories relevant to a specific location.

The ubiquity of text messaging (SMS) based mobile communication creates new opportunities for marketers. Merisavo et al (2007) tested 5 drivers of consumer acceptance of SMS-based mobile advertising: (1) utility, (2) context, (3) control, (4) sacrifice and (5) trust. The results show that utility and context are the strongest positive drivers, while sacrifice is negatively related to the acceptance of mobile advertising. Despite concerns about privacy, results indicate that control and trust are not that important to consumers in mobile advertising.

With the advancements in mobile phone technology and the increase in consumer use of wireless devices to access the Internet, there is a need to explore the inevitable effect of these factors on mobile advertising. Nasco & Bruner (2007) found that modality combinations (text, audio and pictures) significantly affected subjects' perceptions toward and recall of the commercial content on wireless devices. However, modality did not affect perceptions of the mobile device itself or influence behavioral intentions and attitudes toward mobile
advertising on wireless devices. Behavioral intentions to use mobile devices were significantly predicted by consumer perceptions of content and of the device.

With the inexorable progression of technological development, more and more technological solutions are gaining access to market research processes (e.g., online panels, mobile surveys). A promising tool in this context involves interactive, three-dimensional, virtual reality techniques to measure consumer preferences. Many benefits are conceivable: Artificial lab environments can use more realistic designs and improve cost efficiency and "time to market" factors. However, the increasing degree of reality and respondent immersion into the interactive three-dimensional (3D) environment could cause a market research task to fall prey to a tense virtual reality adventure (Berneburg, 2007).

Wu (2007) examined the role of product/brand type on Web site pre-visit intentions by framing Web site visits according to the theory of planned behavior and applying the Rossiter-Percy grid to online advertising planning. The results showed that Web site pre-visit intentions differ among the four different product types (low vs. high involvement × informational vs. transformational). Specifically, pre-visit intentions are higher for high involvement than for low involvement and for transformational than for informational products. When a Web site visit occurs in certain circumstances, pre-visit intentions relate positively to attitude toward the site, which partially mediates brand attitude changes for low involvement products and fully mediates them for high involvement products.

Previous studies suggest that the presentation of an advertisement largely determines how well consumers receive the message. Video games have many elements that make them ideal platforms for advertisements. In a study by Glass (2007), participants played a video game that featured branded products, then took an implicit associations test to determine whether they had more positive attitudes toward the brands in the game than toward a set of equivalently rated brands. All three hypotheses were supported by the results. Participants categorize in-game brands as "good" significantly faster than they categorize them as "bad"
and also significantly faster than they categorize out-of-game brands as good. Finally, they take significantly longer to categorize the in-game brands as bad than they take to categorize the out-of-game brands as bad.

Web sites are based on info. and communication technologies that enable easy, rapid interactions between consumers and advertisers and represent more durable and common communication activity. In this context, the flow experience can provide a better explanation of consumer behavior in the context of websites as co. communication activities. By adding the flow state to traditional advertising models, Sicilia & Ruiz (2007) demonstrated the impact of flow state on website effectiveness. The results showed that the flow state influences attitude toward the website, both directly and indirectly through website cognitions.

Acar (2007) addressed incidental advertising exposure effects in online games by manipulating both the location (low proximity versus high proximity) and the message content (visual versus verbal) of an incidental cue while participants' primary attention is diverted by playing an online game. The results revealed that incidental exposure can be effective if the secondary stimulus appears very close to the focal attention area. The study also found no incidental effects of text inside bars or images in address bars.

Wikipedia (Krishnamurthy, 2008) offers a classical example of User-generated content (UGC), also called consumer-generated media (CGM). CGM encompasses opinions, experiences, advice and commentary about products, brands, companies and services—usually informed by personal experience—that exist in consumer-created postings on Internet discussion boards, forums, Usenet newsgroups and blogs. CGM can include text, images, photos, videos, podcasts and other forms of media. UGC is omnipresent in e-commerce today and its rapid growth has created some of the most successful digital brands, such as YouTube and Wikipedia. It also is quickly becoming a viable electronic medium as massive numbers of Internet users flock to UGC Web sites to consume content generated by "ordinary" people. Despite UGC's extraordinary growth, advertisers and
agencies remain hesitant to embrace this unproven media wholeheartedly, citing concerns such as fear of intruding on a "consumer" environment, a lack of understanding of UGC users and their behaviors and lack of control over the context in which their advertising gets exhibited. In summary, advertisers' wait-and-see attitude toward this new media seems mostly due to a lack of understanding of the characteristics and functioning of this new media.

Within the user-generated content sites, the role and growth of Social networking sites (SNS) has been undeniably overwhelming, yet little is known about why college students join and participate in these sites, which allow users to create their own content or space. Gangadharbatla (2008) investigated the influence of college students' level of Internet self-efficacy, need to belong, need for cognition and collective self-esteem on their attitude toward SNS, which the findings suggest are positive. Furthermore, attitude toward SNS mediates the relationship between willingness to join SNS.

The advent of Web 2.0 technologies has enabled the efficient creation and distribution of user-generated content (UGC), resulting in vast changes in the online media landscape. Daugherty et al (2008) investigated consumer consumption and creation of UGC and the attitudinal factors that contribute to these actions and found that attitude serves as a mediating factor between the use and creation of UGC. With regard to the creation of UGC, the ego-defensive and social functions of attitude are found to have the most explanatory power.

