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Exploring the Implications of the Internet for Consumer Marketing

Consumer markets are heterogeneous and complex, and the Internet is but one possible distribution, transaction, and communication channel in a world dominated by conventional retailing channels. How will the Internet continue to impact marketing to consumers? The analysis of channel intermediary functions on the Internet suggests classification schemes that clarify the potential impact of the Internet across different products and services, positioning the Internet against conventional retailing channels, and identifying similarities and differences that exist between them.

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Despite the growth of Internet marketing, most of what is currently "known" about the potential impact of the Internet on consumer marketing is based on anecdotes, experiential evidence, and ad hoc descriptive studies[1,2]. With few exceptions[3,4], little systematic attention or serious thought has been given to the major long-term implications of the Internet for consumer marketing.

Examining the Internet in the context of consumer marketing and consumer behavior thus seems appropriate at this time, particularly addressing a deceptively straightforward question: What are some of the major implications of the Internet for consumer marketing?

A Market Discontinuity

From virtually any perspective the Internet can be considered a market discontinuity in the Mahajan and Wind[5] sense because it represents a "shift in any of the market forces or their interrelationships that cannot be predicted by a continuation of historical trends and that, if it occurs, can dramatically affect the performance of a firm or an industry" (p. 187). Consequently, analogous to any market discontinuity, it is not possible to predict precisely the specific impacts of the Internet, especially given the velocity with which Internet-related changes are occurring and the increasingly assertive and unpredictable behavior of consumers[6,7].

We will therefore attempt only to provide a rudimentary foundation or framework for future analyses and predictions. Two additional Internet-related issues currently attracting attention will be examined: market disintermediation and price competition. A major tenet of this paper is that marketing implications of the Internet cannot be considered in isolation or limited to online commerce. All Internet-related marketing activities take place in conventional marketing channels and must be considered accordingly.

Throughout this paper the term "Internet" will be used in a generic or conceptual sense to refer to a type of global information infrastructure consisting of computer hardware and software that is characterized as both general and open. The Internet is "general" in that it was not designed for a specific set of services. Indeed, many of the currently available services, such as direct, real-time interaction, had not even been conceived when the Internet was designed. The Internet is "open" in that all specifications required to utilize it are publicly available; anyone who observes certain protocols can access and traverse it. As such, the Internet is the antithesis of the centrally organized and managed electronic sales channels and electronic markets previously discussed.

The Internet is an extremely efficient medium for accessing, organizing, and communicating information. As such, it subsumes communications technologies ranging from the written and spoken word to visual images. Levy[8] believed the Internet would ultimately become "the medium by which we keep in constant contact with our families, watch television, dash off a note to a friend, check the traffic, read the newspaper, prepare a report for work, make a phone call, buy a book."

The speed with which Internet initiatives and related technologies are unfolding and evolving requires four broad assumptions to facilitate the present analysis.

Facilitating Assumptions

The first assumption is that eventually there will be near-universal access to the Internet, at least in the United States; a large and broad cross-section of consumers will be able to access it for both business and pleasure. Due to governmental concern that without broad access to the Internet, society will be bifurcated into those who are informationally impoverished and those who are not.

The second assumption is that use of the Internet for marketing purposes will not increase overall consumer spending. This assumption is not unique to this article (see Shi and Salesky[9]); use of the Internet in marketing to consumers will more likely result in a redistribution of revenues among channels or among members within a channel (see Hagel and Eisenmann[10]).

The third assumption relates to infrastructure technologies. As Economides[11] noted, the Internet of substitutes made of complements: transmission devices and access devices. The basic impact of the Internet on consumer marketing is likely to be unaffected, regardless of what combination of transmission modes and access devices ultimately prevails.

An additional infrastructure technology issue relates to a presumed collapse or demise of the Internet due to congestion; however, it is assumed that the problem will be overcome through market forces and technical advances. For example, usage-based or priority pricing has been suggested as a mechanism for managing Internet activity (see MacKie-Mason and Varian[12]). Likewise, technical advances on the order of ADSL (asymmetrical digital subscriber line) are likely to appear. Both of the infrastructure technology issues (as well related technology issues) will be resolved and hence will not significantly influence the impact of the Internet on consumer marketing.

The fourth assumption relates to the issue of transaction security and privacy on the Internet. While ransaction security (and authorization) is currently a high-profile issue, it poses few long-term problems. E-cash, digital tokens, encryption/decryption technologies and new forms of personal identification offer possible solutions.

