## SWP 11/98 CONSUMER PURCHASING ON THE INTERNET: PROCESSES AND PROSPECTS

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# Consumer Purchasing on the Internet: Processes and Prospects

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#### **ABSTRACT**

Much of the business transacted over the Internet today is in the business-to-business sphere. Outside of specialised niche areas like information technology and other information-based products, business-to-consumers commerce is relatively undeveloped. One principle that holds true in the marketspace is that before cybermarketers can effectively respond to consumer demand, they must understand consumer behaviour. Internet marketers should revisit traditional models of consumer behaviour, examine their underlying assumptions, and explore their validity in the new Internet context. A standard model of the consumer buying behaviour processes is applied to purchasing situations on the Internet, with a view to comparing traditional marketplace transactions with the emerging virtual marketspace. Understanding consumer behaviour in Internet purchasing remains the marketing management imperative.

# Consumer Purchasing on the Internet: Processes and Prospects

The growth in interest in the Internet as a shopping and purchasing medium is fascinating for practitioners and observers alike. In stimulating a techno-economic paradigm shift, the Internet is causing a re-evaluation of traditional assumptions underlying the conduct of business. Despite the hype of on-line retailers, website developers and many observers, however, there have been serious casualties in the field in the early battles to win ground in this new colonisation. The early fallout of IBM's sponsored web shopping malls, for example, are due in part to unrealistic expectations of the demand potential in the field, technology problems, and rather naïve understandings of the true nature of competition in the new world. Yet despite these initial tribulations, the Internet and World Wide Web (WWW) do open up a vast arena providing both opportunities and challenges.

Much of the growth in revenue from business transactions over the Internet has been fuelled by business-to-business exchanges. The result is that there is a considerable and growing body of knowledge, experience and expertise in the field of business-to-business electronic commerce. Yet with the exception of software, books, some travel services and a few other niche areas, that same depth of understanding has not been achieved in the individual consumer field. To exploit this new medium requires not just an understanding of consumer behaviour and the consumer decision making process, but of how new technologies challenge the traditional assumptions which underpin conventional theories and models.

Critical to understanding consumer behaviour in cyberspace, as in the physical world, is to understand how the individual consumer makes purchase choice decisions. That is, if cybermarketers know how the purchase decision is made, and identify the stages in the purchase decision, then they can analytically follow through in developing marketing strategies. The primary purpose of this paper is to outline the traditional consumer buying decision process and compare it with Internet buying behaviour.

Some of the important issues in the information economy are first noted, focusing particularly on the implications for marketing. In order to set reasonable parameters to the paper, a classic typology of consumer purchasing situations is presented. Internet purchasing in terms of this model is then assessed, and the critical issues are identified. Finally, the marketing tasks and strategic directions at each stage of the buying decision process are outlined.

### The information economy

The emergence of the information economy has been predicted for generations. While descriptions of this new era vary from the speculative, as captured in popular cyber-novels (Gibson, 1984), to the more polemic (Negroponte,1995), what is common is that this emerging era will have fundamental impacts on all aspects of social, economic, business and political life. Already the very nature of business itself has been affected. Indeed, the US federal government recognises the dynamic by now collecting economic data using a revised classification system which explicitly captures "information" jobs.

This new era is being brought about by a number of developments, including (i) rapid technological convergence, (ii) greater connectivity, (iii) enhanced interactive capacity, and (iv) increased organisational co-ordination capability/options (Butler *et al.*, 1997; Malone *et al.*, 1987; Yoffie, 1996). And it is perhaps the Internet which is making the information economy visible for the ordinary consumer.

The convergence of digital technologies is blurring the traditional distinction between entire industries. Distinct sectors are seen to fuse in a digital environment. Who, for example, can be sure where the computer industry ends and the telecommunications industry begins? Disaggregation of existing value chains and the formulation of new information-based virtual enterprises make for particular challenges in industry analysis. Such technological convergence is leading to the growth of new products and services with overlapping functionality. While offering more solutions to consumer's problems, they also serving to confuse consumers.

Connectivity refers to the ability of consumers to access and participate in Internet communications. One of the consistent lessons of technological innovation is that the agreement of standards stimulates both uptake of new technologies and investment. The classic example is the technically superior but proprietary Apple Macintosh computer losing out to the open architecture of the IBM compatible machines. More recently, the exponential growth in mobile phones is largely due to the GSM standard. A similar openness now pervades today's network technologies making it easier to connect to global networks. Marketers in the new domain must follow closely the battles for standards - the final choice at the consumer level may be constrained at first by the adoption of a single standard, but widespread uptake will enable economies of scale and consequent advantages.