To understand information processing on blogs, Chu & Kamal (2008) investigated how perceived blogger trustworthiness affects blog readers' elaboration of brand-related messages and its interaction effects with argument quality. The results revealed that the degree of perceived blogger trustworthiness affects the extent of message elaboration and findings from a 2 × 2 (perceived blogger trustworthiness × argument quality) factorial experiment suggest a significant interaction effect on brand attitudes. This interaction reveals that when
perceived blogger trustworthiness is high, argument quality has a greater impact on brand attitudes than when perceived blogger trustworthiness is low.

In the time since the advent of the Internet, the influence of online recommendations on consumer decision making has attracted great attention. YouTube and sites with blogging capabilities, such as MySpace and Facebook, are growing rapidly and frequently feature comments about brands and products. These comments, whether positive or negative, represent a form of user-generated content (UGC). Cheong & Morrison (2008) examined consumers’ opinions of online recommendations embedded in UGC compared with those of producer-generated content (PGC). A major finding of this study is that participants voice more trust in product information created by other consumers than in information generated by manufacturers. The trustworthiness attributed to UGC remains similar, regardless of whether participants view positive or negative information. Most participants trust other end-users’ opinions, because they think other consumers convey more than just positive information about products. In addition, another consumer’s personal experience with a product seems important to several participants who view such UGC as more credible than PGC.

Xia & Bechwati (2008) explored the mechanisms underlying the differential impacts of online consumer reviews, using the concept of cognitive personalization and found that the level of cognitive personalization developed while reading an online review influences consumers’ purchase intentions. The level of cognitive personalization is a function of the reader’s affect intensity, the nature of the product reviewed (experience vs. search) and content of the review (experiential vs. factual). Additionally, the effect of cognitive personalization on purchase intention is moderated by valence (positive vs. negative).

Previous studies using the Integrated Marketing Communications framework have examined the increased effectiveness of combining either multiple media or different tactics when promoting a brand. Micu & Thorson (2008) considered integrating advertising and publicity to promote an unknown
brand on the Internet. Experiment results indicated that when exposure to advertising combines with exposure to objective news about a new brand, effectiveness increases in terms of both brand attitudes and behavioral intentions. For sequencing exposures for technical brands, the news-then-advertising condition offers more effectiveness than the reverse sequence. When introducing non-technical brands on the Web though, using advertising first is more effective in terms of brand attitudes.

Campaigns increasingly implement advergames to engage consumers with a brand through interactive, entertaining media content. Wise et al (2008) examined how variation in the thematic connection between the game associated with an advergame and the brand affects the relationship between attitude toward the game (equated with attitude toward the ad) and attitude toward the brand. The analysis revealed a stronger positive relationship between attitude toward the advergame and attitude toward the brand when participants play games with a high thematic connection to the brand’s product. Therefore, designing advergames that relate thematically to the product of the sponsoring brand should increase the likelihood of positive conditioning of brand attitudes evoked by playing an advergame.

Im et al (2008) assessed the consequences of consumer self-disclosure by examining the disclosure-liking effect in the context of advertising. Of particular interest was whether self-disclosure by visitors to a Web site leads to more positive reactions to subsequent advertising for the products/services offered on that site. The results demonstrate that the positive attitude that self-disclosure can elicit favorably influences subsequent attitudes toward ads and behavior toward the target of the disclosure.

The advent of keyword and Pay-per-click advertising has had a tremendous effect on online advertising, Internet marketing, search engines and Web sites that earn advertising revenue. The 2008 Google Online Marketing Challenge, with more than 8,000 participating students from 47 countries was, as
per Jansen et al (2008), the largest in-class academic competition ever undertaken. Common features of keyword advertising as per the findings are as follows:

1. **Advertiser-provided content**, i.e., a set of advertiser hyperlinks annotated with keyword tags, titles and descriptions.
2. **Advertiser-provided bids** that value traffic according to specified concepts or keywords.
3. Combined *manual and automated review process* to ensure that advertiser content is relevant to the target keyword.
4. **Matching advertiser content to user queries** received by a search engine.
5. **Displaying advertiser content** in some rank order in some placement alongside other algorithmic (i.e., non-sponsored or organic) search engine content.
6. **Gathering data**, metering clicks and charging advertisers on the basis of consumer clicks on the displayed content.

Hanley et al (2008) investigated how the research-informed development model affects the pedagogical learning outcomes and design solutions of university students responsible for creating interactive advertising and news content for television and the iPhone mobile device. Students used feedback from the research subjects as a guide for making changes to their work to improve the usability and design and thus better serve the advertising and news content. This progressive endeavour involved substantive changes to the design and functionality, as well as many small, barely noticeable changes; making better use of space on the screen and enhancing the order of different content areas.

As the number of mobile phone users exceeds that of PC users in many countries, how to optimize PC-based web sites for mobile phone users becomes an important issue. Troutman & Timpson (2008) introduced a method with the help of which firms can use the same URL for both PC-based and mobile phone-based Web sites and both groups of users can get the layout and content that best fit their devices.
Hansen (2009) used participant observation to undertake an ethnographic exploration of the meanings of brands and objects in an online virtual world. Through the perspective of symbolic interactionism and the theory of self-presentation, the meanings of brands and objects emerge in relation to status in game play.