A more important issue involves network privacy and what information consumers will be willing to share with others. When a consumer's transactions and travel information are linked to other information residing in a myriad of massive databases, no secret is safe. Consumers may be willing to provide information about themselves, but at a cost to the requesting entity. Hagel and Rayport[13] predicted that companies will emerge to represent consumers and manage their information (i.e., negotiate on their behalf and obtain remuneration for the use of information). Ultimately, as Leibrock[14] noted, the issue of security and privacy on the Internet is a societal one and, as such, must be resolved at that level. (See also Bloom, Milne, and Adler[15] for related perspectives.)

Currently the Internet is like a frontier; there are few rules, and enforcement of the rules that do exist is frequently through vigilante-style justice (see Spar and Bussgang[16]). We can assume that technical, security and privacy issues will be resolved, perhaps with government intervention, and can be ignored here as we focus only on general economics and behavioral factors.

> *There is no intuitive reason why the Internet, or any service based thereon, will, in and of itself, cause consumers to spend more. Rather, use of the Internet in marketing to consumers will more likely result in a redistribution of revenues among channels or among members within a channel.*

Present Paradigms

As Miller[17] astutely observed, "People tend to see the future of the Internet largely through the same color glasses they wear today"; most firms currently seeking an Internet "presence" tend to be preoccupied with the Internet's communication and advertising potentials; e.g., in "chat rooms" whose popularity could be easily predicted from the experience of France's Minitel service and even from the earliest precursor of the Internet, the Greek agora[18]. The need to socialize seems to be a powerful, culture-free motivator for a variety of behaviors; Lanham[19] argued that the Internet (electronic communication) will bring back an ancient emphasis on interaction, individuality, and open debate.

Advertising

The most common advertising uses of the Internet are home pages and interactive brochures. The media are rife with reports of the types of advertising most likely to be effective on the Internet, how to measure advertising effectiveness, and how to integrate Internet advertising with an overall

communications strategy[20,21]. Rust and Varki[22] went so far as to speculate that the Internet will functionally replace traditional mass media. Bank[23] stated that the Internet is being transformed into a broadcast medium analogous to television, with the exception that programming and advertising will be personalized for each user through "push" technology.

Marketing Research

A second interesting aspect of the Internet is its potential for marketing research. Scholars such as Burke[24] and Urban[25] have demonstrated the feasibility of using the Internet in various research situations. Numerous firms are attempting to take advantage of the capabilities it offers for communication and interaction by, for example, offering Internet-based focus groups and surveys. (See, however, Hanson and Putler[26] for a cautionary note on one online measure frequently used in Internet-related marketing research.)

Revenue Generation

Other firms have attempted to generare revenue through the Internet; Peterson[27] opined that there are several approaches. Many of them – marketing products or services, charging fees for accessible content, online transactions, etc. – are directed toward consumers.

Marketing Existing Products

Marketing products and services to consumers will likely produce most Internet-generated revenues (see Shi and Salesky[28]). As the Internet is constrained neither by location or time, firms can in theory use it to generate revenues by selling to existing and new customers. A firm marketing its products or services through the Internet is, by definition, a global firm, since consumers worldwide can access it without reference to time zones (see Quelch and Klein[29]). Because of such characteristics, the Internet appears to be especially suitable for reaching thin markets – niche markets in which buyers and sellers are small and geographically dispersed, and the products or services are specialized or unique (e.g., rare collectibles).

To date, however, revenues from marketing existing products and services to consumers are rather minuscule compared to total retail sales obtained through other channels. Firms that are successful in marketing through the Internet, such as Dell Computer Corporation, typically possess unique characteristics that are not easily generalized.

As a revenue generator, the Internet currently lags behind such common appliances as the facsimile machine (i.e., broadcast fax) and the telephone (i.e., inbound and outbound telemarketing). Cost reduction rather than revenue generation is its main value (Phillips, Donoho, Keep, Mayberry, McCann, Shapiro, and Smith[30]). Its revenue-generating potential, however, will likely change as Internet access grows and firms gain more knowledge of its strategic, tactical, and operational implications for consumer marketing.