Unlike older technologies, new information technologies provide for true interactivity between buyer and sellers. This interactive element is of crucial importance, since much of business activity consists of interactions (human and technical communication, data gathering, collaborative problem solving, negotiation). Indeed, a recent McKinsey report suggests that 51% of US, and 46% of German, labour costs are accounted for by interactive events (Butler *et al.*, 1997). Technology increases our capacity to interact and serves to decrease the amount of time spent on such activities, a time which not only incurs cost but may add little value.

For organisations, new technologies have also increased the range of options available in relation to co-ordination, permitting new configurations of both intra- and inter-organisational activities. The vertically integrated firm, with the traditional advantages of coordination and control, is giving way to new structures. For instance, where a massive physical asset base of buildings, equipment and transportation might have been advantageous, it may now only restrain the flexibility of the organisation as it decouples the potentially valuable elements of its value chain. The virtual organisation, a grouping of distinct entities that each contributes unique competencies to a specific business project and eventually disbands on completion, is common in some industries. For example, Italian motorbike marque *Aprile* is not made by one company or one leader company, but represents the joint efforts of many companies, each bringing their particular strengths to bear.

### Competing in the information economy

Competing on the Internet is different from competing in the traditional industrial world. Competition no longer takes place in the physical *marketplace* but in the *marketspace* (Rayport and Sviokla, 1994). This computer-mediated environment has profound

implications for how business is transacted between buyer and seller. The content of the transaction is different in that it is based on information about the product or services rather than on its physical appearance or attributes. The context of the transaction is different; instead of taking place in a physical world, it occurs in a computer-mediated environment with the buyer conducting the transaction from a computer screen. Consequently, to be a player in many industries does not require a physical infrastructure like buildings and machinery; a computer and communications platform is sufficient.

#### **Internet dynamics**

For the marketer, the Internet poses many challenges. In particular, the virtual medium provided by new technologies challenge not only traditional theories of marketing but the very practice of marketing itself. A number of significant shifts can be discerned in the development of such business:

#### From broadcast to narrowcast

Technology renders obsolete the traditional one-to-many model of mass marketing communication. One-to-one communication between seller and buyer is now easily achieved (Hoffman and Novak, 1996). Communications can also be geared to take account of such individual factors as demographic profile, lifestyle interests, shopping behaviour, purchasing history and so on. Mass customisation becomes possible with both products and communications being customised to individuals. For example, Crayon.com enables individuals to create their own newspapers from many international sources based on their individual preferences. In constructing this customised newspaper, the consumer might choose to have his world news from *The Los Angeles Times*, local news from *The Irish Times*, sport from *Le Monde* and culture from *Die Welt*.

#### From passive surfer to interactive buyer

Today's consumer is an increasingly proactive consumer. He or she is less likely to be a passive absorber of the marketer's message, and more likely to have been directly involved in its development. Communications between the parties may have enabled the potential buyer to specify their interests and request the seller to keep them informed of updates, upgrades or just relevant news. "Push" technologies encourage the consumer to outline either the general or specific nature of their interests, and invite all comers to supply the information and offer the deal.

#### From limited physical space to unlimited virtual space

In this new world, presence is not achieved by purchasing limited physical space as with newspapers, magazines or billboards. Space is unlimited to the extent that it can be easily increased, although there are limitations to what one can place on a single web page. Perhaps the unique characteristic of business on the Internet is its unconstrained physical space. Organisations and people are no longer confined by physical infrastructure like plant and office buildings. Newspapers, for example, are no longer bound by traditional publishing economies of scale.

#### From advertisement to electronic trade show

The traditional newspaper advertisement or brochure setting out the sellers' wares has both scope and scale limitations. The technology now exists to transform such a medium into an electronic trade show. When speed is an important criterion for success, the challenge is to convert quickly visitors into leads and then into customers.

#### Internet as media

The medium of the Internet is, therefore, not only provides information, albeit of a richer nature than in the marketplace, but is also a mechanism for communication, an environment for conducting the transaction, and possibly a channel for actually delivering the product or service to the consumer (Angehrn, 1997).