Rosenkrans (2009) found that the interactive, rich media ad earned significantly higher click-through rates than the non-interactive, rich media ads. It also garnered more user engagement and encouraged more user interactivity. The interactive ad exhibits higher levels of interactivity, which increase user involvement, as indicated by the mouse rollover findings.

Okazaki (2009) found that mobile device should be considered a personal communication channel that enables firms to collect consumer opinions. The creation of a mobile blog can provide, from the perspective of a social-structural view of interpersonal communication, a form of community. Many consumers see society as consisting of cliques, small groups whose members interact frequently. Clique members are similar and their closeness facilitates effective communication but also insulates the clique from new ideas. The challenge is to create more openness so that cliques exchange info. with others in the society.

The advertising landscape has experienced dramatic change over the past several years, as consumers spend more time online, have more control over traditional advertising vehicles and chose to create and share their own content. As a result, some advertisers are evolving to a confluence culture where traditional methods of work must adapt to embrace the new reality of interactive content, emerging media and production/consumption methods. Sheehan & Morrison (2009) found that leaders in the confluence culture will be those creative strategists who have an understanding of all aspects of the advertising process and use creative skills to solve brand problems. These individuals—nimble, digital and prepared for new challenges—will be able to consider the stories people tell, craft
resonant brand narratives and help clients use these stories to connect people to brands in new and exciting ways.

Russell (2009) reviewed recent innovations in audience metrics for online media and current software and hardware developments that are driving a new era of liquid media and recommended developing metrics that can be harnessed to monetize audience engagement, rationalize media expenditures and create reporting structures for sharing insights.

With the advent of popular Web destinations such as MySpace and Facebook, online social networking communities now occupy the center stage of e-commerce. Yet these online social networking communities must balance the trade-off between advertising revenue and user experience. Zeng et al (2009) investigated the impacts of social identity and group norms on community users’ group intentions to accept advertising in online social networking communities and found when users perceive community advertising as more relevant to the theme of community and thus more congruent to the extension of their social identities, they regard that advertising as more valuable and exhibit more positive behavioral responses to it.

Bellman et al (2009) found that interaction with interactive television (iTV) ads has positive effects on awareness and net positive thoughts, which increase purchase intentions compared with the influence of regular ads. The effectiveness of iTV ads should be measured by their interaction rate rather than the much smaller response rate and iTV advertisers should consider ways to maximize interaction and response rates.

Edwards et al (2009) investigated the role of physical location in online consumer purchases, as demonstrated through the concept of distance. Distance conveys a sense of not only space between objects in the physical world but also psychological distance between people and others. This findings affirm the power of relationships to reduce feelings of mistrust and suggests a new avenue for
research into the role of similarity and familiarity as important variables in purchase decisions online.

Avatar-based, three-dimensional, virtual environments offer a promising corporate communication channel for brand marketing, advergaming and interactive advertising. Jin & Bolebruch (2009) found a favourable effect of spokes-avatars providing product information and their multimodal interactions with consumers' on consumers' product involvement, attitude toward the product and enjoyment of the online shopping experience. It also found a mediating role of spokes-avatars physical attractiveness, in terms of their humaneness.

McMahan et al (2009) explored gender differences in Internet advertising, analyzing gender in relation to interactivity. The study subjects were college-aged students or Generation Y, a group of consumers who tend to go online in great numbers, have considerable spending power and are computer savvy. The findings indicate that men and women differ in their usage and time spent on the various types of interactive features available on corporate Web site, especially human-to-computer interactions.

Assuming that shopping is a business area into which U.S. social networks can expand, Cha (2009) found that shopping services have different target consumers and factors according to product type. Age, usefulness, ease of use, security and fit are critical in establishing favorable attitudes toward shopping for real items. For virtual items, gender, social networking site experience, ease of use and fit influence the attitudes.

A lot of excitement and optimism surround the potential of social media for marketers where attractive audience segments are starting to amass. Social media measurement (Murdough, 2009) will evolve quickly as marketers attempt different approaches and hold enterprise measurement firms accountable to help make sense of all the activity data generated by social media interactions.
Few studies have examined the effects of Web promotions within social networking sites. Mabry & Porter (2010) used a comparison of online survey results from an official movie site and a movie contest promotion within a MySpace site to examine the effectiveness of the two online promotional tactics. Results indicate that overall the official website was more effective than the MySpace promotional page at increasing intent to see the movie, but the most effective campaign would use both an official website & a social networking site.

Tech. has provided consumers with the means to control and edit the info. that they receive and share effectively, especially in the online environment. Kelly et al (2010) found that advertising in the online social networking environment is more likely to be avoided if the user has expectations of a negative experience, the advertising is not relevant to the user, the user is skeptical toward the advertising message or the consumer is skeptical toward the advertising medium.

Hoy & Milne (2010) found several gender differences in young adults’ privacy beliefs, their reactions to behavioural advertising, personal information-sharing behaviours and privacy protection behaviors on social networks. Third-party data usage beyond the original purpose and behavioral advertising techniques are of concern to both genders but more to women. In addition, women engage in noticeably more proactive privacy protection behaviour compared with a decade ago.