A Foundation for Analysis

To reiterate: What are some of the major implications of the Internet for consumer marketing? Unfortunately, the answers to this question are not so straightforward. While most people agree that the Internet will influence consumer marketing, the rigid framework used to analyze such markets contributes to a lack of consensus on how. Extant literature on the structure and performance of conventional retail markets is both voluminous and sophisticated. Retailing activity has been studied from a variety of perspectives, including spatial modeling[31], franchising[32], vertical integration strategy[33], entry deterrence[34], pricing strategies[35], and market coverage[36], and it may be possible to extend some of these perspectives to encompass the Internet. Insights from conventional retail markets can be applied to marketing analyses of the Internet; however, any analysis or theory that does not recognize both the substitutability and complementarity of the Internet and conventional retailing methods will likely yield an incomplete view of the Internet's competitive effects as well as overlook synergies derived from close coordination of it and conventional retailing.

As a starting point for a comprehensive analysis of the impact of the Internet on consumer marketing, it is first necessary to specify the characteristics of the Internet as a marketing channel and examine two broad categories of factors – channel intermediaries and product and service characteristics.

Internet Characteristics

As a marketing channel, the Internet has both unique characteristics and characteristics that are shared with other marketing channels. These characteristics include:

- The ability to inexpensively store vast amounts of information at different virtual locations.
- The availability of powerful and inexpensive means of searching, organizing, and disseminating such information
- Interactivity and the ability to provide information on demand
- The ability to provide perceptual experiences that are far superior to a printed catalog, although not as rich as personal inspection
- The capability to serve as a transaction medium
- The ability to serve as a physical distribution medium for certain goods (e.g., software)
- Relatively low entry and establishment costs for sellers
- No existing marketing channel possesses all of these characteristics. Even so, the present analysis may be relevant for future channels (as yet unknown) that may possess these characteristics.

Channel Intermediary Functions

Marketing activity occurs through three types of channels: distribution channels, transaction channels, and communication channels. The function of distribution channels is to facilitate the physical exchange of products and services. Transaction channels are those that generate sales activities between buyers and sellers. Finally, communication channels enable the exchange of information between buyers and sellers. Although conceptually distinct, in the context of consumer marketing these channels frequently

overlap, and channel members may be responsible for multiple functions.

Distribution

The distribution function typically involves more than facilitating physical exchanges. Frequently it incorporates functions such as sorting, inventory holding, allocation, breaking bulk, and building up assortments (see Alderson[37]). The existence of intermediaries in the distribution channel is supported primarily by the rationale of efficiency (see Stern, El-Ansary, and Coughlan[38]). For example, assortment building of frequently purchased goods by supermarkets increases distribution efficiencies because the supermarkets carry out functions that are expensive or difficult to perform by producers and consumers.

Transaction Channels

The function of transaction channels is to facilitate economic exchanges between buyers and sellers. Although transaction channel intermediaries exist because of the efficiencies they provide, they differ from distribution channel intermediaries in that they assume some strategic control over marketing variables such as price and merchandising. Examples of transaction intermediaries include brokers, wholesalers, and retailers, some of which may never physically handle or take title to any product or service.

Communication Channels

The primary function of communication channels is to inform buyers and prospective buyers about the availability and features of a seller's product or service offering; at times they also allow buyers to communicate with sellers. Communication channel intermediaries provide information to prospective buyers; they include advertising agencies and media.

The Internet's potential for efficiency improvements in channel functions will obviously vary across the three types of intermediaries. In particular, the specific impact of the Internet on the three types of channel intermediaries can be assessed by posing two questions. These questions implicitly assume that a firm wanting to replace a channel intermediary with its own Internet operation has the capability to do so efficiently. If so:

- Is an Internet operation a credible substitute for the function(s) of a traditional channel intermediary?
- Can the Internet operation significantly dominate the current performance of a traditional channel intermediary?

Figure 1.0 summarizes answers to these two questions for each of the three types of channel intermediaries.

Effects of the Internet on Channel Intermediaries

Of the three types of channel intermediaries, the logistic functions of distribution intermediaries are probably the least dependent on the informational exchange between buyers and sellers. The added value created by a delivery service or a retailer providing a physical assortment to ultimate users seems quite robust in the presence of what might appear to be a near-perfect medium for producers. There is, however, a major exception – information goods that can be distributed very efficiently through the Internet. Indeed, for goods consisting of digital assets (see Rayport and Sviokla[39]), such as computer software, music, or reports, the Internet may be the ideal distribution channel because the variable cost of distributing them is nearly zero.