As a medium for information distribution and dissemination, the Internet accesses a global audience. Unlike traditional communications media, the use of voice, video, text and images provide a richer picture of the company's wares. Information can be tailored to the requirements of the consumer either by eliciting information from them or through the use of tracking technologies.

As a medium for communicating with customers or potential customers, the interactive nature of the Internet allows the marketer to establish an active dialogue with consumers. By using email, on-line forums or a more advanced interaction space, information and opinions can be exchanged in a two-way process.

As a medium for conducting transactions, orders, invoices and other business documents can be sent electronically. Payment can also be made electronically using a credit card although in the future the 'electronic purse' may enable micro payments to be made.

As a distribution medium, the Internet enables certain products and services to be easily delivered to consumers without geographical limitations. Obvious examples include software, music and other digital-based product. Less obvious ones include consulting services such as Ernst & Young's on-line consulting site. It may also be possible to increase the value of a core physical product through capitalising on information. This what Federal Express have achieved by permitting customers to enquire into the status of their package shipments using the WWW.

## Understanding consumer behaviour

Despite such fundamental change in the structure and process of buying and selling, one principle which holds true in the *marketspace* is that before marketers can effectively respond to consumer demand, they must first understand the consumer. There are general models of buying behaviour that enable an understanding of the process which consumers follow in making a purchasing decision. These models provide explanatory and predictive ability which are of critical importance to marketers.

The changing market environment is highly complex, and can be subjected to analysis from many perspectives. At the broadest level, the new economics of information addresses the uncoupling of information from the physical value chain and the effects on industry structures and processes (Evans and Wurster, 1997; Rayport and Sviokla, 1995). At the intermediate level of trading, the primary concern is interactivity (Butler *et al.*, 1997). At the level of the individual consumer, however, the new concerns are the process by which consumers make decisions in the new environment (Peterson *et al.*, 1997). It is certainly the

case that new models of web-based purchasing behaviour will only be developed and finessed through ongoing research and application. Generic models suffer the natural weakness of being too general to guide marketing activity, whereas models of specific situations are often not generalisable. Nonetheless, the purpose here is to set out the basic elements of the purchasing situation and to compare the traditional with the new.

#### Purchasing categories

The classic typology of purchasing categories is set out in figure 1. This schema portrays a continuum extending from routine problem solving behaviour through limited problem solving to extensive problem solving. Any buying situation will be placed along the continuum according to the degree of active reasoning required for a particular purchasing decision.

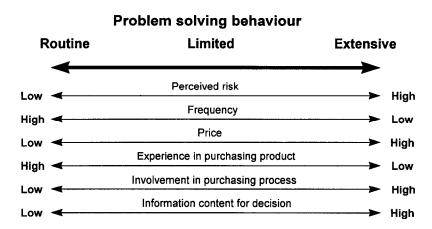


Figure 1 Consumer purchasing and characteristics of the purchasing decision.

Routine problem solving behaviour, typified by the purchase of a newspaper or chocolate bar, is a simple and straightforward task for the individual. The consumer is comfortable and experienced in the process, and it is perhaps something that the consumer does on a daily basis. There is no great sense of personal involvement in the purchase - the individual will hardly be judged on the purchase, the price is low, and the risks associated with getting the wrong product are negligible. At the other extreme, however, typified by the purchase of hi fi equipment, a car or an apartment, is the extensive problem solving situation. Here, there is a great sense of personal involvement in the decision, the purchase is infrequent and so the consumer does not have any or much experience in the process, and the perceived risks are high. Between the two extremes is the limited problem solving situation. When involvement is relatively low, when the alternatives are not perceived to be widely differentiated, and when the time frame is relatively short, then this situation prevails.

For the purpose of comparing the issues in the decision process between an individual shopping in the physical world and on the Internet, we will examine the extensive problem solving (EPS) situation in the first instance. This is appropriate early in the life of consumer-level electronic commerce, given the lack of experience of potential customers, the perceived risks in payment security, and the time taken to learn and become familiar with the purchase routines on the Web. With experience, however, many such purchases will be more realistically categorised as limited problem solving (LPS).

#### The consumer decision process

The modelling of consumer decision making enables managers to explain and predict consumer behaviour, and thereby provides a basis for marketing decisions. The traditional framework for analysts of the LPS and EPS buyer decision processes is a linear stages model of five key steps, as outlined in Figure 2. Of course, iteration exists between the stages. Indeed, given the speed at which information is now updated, it could be argued that the loops backward in the model are increasingly important (Zellwegger, 1997). Nonetheless, the general thrust is forward through the stages. The consumer progresses firstly from a state of felt deprivation (*Problem Recognition*) to the *Search for Information* on possible solutions. The information gathered, be it from internal sources (e.g. memory) or external sources (e.g. discussions, brochures, sales promotions) provides the basis for the next stage - the *Evaluation of Alternatives*. This stage requires the development and comparison of purchasing evaluation criteria.