Lewis & Porter (2010) found that though moderately incongruent advertising in an massively multiplayer online role-playing game (MMORPG) can trigger high awareness rates, extremely incongruent in-game advertising can reduce a game’s perceived sense of realism and annoy players if not coordinated appropriately with the game environment. Whereas previous research suggests players usually accept in-game advertising when relevant, this study shows that the opposite occurs when advertisers fail to contextualize ads within the game world.
Martin & Todorov (2010) found that a range of new marketing media can be leveraged to keep people tuned in and seamlessly integrate brands into their everyday lives. Digital platform adoption by brands will continue to grow and marketers can no longer view these as standalone touchpoints but instead must recognize them as seamless engagement opportunities that can keep customers connected to a brand story throughout the day. To be successful in every digital initiative and strengthen the brand-consumer relationship, marketers should select digital platforms that deliver high engagement value, connect brands with consumers’ social networks and provide value and relevance in the context of each consumer’s location and activity.

What happens if you create a campaign based on the target segment’s dreams of being a designer, in combination with a recognized brand and medium that have the same target segment? Fagerstrom & Ghinea (2010) demonstrated that by using the Web in an interactive and social way, co.’s can achieve brand awareness, positive attitude toward a brand and increased sales in target segment.

Katz (2010) presented a large-scale study on the effectiveness of different online video advertising formats using a sample of six major U.S. advertisers and seven media companies and found that Ad Selector is the most effective format of online video advertising.

The Web has become an essential resource for enterprise development. Its impact on advertising strategy is perhaps the most apparent influence. Network advertising has become the third largest industry in the information economy in China, second only to e-commerce and online games. To understand the current status and development of Chinese online marketing communications, Huang & Tsang (2010) introduced three primary aspects: audience characteristics, media types and subject placement and found that marketers cannot achieve effective marketing communication strategies without a comprehensive understanding of how consumers interact and construct meanings in cyberspace.
Chen & Haley (2010) revealed the lived meanings of Chinese social network sites (SNSs) among urban, white-collar professional users through an investigation of a newly launched SNS, Happy Network. Their shared meanings were interdependent with participants' interpretations of time, fun, need to belong and social interactions, shaped by and reflective of their social role as white-collar professionals and the cultural characteristics of contemporary Chinese society.

Lee (2010) underscored the need for understanding current internet use of each mobile service (e.g. informational service related to health, business/finance, payment/billing services and purchasing products) as a key to the success of the potential use of mobile services. Mobile phones that are data ready and connected to digital communication networks helped paved the way for m-commerce, just as the internet and web browsers opened up the path for e-commerce (Dholakia and Dholakia, 2004).

Brettel and Spilker-Attig (2010) found that on-demand channels have a stronger effect on short-term success than push-channels and that this is strongly moderated by the culture. To guard against suboptimal allocation of resources to advertising channels as a result of missing/misleading data, the researchers suggest identifying the total effect of impressions and clicks in each advertising channel.

Modern marketers seek new research paradigms to explore preconscious, nonverbal stages of consumer behavior, often turning to brain science because some mental processes, particularly those underlying conscious awareness, may be better understood by analyzing neuro-physiological reactions. A new discipline, consumer neuroscience, thus examines the brain and its functioning in a marketing context. Ohme et al (2011) demonstrate how consumer neuroscience can contribute to existing marketing knowledge, with a focus on two methods: EEG and eye-tracking. In interactive environments, it is ideal to administer brain wave analyses in parallel with observations of eye movements. Such an integration can capture what people feel when they look at something. The EEG-
eye-tracking integrative approach offers various opportunities to interactive advertising researchers.

Cauberghe & Pelsmacker (2011) found that the impact of perceived usefulness on the intention to use interactive digital television is low compared with the impact of perceived ease of use and subjective norms. Over time, the compliance effect of external subjective norms on usage intention decreases, in favor of the internalization effect through perceived ease of use.

Digital media has profoundly affected the advertising industry as new channels supplant traditional media and Internet advertising moves beyond rudimentary display ads to the likes of viral video and social networking. Mallia & Windels (2011) explored how digital media might affect the creative careers of women, who were constrained by the organizational structure dominant in the twentieth century. The findings suggest that digital agencies develop their work differently than traditional advertising agencies and that the nature of digital work requires more diverse and specialized project teams. This shift has increased collaboration among creative personnel and led to a more positive workplace experience for women.

Elias et al (2011) examined the relationship between ethnic identity and same- or different-race sources on blacks' consumer attitudes and found that the race of a character used in an ad transversely moderates the relationship between ethnic identity and consumer attitudes. Specifically, as blacks' strength of ethnic identity increases, they tend to display more favorable consumer attitudes if the product presenter of an e-commerce website is also black and weaker but negative attitudes if the product presenter is white.

Ahrens & Coyle (2011) found that proper implementation and design of registration pages is a crucial consideration in the development of websites for two reasons: First, users often navigate through them to receive future marketing
communications. Second, advertisers can gain valuable contact info. through registration processes that allow them to customize marketing communications.

Viral advertising has attracted advertisers in recent years, yet little is known about how exactly it works from an information processing perspective. Eckler & Bolls (2011) explored how the emotional tone (pleasant, unpleasant, coactive) of viral video ads affects attitude toward the ad, attitude toward the brand and forwarding intentions. Results indicate that pleasant emotional tone elicits the strongest attitude toward the ad, attitude toward the brand and intention to forward. The effects were weaker for coactive tone and weakest for negative emotional tone. These results challenge the common approach of shocking or scaring online users to motivate them to forward a viral video.