Transaction channel intermediaries will probably be more affected by the existence of the Internet because it will be possible for sellers (producers or manufacturers in particular) to efficiently interact with individual buyers and potential buyers. Sellers can internalize the transaction functions previously handled by local transaction channel intermediaries in geographically dispersed markets without regard for distance or time. Internalization of the transaction function will, however, be mediated by the characteristics of the products and services marketed (see the following section).

Communication channel intermediaries will probably be the most affected by the existence of the Internet. By definition, the Internet has been designed to deliver information efficiently and foster connectivity. It is more flexible than existing mass media channels, potentially superior in targeting individual buyers and prospective buyers, and it enables direct interaction. Moreover, the Internet can offer communication options that have virtually no variable costs.

Product and Service Characteristics

Internet consumer marketing depends on the characteristics of the products and services being marketed. Thus we must consider product and service characteristics when evaluating its impact. For example, it is possible to classify products and services as being either search or experience goods. Features of a search good can be evaluated from externally provided information, whereas experience goods need to be personally inspected or tried. If a good is a search good and its features can be objectively assessed using readily available information, the Internet could serve significant transaction and communication functions and hence affect transaction channel and communication channel intermediaries involved with the good. If it is an experience good, information about the good's features may not be sufficient for a consumer to engage in an Internet-based transaction.

A consumer might use a traditional transaction channel to experience the good and then revert to an Internet-based transaction channel when acquiring it. Additionally, as a communication channel the Internet will be increasingly able to offer perceptual experiences that far transcend verbal descriptions of goods. Pictures of flower bouquets or fruits can be presented in great detail, and music from a CD can be sampled online. Finally, for routinely purchased experience goods in categories in which a consumer has considerable personal experience, the Internet may serve as an effective communication and transaction medium.

Although the search good-experience good dichotomy is useful, perhaps a better classification system is one in which products and services are categorized along three dimensions that are more relevant in

the context of the Internet: cost and frequency of purchase, value proposition, and degree of differentiation. Goods vary along the first dimension from low-cost, frequently purchased goods (e.g., consumable products such as milk) to high-cost, infrequently purchased goods (e.g., durable products such as stereo systems). Even though this dimension is not strictly bipolar, it is still useful in that it illustrates differences in transaction and distribution costs depending on whether, and how, the Internet is used. In general, when purchase fulfillment requires physical delivery, the more frequent the purchase and the smaller the cost (e.g., milk), the less likely is there to be a good "fit" between a product or service and Internet-based marketing.

Goods vary along the second dimension according to their value proposition, whether they are tangible and physical, or intangible and service related. As previously discussed, Internet-related marketing is particularly well suited to certain types of intangible or service-related goods (i.e., those based on digital assets). To the extent that the value proposition is intangible, the greater the frequency of purchase or use of a good, the greater the advantage of the Internet as a transaction and distribution medium.

The third dimension reflects the degree to which a product or service is differentiable. In particular, it reflects the extent to which a seller can create a sustainable competitive advantage through product and service differentiation. Internet-related marketing can result in extreme price competition when products or services are incapable of significant differentiation. This can happen when they are perceived as commodities, partially because other factors that might moderate competition (e.g., store location) are absent, and partially because of the relative efficiency of price searching engendered by the Internet. However, when products or services are capable of significant differentiation, the Internet can be a mechanism to guide buyers. For example, consider a prospective buyer in the market for computer virus-protection software. This product can be classified as relatively expensive, infrequently purchased, with an intangible value proposition and arelatively high differentiability. Searching on the Internet enables the prospective buyer to obtain information on various competing products, possibly sample the products for free, and select the one that best meets his or her requirements. Consequently, sellers have an opportunity to charge a higher price, taking advantage of the good fit between buyer requirements and product characteristics. In a conventional retail setting, such detailed search and personal sampling is costly. Willingness to pay is tempered in this setting by uncertainty regarding how well the product meshes with the buyer's requirements. In such instances, Internet-related marketing may result in higher margins than conventional retailing.

For a summary, see Figure 2.0. When considered in conjunction with the conceptualized channel intermediary functions, the classification scheme suggests several implications for marketing through the Internet.

While a useful starting point, such schemes do not predict or explain either the structure or performance of consumer markets. To understand their implications for evaluating the impact of the Internet more fully, it is necessary to address its role in consumers' information and brand acquisition strategies.