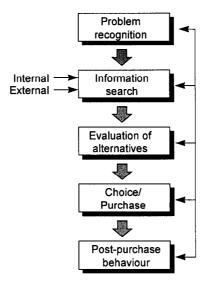


Figure 2 Consumer behaviour and the purchasing decision.

The Choice/Purchase stage concerns the action or activity of the purchase, and includes such issues as the place and means of purchase as well as the actual decision to buy. Finally, Post-Purchase behaviour, as an explicit stage in the process, is critical in the marketing perspective. The degree of satisfaction/dissatisfaction with the product/service is a major concern of marketers, and provides information for future products and services. This framework is useful in enabling the complexities of the external environment and internal information processing to be captured. Each of these stages is now examined in turn and compared in the context of the marketplace and the marketspace. Figure 3 provides an overview.

#### **Problem recognition**

The first stage of the consumer decision process triggers all subsequent activity. The consumer is compelled to fill the gap between the actual state (deprivation) and the desired state (fulfilment) when his or her threshold of problem awareness is reached. Problem recognition may be triggered by a number of external or internal factors. For example, an increase in a person's financial situation can trigger a consumption decision; running out of stock results in a depletion that requires restocking; marketing stimuli, such as a new product

announcement or sales promotion campaign, may lead the individual to perceive a particular want for the product.

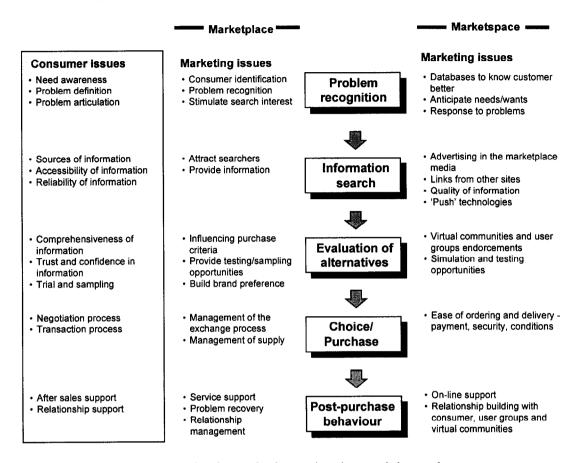


Figure 3: Consumer marketing issues in the marketplace and the marketspace.

Consider the external marketing stimuli: In traditional markets, conventional marketing communications stimulate demand via conventional media, e.g. an advertisement on television. On the internet, however, the medium is new, and so new kinds of communications are required. Traditional mass marketing approaches such as advertising reflect the one mass marketer communicating a common message to many consumers. Of course, much of the audience will not be interested, and there is considerable wastage. But new information technologies fundamentally change that. Computer-mediated environments enable identification of individual consumer needs and wants, and the subsequent design and delivery of individual, customised communications to the one individual by many suppliers. This, then, supersedes the traditional "one-to-many" practice.

In terms of consumer problem recognition, the Internet marketer can capture the consumer at this early stage in the process. That is, the marketer, by virtue of powerful databases of consumer information, is in a better position to know and anticipate the consumer's needs and wants. Furthermore, the problem thresholds that will trigger action may also be known. Indeed, the marketer may be in a position to manage the consumer's purchasing function in a way that has only been known in business-to-business markets heretofore. For instance, the benefits of EDI emphasise the effectiveness of automatic reorder prompts at specific stocks levels, product and service updates, and automatic upgrades for valued customers. These all make the decision less complex for the buyer, and more manageable and effective. Such relationships are now increasingly possible at the consumer level.

Direct marketing activity in recent years has been based on this kind of relationship potential. But the leap forward of the Internet will be largely empowered by tracking technologies. A "cookie" tracking devise will enable "click stream" analysis of individuals, such that their browsing activities, interests and purchase behaviour may be exactly known to the marketer. Then, by solicitous communications, the consumer may be contacted on the basis of his or her specific needs and wants as determined by behaviour pattern analysis. The relationship development advantages accruing to the pioneers of such analytical and communication technologies are enormous. The problem recognition stage in the purchase decision process remains essentially the same, but the potential for marketer-consumer relationships is enhanced.