Advertisers have long used traditional media to build brands; many have now started taking the Internet seriously to support their brands, as millions of consumers are now going online to access information (Seethamraju, 2006). The Internet has created a new communication environment for advertising campaigns, thus initiating a new era of firm-consumer interaction (Rust & Oliver, 1994). The Internet has already become a significant advertising medium and it will soon become a very important component of a company's media-mix. Many companies are now considering Internet advertising as a viable alternative to advertising in traditional media (Dreze & Zufriden, 1998).

Advertising on the Web and in traditional media is not the same, since the Web can extend the function of advertising far beyond what traditional media are able to accomplish (Li & Leckenby, 2004). Consumers can not only obtain information about the product or services offered by following the various links within the Internet advertisement (ad) but also place orders online and download some products (such as e-books) to their computer (Li & Leckenby, 1999). In contrast, these kinds of facilities are not available in traditional advertising media. So the Internet provides the means for 'interaction' between buyers and sellers.
(Leckenby & Li, 2000), and gives consumers the flexibility to do things themselves with ease, speed and at their own convenience (Hui & Wan, 2007).

However the Internet is a relatively new medium and it may be a little too early to set rules and define exactly what works and what doesn’t. Many consumers find advertising annoying (Sandage & Leckenby, 1980; Zhang, 2000). Research has confirmed a generally negative public opinion about advertising (Alwitt & Prabhaker, 1994; Zanot, 1981). It is becoming increasingly difficult to get viewers to pay attention to advertisements—be it ads on the Web or in any traditional medium. There seems to be advertising clutter in all the media. The Internet has become a proven medium for advertising and a feasible alternative to traditional media like television and billboards (Wang et al, 2002). The number of people watching TV and surfing Web simultaneously continues to rise (Coffey & Stripp, 1997), and with an increase in the number of viewers, the advertising possibilities on these media has caught the attention of the advertisers.

Bogart (1985) argues that the chances of an advertisement being carefully processed by the audience are lowered because of the high volume of advertisements competing for an individual’s attention on a daily basis in different media. The job is made more difficult by the Internet which has resulted in greater growth of online advertising, thereby making the competition for an individual’s attention more severe and intense.

Is the presence of a new medium of communication an indication of the exit of the already existing traditional media, like the television? The radio did not replace newspapers; TV did not replace the movies or the radio; satellites and cable did not replace broadcast TV (Coffey & Stripp). Television has its own strengths—it provides entertainment for the whole family and is easy to use—especially for those who are not too familiar with the Internet. The Internet on the other hand is a medium that provides better interaction and plenty of information that users can navigate through according to their needs (Ducoffe, 1996). Whether the Web will take over as the new medium of advertising is a question that both advertisers and marketers want an answer to.
Every year companies spend large amounts of money on advertising in different media. Not all the advertisements are successful in attracting the attention of the right consumers or persuading them to make a purchase. In this age of advertising overload, viewers want to see what they want to see and pay no attention to the rest. How do viewers perceive the Internet vis-à-vis other media? Is Web advertising more effective than television advertising? The perception of the viewers influences the advertisers' selection of the medium.

Advertising on the Internet and the traditional media have their own advantages and disadvantages. There is the testimony of more than forty years of research to show what the impact of an advertisement on television is. Research on the impact of Internet advertisements has a long way to go on this front (Kumar & Shaw, 2004). The Internet has evolved as an important tool for advertisers and marketers and is in competition with the traditional media. It is however not clear from previous studies whether the consumers who watch both online advertisements and ads on the traditional media consider both the media to be equally effective. Research in the past has focused on the effectiveness of the Internet as an advertising medium, but there is a dearth of research on the comparative effectiveness of Web and television advertising. Research that does focus on the comparative effectiveness of the two media does so from the business manager's perspective (Leong et al, 1998). There is some research on the effectiveness of online advertisements in the West but in India the Internet made a relatively recent entry and therefore there isn't much research in the Indian context that focuses on the above question.

Advertising on the Internet purportedly started on October 27, 1994 when *Hotwired*—the First commercial Web magazine—was launched by *Wired* magazine, and is credited with being the first to bring advertising to the Internet. Magazine executives realized that slow download times kept them from using video, audio or even large graphics, so they developed what they termed 'banner ads' (Kaye & Medoff, 2001). Since then, advertising on the Internet has increased
rapidly, mainly due to an astronomical growth in Web traffic (Rae & Brennen, 1998). But as online advertising increases, so does the clutter.

According to Korgaonkar and Wolin (2002), the Web is a medium with characteristics such as constant message delivery, audience selectivity, multimedia capacity, measurable effects, global reach, audience controlled advertising exposure and interactivity, making it, along with its components, an advertising medium. A Web advertisement's depth ranges from corporate logos, banners, pop up messages, e-mail messages, and text based hyperlinks to official websites (Briggs & Hollis, 1997; Ducoff, 1996; Newhagen & Rafaeli, 1996; Scholosser & Kanfer, 1999; Singh et al, 2000). Many companies are turning to the Web to advertise their products and services. Consumers have more control over advertising exposure with Web advertising, because they can select how much commercial content they wish to view, what they want to view and if they want to view it at all. Marketers can create and administer close relationships with millions of consumers simultaneously through the Web at a markedly lower cost to the marketer than when using traditional media (Korgaonkar and Wolin, 2002).