Channel Intermediary Functions and the Internet

Channel Type	Intermediary Function	Are Internet Operations a Substitute?	Does the Internet Dominate?
Distribution	Logistic operations Assorting Accumulating Sorting	No, unless the good is based on digital assets	No, unless the good is based on digital assets
Transaction	Sales, including control over the sales environment	Likely	Depends on the characteristics of the good
Communication	Creating information (e.g., role of ad agencies) Distributing information to buyers (e.g., role of broadcast media)	Possible Very Likely	Possible Very Likely

FIGURE 1.0 **Channel Intermediary Functions of the Internet**

Consumer Decision Sequences

A rich melange of theoretical and strategic considerations emerges when the Internet and conventional retailing channels are treated as parallel, coexisting systems that are both complementary and competing. The structure of a consumer market as well as its performance is mediated by (1) consumers' choice of communication, transaction, and distribution channel(s); (2) the product or service offering(s) being marketed; and (3) the specific sequence of decisions followed by consumers in carrying out their purchasing functions.

Consumers can choose (1) whether to focus on a product or a service category or a brand at any stage of the information acquisition process; (2) whether to use the Internet or conventional retail channels for information acquisition; and (3) whether to use the Internet or a conventional retail

Product and Service Classification Grid

Dimension 1	Dimension 2	Dimension 3	Dimension 4
Low outlay, frequently purchased goods	Value proposition tangible or physical	Differentiation potential high	Wine, soft drinks, cigarettes
		Differentiation potential low	Milk, eggs
	Value proposition intangible or informational	Differentiation potential high	Online newspapers and magazines
		Differentiation potential low	Stock market quotes
High outlay, frequently purchased goods	Value proposition tangible or physical	Differentiation potential high	Stereo systems, automobiles
		Differentiation potential low	Precious metal ingot of known weight and purity
	Value proposition intangible or informational	Differentiation potential high	Software packages
		Differentiation potential low	Automobile financing, insurance

FIGURE 2.0 **Product and Service Classification Grid**

channel for the final transaction and brand acquisition. Manufacturer competition shifts to the retail level once a consumer has focused on a brand (see Figure 3.0). For simplicity, only two channels, Internet and conventional fixed-location retailing, and two activities, information search and brand acquisition, will be considered. The specific decision sequences used by consumers clearly influence the nature and intensity of competition among sellers – both horizontally and vertically. Thus it is important to incorporate consumers' alternative decision sequences into any analysis of consumer market structure and performance.

Consider the case of a consumer who begins the process with a pre-selected brand (Figure 3A). This may come about because the consumer has become aware of the brand through advertising, a personal recommendation, or prior experience. With the manufacturer predetermined, competition for this consumer is limited to retailers. Since the brand choice is clearly defined, the consumer will probably focus on price information and brand availability when conducting a search. The transaction could take place in either channel. As long as the brand's manufacturer is not vertically integrated into retailing, substantial brand equity is probably required for strong performance in the context of the Internet as a transaction channel. (Empirical research by Jarvenpaa and Todd[40] suggested that, contrary to "common wisdom," all sellers are not equal on the Internet.) By indicating a brand choice beforehand, the consumer forces retailers to compete on price by comparing their offerings across channels, thus promulgating intense price competition; initial brand choice protects manufacturers from this competition.

What happens when the consumer shops for a brand? In Figure 3B, brand choice is made after a consumer searches a single channel, whether Internet or conventional. For such a consumer, competition among manufacturers is limited to a single channel. If this consumer decides to shop for a low price, however, retailers will be forced to compete across channels. For example, a consumer in the market for a television set may decide on a particular brand after collecting information through the Internet, but may then seek to consummate a transaction through either the Internet or a conventional retail channel.

Figure 3C presents the scenario of a consumer delaying a brand choice until completing a search of both the Internet and conventional retail channels. In this instance, the consumer possesses all relevant information on product attributes, including price, before making a purchase decision. For this consumer, manufacturers and retailers compete across both channels. Hence competition is very broadly based.

Note that the existence of large numbers of consumers who are channel loyal, that is, who confine their information search and product acquisition activities to one channel, will moderate competition between the Internet and conventional retail channels. Channel loyalty can therefore effectively serve as a segmentation mechanism. At the same time, the existence of large segments of consumers who move from one channel to another during the decision process intensifies cross-channel competition.