The primary strategy issues for marketers at this stage in the process are the development of communications technologies that will enable the degree of customer relationships wherein the consumer's problem recognition will be anticipated, or even triggered, by the seller.

#### Information search

Whereas the problem recognition stage motivates the consumer to act, the information search stage is when the consumer takes action to gain knowledge. The sourcing of information is at the heart of this stage in the consumer buying decision process. Essentially, the consumer seeks information for decision-making, and the marketer must provide the necessary information.

The management of information is the primary role of the agent or broker in the *marketplace* This is the effective function of travel agents, for instance. But, in the *marketspace*, when an airline sets up its own website with interactive flight information and booking facilities, for example, then the traditional intermediary is bypassed in a classic case of dis-intermediation. So, the information can be sought and accessed directly by consumers because of information technology developments. Critically, the information provider or broker can no longer survive in a passive role.

The emphasis has moved from a total reliance on attracting visitors to the seller. The emergence of new *push technologies* means that communications can now be sent routinely to targeted recipients who are known to be interested parties by virtue of their earlier visits to the website, their queries and their general Internet browsing and shopping behaviour. That is, the information search stage in the framework is anticipated with greater clarity and focus; the ability of the information provider to proactively locate the interested searcher and provide the desired information is now hugely enhanced. Consumers may register for continual information updates and routinised offer information at no charge. Information is virtually free, and the costs of accessing information are negligible. Given the free flow of product information in the *marketspace* and the potential for overload, the marketer with the best-designed information package will generate the competitive advantage.

Webcasting is a way of pushing information out across the Net rather then waiting for consumers to find it. PointCast is one such Internet service which literally broadcasts news, sport, weather reports, stock prices and other information directly to a PC in a personalised, easy-to-digest newscast. There is now no need for broad-based surfing: the information finds the subscribers once they have specified the information they want to receive. In what is the equivalent of the screen saver, PointCast converts the idle computer screen into an eye catching TV-like newscast when the computer is not being used.

As individuals come to utilise the Internet for consumer purchases, a situation of perfect information is almost attainable. However, it must be noted that consumers' sense of uncertainty can actually increase as they gain more information. Information "overload" occurs when we learn more about the alternatives available to us, and the search becomes "psychologically costly" (Wilkie, 1994). When humans cannot plot or track the totality of information, they deliberately simplify their problem - they develop heuristics that must be recognised by marketers. Chief among these, for the marketer, is brand loyalty and all that goes with the development of a brand - identity, reliability, trust.

For the marketer, the strategy issues related to this stage of the process revolve around attracting information-seeking consumers and providing the information they require. In the *marketspace*, this demands a good net presence at the very least. In traditional markets, the intermediary function is largely based on information provision and exchange. As communications technologies change and as channel dis-intermediation and re-intermediation become more common, matching information content with the consumer's requirement, while continuing to be fundamental to success, will require new approaches to information provision and exchange.

#### **Evaluation of alternatives**

The third stage of the consumer buying decision process involves the analysis and evaluation of alternative solutions. So, the consumer has sought and found the relevant information, and must now use it to make the purchase decision. Traditional sources of information for the evaluative stage include past experience, marketing-sponsored communications, consumer groups and research institutions, and word-of-mouth. In Internet markets, however, information technologies allow for more, and more defined, evaluative criteria to be used. In this regard, when consumers experience information overload in the evaluation process, or when the "psychological price" of evaluation becomes too high, the advantage may be to the "safe" branded or established competitor.

The counterpoint to this, however, lies in the comparative possibilities of newly developing intelligent shopping agents. CompareNet, for instance, has a programme that for a wide range of goods and services will search the Web for the product the consumer specifies. Then, it will help the consumer to choose and arrange the relevant criteria for the evaluation of that product. Finally, it will instantly produce tabulated data that allows the buyer to compare the options. The service provides simple definitions of these criteria and indicates why they are important in the purchasing decision. This educational role is also enhanced with buying tips to empower the buyer

While this would appear to be a very democratic model, already several web sellers are blocking such shopping agents from their sites, notably in the music CD field. Despite this setback, however, we can expect this service for almost any purchase imaginable in the near future. Of course, it is clear that the competitor without an Internet presence cannot even get to the point of being considered.