Advertisers use creativity in developing ads in all media. TV commercials use sound, moving images, and pictures, and a commercial on TV varies in duration- ranging from five seconds to ninety seconds. Similarly, advertisers have been very creative in designing effective ads for the Internet. Several different formats are being used currently, including banner ads, button ads, pop ups and pop unders, interstitials or in-your-face ads, online advergaming and keyword ads.

The Web has several advantages as an advertising medium when compared to traditional media. The most evident advantage is cost, which is generally a fraction of what would be paid for a comparable format on TV (Pelle, 2005). Also in terms of the impact of communication, online ads can count on virtually unlimited advertising space- if the attention and interest of the consumer is captured, s/he will be able to watch the ad over and over again, which is a benefit the Internet enjoys over the traditional media, like television. In addition, the Internet performs another essential function that no other traditional medium
does- it acts as a sales and distribution channel. Any consumer who wants to buy a product/service advertised on the Web can buy it right away without having to go anywhere. Meeker (1997) describes the Internet as the only medium that allows consumers to interact with products, investigate further details, and immediately make purchases. Suresh (2006) considers customization and low costs as the major advantages that online advertising provides to the advertisers. Cookies (a file with a unique ID tag placed on computers by a website) placed on the computers of Web surfers helps in tracking the Web usage habits of the surfers. This gives relevant information which may be used by the advertisers, so that the next time the surfer visits the same website, only ads relevant to the surfer are displayed.

Despite the advantages mentioned above, online advertising has clear disadvantages as well. As with other advertising media clutter is an issue, as competition for Web users becomes more intense (Kanso & Nelson, 2004). Also the frequency of unwanted pop up ads can become extremely annoying to the point that users could decide to avoid visiting certain sites (Pelle, 2005). Also, the presence of unsecured sites affected by viruses, and irrelevant messages does not help in building trust.

Literature suggests that Web ads have the potential to be as effective as ads in more traditional media (Gallagher et al, 2001). According to Sunder et al (1998) the print medium is superior to the online medium in memory measures, ascribing this effect to the novelty of online advertising’s delivery mechanism and also user expectations. On the other hand, Gallagher et al (2001) state that both media are equally effective.

Researchers have studied the differences between online and traditional advertising (Menon & Soman, 2002; Scholosser & Kanfer, 1999; Steward & Pavlou, 2002; Yoon & Kim, 2001). Hoffman et al (1995) consider Web based commercial efforts to be more efficient than those mounted in traditional channels, although this claim is disputed by Gallagher et al (2001). Potter (1994) estimates that Web based marketing results in ten times as many units sold, with
one-tenth the advertising budget. Marketers should therefore think of using new technologies to plan an online/offline mix to increase brand impact.

Although the Internet is a considerably new medium for interactive communications (Hoffman & Novak, 1996), there is evidence that consumers have already integrated the Internet experience into their broader media use. Almost half of all personal computers (PCs) are in the same room as the TV sets, and watching TV and accessing the Internet simultaneously is common (Cox, 1998). Although the Internet and other execute sale and collect payment—have been considered more powerful, responsive and customizable than traditional media (Hoffman & Novak, 1996), there is empirical evidence which suggests that consumers respond to much of the advertising on the Internet in the same ways as they respond to advertising in more traditional media, at least with respect to traditional measures of advertising effectiveness. For instance, Dreze and Hussherr (1999) found the response to advertising in other media, except that advertising on the Internet is easier to ignore.

The idea of integration between traditional media such as TV and the new digital media has been discussed. In a study by Leong et al (1998) it was found that although the Web is different from the other media, it compliments these media. They suggest that a synergy can be achieved by integrating the Internet into the media mix to achieve the company’s objectives. It has also been said that TV viewing as we know it today will soon be largely replaced by computer based activities, such as surfing the Web (Negroponte, 1995). Coffey and Stripp (1997) however do not think that there is any convincing argument in favour of a replacement hypothesis. They argue that the amount of TV viewing will probably decline but will still remain a popular activity. They have documented that the power of TV to promote websites is a clear evidence of the fact that PC users are consumers of other media—including TV—and that those media are powerful tools to promote websites and drive Web traffic. The data suggest that an overwhelming number of PC users are interested in the new media as well as in television. Kanso and Nelson (2004) suggest that an integrated partnership
between magazine advertising and the internet needs to be enhanced, and advertising the company's website in other traditional media may be another way of enticing consumers to the site. Chang and Thorson show that the TV-Web synergy produces an effect that is superior to repetitive ad exposure in either media. The TV-Web synergy leads to higher attention, higher perceived credibility, and a greater number of positive thoughts.

It is difficult to compare advertising effectiveness on the Internet relative to that in media such as the television. One of the parameters on which the effectiveness of the medium is measured is the credibility that the medium enjoys. The credibility of the medium that carries the advertisements affects the credibility of the ad, which, in turn affects the credibility of the brand (Hoveland & Weiss, 1951; Kelman & Hoveland, 1953; Schiffmann & Kanuk, 1994).

In an important study on Web advertising, Ducoffe (1996) presents the results of an intercept survey focusing on the perceived value of Web advertising. Of the seven media that the respondents were asked to rank in terms of their value as a source of advertising, the Web was placed near the bottom. Television ranked as the most valuable source of advertising with a mean ranking of 2.2, followed by newspapers (3.1), magazines (3.3), direct mail (4.0), radio (4.3), Web (5.2) and outdoor media (5.7).