Figure 4.0 links the product and service characteristics presented in Figure 2.0 to the decision sequences in Figure 3.0. Consider some of the implications of Figure 4.0. When products are low cost and frequently purchased, the conventional retail channel tends to dominate the Internet channel with respect to transaction and distribution functions, primarily because these functions do not offer economies of scale to the Internet marketer (unless there is a substantial delivery charge and/or several products are purchased and delivered together). As previously mentioned, however, if the value proposition is intangible or informational, the advantage shifts to the Internet marketer. Whether the potential for differentiation is high (e.g., online newspapers) or low (e.g., stock market quotes), an intangible or informational value proposition favors the Internet mar-

keter (due to the use of digital assets).

When products are expensive and infrequently purchased, the distribution constraint is reduced, since delivery cost is a smaller proportion of the cost of the product. An Internet marketer therefore might be more likely to carry such a product. This likelihood, however, is counterbalanced by the probable need to personally inspect the product prior to purchase, and hence the traditional retailer is favored. Again, however, when the value proposition is intangible or informational, the Internet marketer is favored. Services such as automobile loans are easily arranged through the Internet, and software can be sampled, purchased, and distributed electronically. In general, it is expected that consumers will use traditional retail channels and the Internet jointly for high-value, infrequent transactions.

Collectively, the channel intermediary function conceptualization, product and service classification scheme, and consumer decision framework provide a foundation for analyzing the impact of the Internet on consumer marketing, especially where conventional retail channels are still a powerful presence. The channel intermediary function conceptualization focuses attention on where and how the Internet will likely substitute for and/or complement conventional channel intermediaries. The product and service classification scheme indicates that the impact of the Internet is sensitive to the nature of the products and services being marketed. The consumer decision framework emphasizes that consumers may use the Internet and traditional retail channels differentially to seek information, make brand choices, and take delivery of a product or service. All three influence the nature and degree of competition in a consumer market and, when applied in concert, enable meaningful, precise predictions of the impact of the Internet in specific marketing situations. keter (due to the use of digital assets).

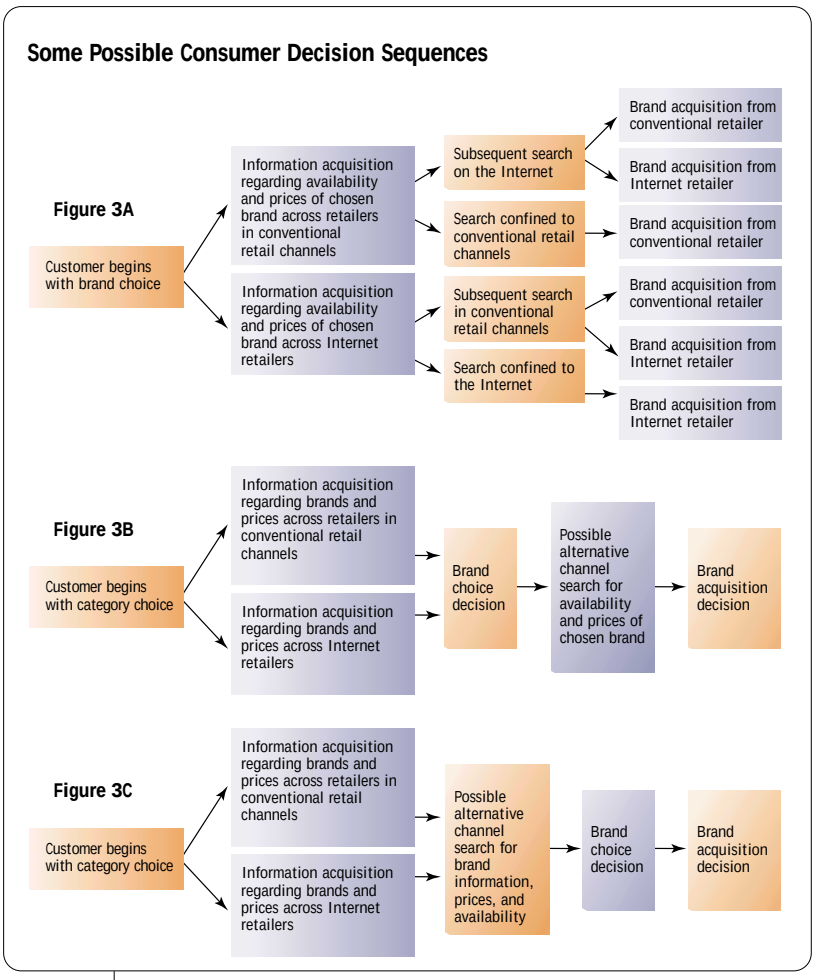

FIGURE 3.0 **Some Possible Consumer Decision Sequences**

Equilibrium Market Structures

Early visions of electronic marketing predicted the decline in importance or demise of traditional channel intermediaries as consumers directly access manufacturers. The availability of flexible, low-cost information exchanges between consumers and manufacturers on the Internet and the subsequent loss of location and time as bases of sustainable strategic advantage supports them still.