It would be naive to think that the Internet provides only a simple visual evaluation. Imminent developments will enable highly sensory interactivity. Already, three-dimensional representations can "walk" a consumer through a new apartment, clothing can be "tried on and modelled", and technologies such as WAV and Real Audio transmit selections of music for the potential purchaser. Virtual reality test drive simulations are developing rapidly, and soon Aldos Huxley's "feelies" may not be the absurd scenario that was once sneered at.

In this arena of powerful information forces we should not be dismissive of simpler approaches to evaluating alternative solutions to problems. In the same way that word-of-mouth communication and the reference of family and friends is a central influence at this stage of the decision process in the traditional *marketplace*, new kinds of reference groups are central in the *marketspace*. In effect, a discussion group of interested parties in any field serves this role in the new environment. The virtual community can have all the power of the traditional reference groups but with even greater quality and quantity of evaluative information available to it and the means to share that information (Hagel, 1997). The notion of community can convey enormous credibility on the information source. Ideas and proposals are vetted by and with trusted colleagues in the community. The best-known online communities include Agriculture Online, Garden Escape and Mums Online.

In the entertainment field, for instance, Firefly.com has proven to be an exciting and successful source for information searchers. It is, by nature and design, a body of like-minded individuals whose patterns of entertainment consumption are similar and who share freely their knowledge of, and views on, a wide variety of goods and services. Even simpler versions of virtual communities are typified by Amazon.com's (the world's biggest bookseller site) open book reviews, whereby a potential buyer can read book reviews by other website visitors.

For the marketing strategist, the first issue for alternative evaluation is to understand the criteria employed by the consumer to evaluate the product, the preferences of the consumer, and the positions of competitors on these criteria. This is underlined when the comparative-type search engines described increase in popularity. Corporate identity and branding strategies are also relevant here, and the Internet will provide opportunities for exciting new brands.

#### **Purchase decision**

The purchase stage of the process involves decisions on where and how to buy. A core question concerns why people go shopping. Consumers do not shop only to buy. Personal shopping motives include diversion from daily routines, self gratification, learning about new trends and physical activity. Among the social motives are communicating with others with similar interests, peer group attraction and the pleasure involved in bargaining and haggling. So, the investigation of these kinds of motives between physical shopping and Internet shopping also requires comparison.

Where to buy is a decision regarding the choice of seller. Competition on the web is driven by sellers attempting to build more exciting and interesting sites than their competitors, attracting the right customers to those sites, and providing superior shopping experiences to induce purchase. How to buy concerns the nature of the transaction and contract. Many of the products and services currently available to individual consumers on the Internet are digital eg. software and upgrades, or easily physically transported e.g. music CDs and books. The future broadening of the base will require particular analysis of physical delivery issues. For example, Peapod.com takes and delivers grocery orders in various regions of the USA via alliances with grocery chains. The actual delivery routines for such a service are probably more complex than the ordering, packing and payment routines. Whereas the order can be met within the one organisation and under one roof, the logistics of physical delivery of relatively bulky but relatively low-value grocery orders is an entirely different proposition.

New shopping and purchase activity on the Internet are giving rise to new alliances between Internet sellers and distribution organisations. This may be interpreted as a boon to

traditional distributors. Consider the case of courier and delivery firms: whereas the likes of United Parcel Service and Federal Express until very recently would have been highly dependant on the delivery of document parcels, fax and email now enable direct transmission between the parties without any need for an intermediary. Such distribution organisations need to find new markets and opportunities. With the rise of Internet shopping, we are likely to see a shift away from physical retailing as we know it, and a corresponding shift to home deliveries of a wide range of goods. This, then, would appear to be an opportunity for the worried couriers and distributors. As an example, another US Internet grocer - NetGrocer.com - has an offer whereby FedEx will deliver their customers' grocery parcels worth more than \$75 for no charge at all.

Internet marketers must make the shopping experience easy and enjoyable for their customers. Ease of ordering, payment and delivery are critical in this purchase stage. Straightforward routines with minimum complexity and maximum compatibility with marketplace patterns of behaviour will aid in the diffusion of Internet purchasing at the consumer level. Clear explanations of how to order, how to pay, what to expect on delivery all enhanced by innovative text and graphical features - are the key. For most Internet shopping sites at present, the customer places his or her chosen goods in a virtual "shopping cart". Indeed, the virtual cart is accompanied by a list of contents on the screen, and often with a cumulative running total of the value of the goods. It is the possible to make a final decision on which items to retain and which to discard just before arriving at the virtual checkout. Objectively, this is a more customer-friendly scenario than the "real world"!