Not all Web ads are successful; neither are all TV commercials effective. Griffith and Chen (2004) in their research on the effectiveness of online ads note that one of the key advantages of online advertising over traditional advertising is that it can approximate key characteristics of direct experience (DE) when promoting experience products such as books, apparel, watches, food etc. DE is defined as a consumer's first usage experience with a product (Singh et al, 2000). Meeker (1997) describes the Web as the only medium that allows consumers to interact with products, investigate further details and immediately make purchases. Findings of the research suggest that only online ads that employ DE are more effective than online ads alone. The Web has the quality of the print media (DeFleur, 2002), but is not identical with it. The same is true of TV.
Ducoff argues that media context has an important influence on the values of advertising (Eveland & Dunwoody, 2002). Previous studies show that consumers think newspapers carry the most informative, reliable and believable advertising whereas television and radio rate lower on these attributes (Bauer & Greyser, 1968; Becker et al, 1976; Grotta et al, 1976; Larkin, 1979). Within a medium, individuals who select a particular media vehicle may consider advertising that fits closely with the editorial environment to be of greater value because it addresses their particular interests (Aaker et al, 1972; Cannon, 1982). According to Wang et al (2002), a respondent may have a positive attitude towards the Web as a tool or medium, but a negative attitude towards advertising on the Web, that is, consumer's attitude towards Web advertising may not be the same as his or her attitude towards the Web as a medium itself.

The Web is fast becoming an important advertising medium and advertising on the Web has reached a level where many companies are considering it to be a viable alternative to traditional media (Dreze & Zufriden, 1998). For this reason, companies are interested in standardized measures such as reach, frequency and gross rating points (GRP) that will allow them to compare advertising effectiveness on the Internet to that of other media. Reach is the total number of unduplicated users who had the opportunity to see an ad one or more times. Frequency is the average number of times a user had the opportunity to see an ad. GRP is the product of reach and frequency. Unfortunately, there are a number of shortcomings when it comes to measuring the effectiveness of Web advertising. Marketers are interested in measuring banner ad effectiveness by counting banner impressions or the number of advertisement click throughs (the number of times a user clicks on an advertisement). These methods are designed to examine reach and frequency issues, but due to the problems associated with identifying unique visitors to a site, it is difficult to accurately measure the impressions, reach and frequency of banner advertising exposures for a target audience. The second measurement problem is that of caching. Caches are temporary storage areas in which a computer system stores info. that may be too lengthy to retrieve from their original location. This means that a user's subsequent requests for a page
may be retrieved from a local cache and the website server will not record the user’s subsequent exposures to the ad on the Web.

These problems of identifying unique visitors or caching are not encountered in traditional media. But there may be other shortcomings while measuring the advertising effectiveness of TV. While watching TV, viewers could miss out on an ad due to distractions of various sorts. Thus, even though the TV may have been switched on, there is no way of ascertaining that the viewer was actually exposed to the ad, or even paid attention to it.

Hollis (2005) asserts that the dominant forms of measuring ad effectiveness on the Web are click through rate (CTR, i.e., the no. of clicks on banner ads on a publisher’s webpage that result in the transfer of a surfer to the advertiser’s website) and brand metrics. CTR indicates the active response to advertising, not just probable exposure to it. Brand metrics like brand awareness and recognition can be measured by traditional survey research unlike behavioural response such as click through.

According to Ducoffe (1996), advertising value is understood as an overall representation of the worth of advertising, i.e., the value of advertising in general. To understand what makes advertising valuable, Ducoffe identified the dimensions of advertising which include informativeness, irritation, deceptiveness and entertainment. Ducoffe found that these dimensions are predictors of value of advertising which affects the consumer’s attitude towards advertising and that Web advertising high in value would also tend to hold more favourable general attitudes. Advertising value as defined by Ducoffe is a subjective evaluation of the relative worth or utility of advertising to consumers. The value of advertising is thus understood to be comprised of informativeness, attention, emotions, precipitating action, attitude, entertainment, irritation and deceptiveness.

An analysis of the comparative effectiveness with traditional media by Leong et al (1998) revealed that the website is located close to direct mail in its ability to convey information and details about the product/service. These results
are not surprising given the ability of the Internet— to provide quick and convenient access to information of all kinds on various products and services. Web advertising can potentially offer consumers an advantage over traditional media because the former makes the required information available immediately (Ducoffe, 1996). For example, banner ads transmitted to online users who employ specified keywords when browsing the Web have been found to generate far higher conversion rates (the percentage of people who click on a banner ad to reach the advertised website) than non-targeted banners (The Cyber Marketing Letters, 1996). Unlike TV, the radio and billboards, the Internet offers more content rich information about specific features of the product or service to information hungry consumers (Arens, 2004). This means that a consumer will see what s/he wants to see, when s/he wants to know further details of the product/service. This is a luxury not available to consumers watching TV ads.

An important study (Nagar, 2009) in the Indian context, focusing on a comparison between the effectiveness of advertisements in two different media, namely the Web and Television advertising (through a survey of responses from customers who are users of both the media) revealed that the Web is an excellent medium for conveying information and advertisements on the Web are not considered to be deceptive. However, television scores over the Web on parameters such as catching viewers' attention, increasing purchase possibility and in changing and maintaining attitudes towards the advertised products/services and towards the image of the advertiser.