These predictions, though effective, are probably too general. For example, the predictions do not recognize that a market consists of a profusion of product and service categories with widely varying characteristics coupled with a mixture of consumers, retailers, wholesalers, manufacturers, and assorted other intermediaries who are bound together through a multitude of formal contractual and distributional agreements and informal arrangements. Nor do they appear to appreciate that "equilibrium" is a very sophisticated construct that imposes strong conditions on the stability of the strategies of all market participants.

It may well be that the Internet will lead to structural changes in some consumer markets. Under certain conditions

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Product and Service Characteristics and Likely Consumer Decision Sequence

Dimension 1	Dimension 2	Dimension 3	Likely decision sequence
Low outlay, frequently purchased goods	Value proposition tangible or physical	Differentiation potential high	(Example: Wine, soft drinks, cigarettes) Brand choice likely after retail search. Subsequent price search on the Internet is unlikely. Final acquisition likely in retail store
		Differentiation potential low	(Example: Milk, eggs) Brand choice likely after retail search. Subsequent price search on the Internet is unlikely. Final acquisition likely in retail store
	Value proposition intangible or informational	Differentiation potential high	(Example: Online newspapers and magazines) Brand choice likely after Internet search. Subsequent price search in retail channels is unlikely. Final acquisition likely on the Internet.
		Differentiation potential low	(Example: Stock market quotes) Brand choice likely after Internet search. Subsequent price search in retail channels is unlikely. Final acquisition likely on the Internet.
High outlay, frequently purchased goods	Value proposition tangible or physical	Differentiation potential high	(Example: Stereo systems, automobiles) Brand choice likely after search of both channels. Price search likely in both channels. Final acquisition may occur in either channel. (Comment: The need for personal product inspection may strongly influence the decision process in this case.)
		Differentiation potential low	(Example: Precious metal ingot of known weight and purity) Brand choice likely after search of both channels. Price search likely in both channels. Final acquisition may occur in either channel.
	Value proposition intangible or informational	Differentiation potential high	(Example: Software packages) Brand choice likely after search of both channels. Price search likely in both channels. Final acquisition may occur in either channel. (Comment: If prices are comparable, the Internet may be convenient for the final delivery of such products in the near future.)
		Differentiation potential low	(Example: Wine, soft drinks, cigarettes) Brand choice likely after retail search. Subsequent price search on the Internet is unlikely. Final acquisition likely in retail store

FIGURE 4.0 **Product and Service Characteristics and Likely Consumer Decision Sequences**

the Internet will probably cause some degree of disintermediation or vertical integration compared with conventional retailing channels because of the distribution, transaction, and communication functions that it can facilitate for some products and services. Even so, the Internet may also lead to more channel intermediaries than currently exist, such as rating services, automated ordering services, and order consolidation services (Sheth and Sisodia[41]).

Strategically, manufacturers use transaction intermediaries to shield them from direct competition. McGuire and Staelin[42] showed that if two competing products are highly substitutable, the respective manufacturers may be better off using independent retailers to protect themselves from possibly ruinous price competition, even though they lose control of retail prices. Although some of the assumptions underlying these analyses need to be modified for the Internet, the underlying intuition, that manufacturers can protect themselves from competing directly with each other by a process of reintermediation, is especially appealing in the context of Internet-based marketing.

Despite its considerable advantages in efficiently providing information and facilitating transactions, the Internet will not lead to complete disintermediation in the foreseeable future for reasons that are economic, behavioral, and psychological. For instance, a single carton of milk will probably continue to be purchased at the nearest supermarket or convenience store because the distribution and transaction costs of such items are considerable as a proportion of the price paid. Of course, larger bundles of groceries may be amenable to Internet-based transactions, although the related distribution cost may or may not render Internet-based marketing feasible.