The question of security concerns all inexperienced Internet shoppers. Considerable progress has been made in encryption, to the point where many sellers will even guarantee to make good fraudulent losses arising from Internet transactions. The Secure Electronic Transaction (SET) protocol is set to popularise on line credit card purchases. This protocol is essentially a set of written standards that describe how credit-card associations, banks, merchants and consumers should implement credit-card transactions across the Web. SET will eventually require online credit-card users to possess a new form of identification called a "digital certificate," an electronic identify vouched for by a trusted third party such as a bank. At present, many Internet sellers take credit card details only at the initial registration, and dedicated customer identification passwords negate the need for further communication of confidential information.

In terms of the marketing implications of consumer behaviour at the choice/purchase stage of the decision framework, ordering, payment and delivery are the key strategic issues. Marketers must make the buyer feel comfortable with the decisions on where to buy and how to buy. Clarity in understanding, compatibility with behaviour patterns, and a sense of security must be managed to this end.

#### Post purchase behaviour

The final stage in the framework is post-purchase behaviour. It is explicitly included as a component of the model, rather than as something that is outside the process, because of its contribution to understanding the totality of consumer behaviour. Given the emphasis in marketing on the development of ongoing relationships with customers, the actual sale should be perceived as a starting point rather than an end. So, how the customer takes delivery of the product, how the product is used, the degree of satisfaction, quality of the service dimensions, customer complaints and suggestions are all critical to understanding consumer behaviour. This, of course, applies both in the *marketplace* and in the *marketspace*.

One important difference between relationship development in the two types of market is that while traditional relations can emphasise "high touch", virtual markets can emphasise "high tech". The former relies more on human interaction and personal interest for the development and maintenance of good customer relations between buyer and seller. The latter is more reliant on the power of information and communications technologies to anticipate and satisfy customers' needs, and thereby to forge and continue business relationships. So, for example, a tailor making bespoke suits of clothing develops life-long personal relationships with his clientele. The Levi Strauss clothing company employs technology to customise a simple pair of denim jeans through IT connections between the boutique and the factory. Of course, each is offering a customised service; each is providing its distinct customers with their preferred requirement, but in very different ways. The Internet affords opportunities for post-purchase relationship development via mass customisation.

Whilst consumer groups are influential in many areas of business, the on-line user groups involved in Internet markets warrant particular attention because of their power of communication. The critical role of virtual communities in evaluating organisations and products before the purchase is mirrored by the actions of user groups in the post-purchase situation. Common in high-tech and industrial markets, where engineers and scientists trade data and information about goods and services, it is increasingly likely that consumer products organisations will find themselves responding directly to the feedback from its user groups. The ability to draw customers into a conversation in real time confers tremendous powers on the seller, and requires a proactive approach to after sales relationships.

One of the big mistakes made by early sellers on the Internet was their misjudgement regarding the necessity to continually update their site. Post purchase activity involves consumers returning to the sellers site with queries, for new information, and to repurchase. Such buyers demand to be treated to new information at every visit. The web is littered with the "ghost sites" of sellers who did not reckon on the long-term investment in updating their web presence. Such sites are extremely annoying to "netizens", and with their natural concern for time effectiveness in all aspects of their lives, they are unforgiving of such transgressions.

The regular usage of goods and services will determine whether or not customers develop a sense of loyalty to a good or supplier. Satisfaction-in-use is a key to repeat purchase. Further, innovate ideas are often driven by customers, underlining the need for continuous monitoring of post purchase activity. Again, the possibilities open to buyers and sellers to engage in real time communication via the Internet enables such close relations that total satisfaction for customers and a stream of useful and insightful feedback for marketers can ensue.

In strategic terms, marketers must recognise the critical post purchase dimension of consumer behaviour if they are to take advantage of the potential for relationship development and customer loyalty and retention. In the *marketspace*, this requires the adoption of technologies that enable to seller to stay with the buyer after the fact of the sale. Communications access to and from the customer, and commitment to fostering good relations with the increasingly powerful consumer/user groups are important strategic considerations.

## Implications for marketers

The marketspace is not an electronic replication of the marketplace. The characteristics of the marketspace demand that marketers revisit and revise their assumptions and models of the physical marketplace when operating in this environment. Whether in the cyber-world or the physical-world, the heart of marketing management is understanding consumers and their

behaviour patterns. We have seen that the five stages model of consumer decision making captures the essence of behaviour in any context, but the management of the marketing issues at each stage in the *marketspace* require particular attention and approaches.