While research in the past focused on the effectiveness of the Internet as an advertising medium, there was a dearth of research on the comparative effectiveness of Web and television advertising; which this study attempted to cover by filling the gap. Based on a literature survey, the author formulated various hypotheses that test the ‘value’ of advertising on the dimensions of informativeness, attention, emotions, precipitating action, attitude, entertainment, irritation and deceptiveness. Users consider both television and Web advertising to be entertaining which also stimulate emotions among them; however, both the
media generate a high level of irritation among the users due to over-exposure and advertising clutter. The author maintains that with enterprising effort it may not be long before the Web competes with television on all the factors of advertising effectiveness (Nagar, 2009).

A total of 379 respondents were given nine different media of advertising and were asked to rank them in order of their relative value as a medium of advertising. Of all the media, the respondents ranked television as the most valuable source of advertising with a mean ranking of 2.08, followed by newspapers (2.67), magazines (4.31), radio (4.98), Internet (5.03), point-of-purchase (5.62), direct mail (5.65), outdoor media (5.93) and telemarketing (6.51). The Internet was ranked in the middle, much ahead of point-of-purchase, direct mail, outdoor media and telemarketing in terms of its value as a source of advertising, making it clear that Web has come of age. However, the results also indicate that although users of television still believe it to be the most effective medium of advertising, there is a tendency among viewers to shift towards new media like the Internet. The increased use of the Internet has led people to notice online advertisements and benefit from them. Among the new media, the ranking of the Web as the fifth most effective medium of advertising is a reflection of its growing popularity vis-à-vis other advertising media. But it will take some time before the Web takes on television in the race to becoming the most popular medium of advertising (Nagar, 2009).

The hypothesis tests showed how viewers perceive the effectiveness of television and the Web as media of advertising. Similar to the results of a study conducted by Leong et al, the study also revealed that the Web is a good medium for conveying information and detail. The Web as a medium for advertising provides the user with a plethora of information. An information hungry user can search on the links provided on the site and get more information related to the product/service. The same is not possible for television viewers. The hypothesis test also showed that TV is a better medium compared to the Web in getting the viewer's attention. Indeed, television ads lead to higher attention retention because the ads are positioned in between programme slots. Generally, most of
the TV channels take commercial breaks in between programmes at around the same time. Therefore, when a viewer switches channels during the break, s/he comes across ads on other channels as well. Thus, while watching a programme, viewers are forced to watch at least a few ads and pay some attention to them. On the Web, however, regular users are aware of the placement of various links on the webpage and they know exactly where to click to carry on with their work without having to scan the entire page. In such cases, Web ads do very little to catch the attention of these users. Web ad developers could explore the viability of using the time lag in between opening of web pages for displaying ads. These are called interstitials and are being used by some advertisers to a certain extent. This way, while the user is waiting to move from one link to the other, the time which was earlier wasted for the link to open may now be utilized in reading the ads on display. In other words, the user will be forced to pay attention to the displayed ad as s/he will have no other choice (Nagar, 2009).

New and innovative advertising is opening doors for viewers as well as advertisers. The use of sound and moving images was an advantage that TV ads had over Web ads some time back. However, this is now changing as more and more advertisers have begun sponsoring online discussion groups, promoting a brand/firm in chat rooms, blogging etc. Some enterprising marketers even operate exclusive websites for their products. Such ads use both sound and videos and thus like TV ads Web ads also help in stimulating emotions in addition to providing information about the products/services. This explains why TV and Web ads are both considered entertaining. The results of this study indicate that Web ads are less effective in changing attitudes. These results are consistent with the results of past research. Web ads are not as effective in catching the user’s attention as TV ads and therefore are also less effective in changing beliefs and attitudes towards the products and services advertised (Nagar, 2009).

One could expect the Web to be more likely to precipitate action considering that people can order online. Past research which has been carried out in the West has supported this explanation. Yet in the Indian context, the results
of the study were different—TV ads induce viewers to buy the products advertised while Web ads are less effective in getting the same response. There are several possible reasons for this effect. First, for a user to place an order online, s/he would require a credit card. Not everybody who uses the Web has this facility and those who do may be skeptical about using it online. Second, the pattern of usage of the Web and TV is very different. The study revealed that on an average, a viewer watches TV everyday, while the average Web usage is two-three times a week. Third, a viewer spends an average of 57.13 hours watching TV every week, while the average time spent surfing the Web is only 16.32 hours, which is a significant difference by any standard. This explains why TV is doing a better job than the Web in precipitating action in the Indian context (Nagar, 2009).

The results of the study indicate that TV ads are considered to be more deceptive in comparison to Web ads. Web ads are designed to include a number of related links that a user can click on to know more about the advertised product/service. Many viewers find both Web ads and ads on television to be irritating. This may be due to the fact that a user is over-exposed to ads every time s/he visits the site or watches a programme on television. Most of these ads may not be of the slightest interest to the viewer. Viewer/users do not appreciate advertisement clutter either on television or on the Web (Nagar, 2009).
REFERENCES


Bemeburg, Alma. (2007), "Interactive 3D Simulations in Measuring Consumer Preferences: Friend or Foe to Test Results?," *Journal of Interactive Advertising* 8 (1) available at http://jiad.org/


Hoy, Mariea Grubbs and George Milne (2010), "Gender Differences in Privacy-Related Measures for Young Adult Facebook Users," *Journal of Interactive Advertising*, 10 (2) available at http://jiad.org/


The Cyber Marketing Letters, January 1996.