One management assumption is that communicating with consumers is predominantly unidirectional, and that the recipient is largely passive. In the *marketspace*, however, marketing communication can be bi-directional. That is, the technology exists for consumers to engage in an interactive dialogue with marketing organisations in a more rapid and cost-effective manner that ever before. Such communication enables the development of close relationships, to the point where the marketer can actively anticipate customer needs and wants. That power provides the means to deliver satisfaction to the customer even by preempting consumer problems.

It has traditionally been assumed in the provision of information that "more is better". That is, increasing the amount of information provided would increase the chances of purchase. However, on the Internet, because information is virtually free and complete, the potential for overload is such that the more information supplied, the more confused the customer may become. So, the management of information is no longer about quantity, but about the quality. That involves accessibility, interactivity, functionality and timeliness.

The physical marketplace imposes limitations on information. Economic and access barriers constrain what can efficiently be known, and consequently what can realistically be evaluated. On the Internet, however, intelligent shopping agents can scan the entire Web to find the data necessary for comparison. The relevant criteria can be presented and explained and ordered to suit the shopper. Consumers can now review self-designed tables of data and information and source the most appropriate suppliers.

The traditional trade-off between the richness and the reach of information no longer holds (Evans and Wurster, 1997). In the marketspace, the new economics of information denotes that it is now possible to provide a vast amount of customised and interactive information to a mass audience. Previously, the communication of rich information has required proximity and dedicated channels and these have been limited by cost of physical constraints.

Physical limitations were conventionally a prime determinant of purchase choice. The underlying assumption about purchase was that increases in distance were accompanied by corresponding increases in the cost of purchase. Geography was the barrier. On the Web, it can be argued that every business is a global business (Quelch and Klein 1996). Naturally, physical delivery is a key issue in many industries, but digitisation overcomes many of the traditional problems. The assumptions about purchase and delivery are now very different: new channels and modes of physical delivery will develop to suit the developing buying processes. It is already clear that home deliveries of almost every consumer product and service are increasingly available.

Whereas it had traditionally been assumed that marketing relationships were individual, one-to-one and personal, it is now increasingly the case that virtual communities and user groups are a primary source of strategic marketing relationships. Notwithstanding calls for the recognition of broader publics in relationship development, the organisational level of the firm and the organisational level of the community or user group are now critically important units of analysis in relationship management.

While business-to-business marketing is relatively well-developed on the Internet, the same cannot yet be said of consumer-level commerce. As Peterson *et al.* (1997) have noted, we are at an early stage in Internet development for building an appropriate dedicated model of

consumer buying behaviour. Decision sequences will be influenced by the starting point of the consumer, the relevant market structures, and the characteristics of the product in question. In this paper, we have considered the conventional framework for understanding consumer buying behaviour in extensive and limited problem solving situations, and applied it to the *marketspace*. The analysis confirms the centrality of understanding consumer motivations and behaviour patterns to effective marketing decisions. The peculiarities of marketing in a computer-mediated environment do not diminish that management imperative. Nonetheless, several key issues of concern to marketers have been drawn out and discussed. The diagnostic framework in figure 4 encapsulates those main points.

Purchasing behaviour	Diagnostic questions
Problem recognition	<ul> <li>Do you collect customer information from site visits?</li> <li>Do you use information to anticipate customer needs and wants?</li> </ul>
Information search	<ul> <li>Do you ensure that your site is designed to attract new visitors and to encourage visitors to return?</li> <li>Do you ensure that the information your site provides is appropriate for visitors needs? How do you decide what to present? And how to present? How frequently is your site updated?</li> <li>Do you use "push" technologies to inform and update customers?</li> </ul>
Evaluation of alternatives	<ul> <li>Do you proactively influence and co-operate with virtual communities and user groups?</li> <li>Do you provide interactive support for evaluation?</li> </ul>
Choice/Purchase	<ul> <li>Do you ensure that your exchange process is simple and risk free?</li> <li>Do you provide a customer oriented delivery process?</li> </ul>
Post-purchase	<ul> <li>Do you provide online support?</li> <li>Do you actively develop relationships with customers and prospects?</li> </ul>

Figure 4: Management diagnostic for Internet Marketing.

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