Research (e.g., Berkowitz, Walton, and Walker[43]; Forman and Sriram[44]) shows that many consumers shop for enjoyment social interaction. Shopping adds value to products and services and variety to consumers' lives; they may never use the Internet for shopping. Some consumers may divide purchases between the Internet at conventional retailers; while others, through "technophobia" or inertia, may avoid the Internet altogether.

While the structure of a consumer market depends on a variety of factors, it generally evolves from the decision-making processes of market participants. For example, Balasubramanian[45] demonstrated that incidences of catalogs and fixed-location retail outlets vary widely across product and service categories. This variation depends in part on consumer perceptions of the categories as well as on their shopping experiences, the perceived need for future

channel interactions, and the average dollar amount per purchase. Similarly, decisions of market participants and other moderating variables (e.g., products and services) influence the impact of the Internet on the structure of consumer markets. Figure 5.0 contains examples of such decisions and moderating variables. Although the Internet may influence both the structure and performance of certain consumer markets, the extent to which this occurs will be a function of numerous factors, both controllable and uncontrollable. Except for extreme cases, such as digital assets being employed in a service, the Internet will probably not eliminate conventional retail channels.

In theory, firms can use the Internet to generate revenues by selling more to existing customers as well as by attracting new customers. Both of these will occur because the Internet is not constrained by either location or time. A firm marketing its products or services through the Internet is, by definition, a global firm, since consumers worldwide can access it.

The Internet and Price Competition

For homogeneous, commodity-type, or completely substitutable goods it can be expected that the Internet will foster Bertrand-type competition. (See Tirole[46] for conditions that generally facilitate Bertrand-type competition.) In the context of an Internet-based market, there are large numbers of buyers and sellers who possess near-perfect information on product and service attributes, including price. Market entry and exit are nearly costless, as are search and transactions.

Under these conditions, the Bertrand model of competition predicts that firms will price at their marginal cost and that no firm can make positive profits because of intense price competition. This is paradoxical; it is not obvious why firms would enter or continue to compete in a market if it is not profitable to do so. Although theoretically appealing, the model's predictions may not hold for Internet-based marketing for several reasons.

The model assumes that firms interact only once, anticipating that unilaterally undercutting competitors' prices leads to large demand effects and creates more profit than charging the same price as competitors: a firm will undercut its competitors, who in turn have the same incentive to undercut its price, such that every competitor ends up pricing at marginal cost. However, it is unlikely that competitors who interact with each other over time will display such destructive pricing behavior. Specifically, in repeated interactions a firm not only should take into account the (mostly positive) present effects of undercutting competitors' prices, it should also take into account the likelihood of invoking a long-term price war.

The model assumption that consumers have full knowledge of the availability and prices of competing products and services may also not hold, even though by definition the Internet provides virtually costless information. If consumers decide not to seek information on all available products and services, competition will reflect this fact. Stigler[47] argued that consumers who value time will stop searching when the marginal benefits of search no longer outweigh the marginal costs; the implication of this argument is that, in general, full search across many alternatives will occur only when it is completely costless. Zettelmeyer[48] proposed that firms use search cost as a control variable to reduce competition, even if it is costless to let consumers search their offerings. This logic seems to apply to the decisions of several marketers to not post prices on their Internet sites.

Finally, the model assumes that competing products and services are completely undifferentiated. This is a very big assumption because it can be argued that firms will always be able to find a nonprice basis for differentiation (e.g., warranties, post-sale service, image, and so on). Even minute differences in differentiation, such as how price is bundled with other offering attributes, may allow firms to price at higher than marginal cost.

Conclusion

In brief, the conclusion that the Internet is likely to promote intense price competition for products and services that are very substitutable may be overly general. Not only are firms likely to be strategic about letting consumers use the Internet as a source of near-costless information, they are also likely to create at least minimal differences, whether physical or perceptual, between their products and services and competing products and services and will recognize the interdependent nature of competition over time. Consequently some consumers may be willing to pay higher prices for products and services marketed through the Internet because of the increased selection and convenience (see Rayport and Sviokla[49]).

Even so, the advent of sophisticated and inexpensive search engines, shopping agents, and robotic software may also revolutionize the search processes of consumers and consequently increase the level of competition for highly substitutable

WEB LINK

Read "Marketing's Final Frontier: The Automation of Consumption" by Jagdish N. Sheth and Rajendra Sisodia at sheth.CRMproject.com.

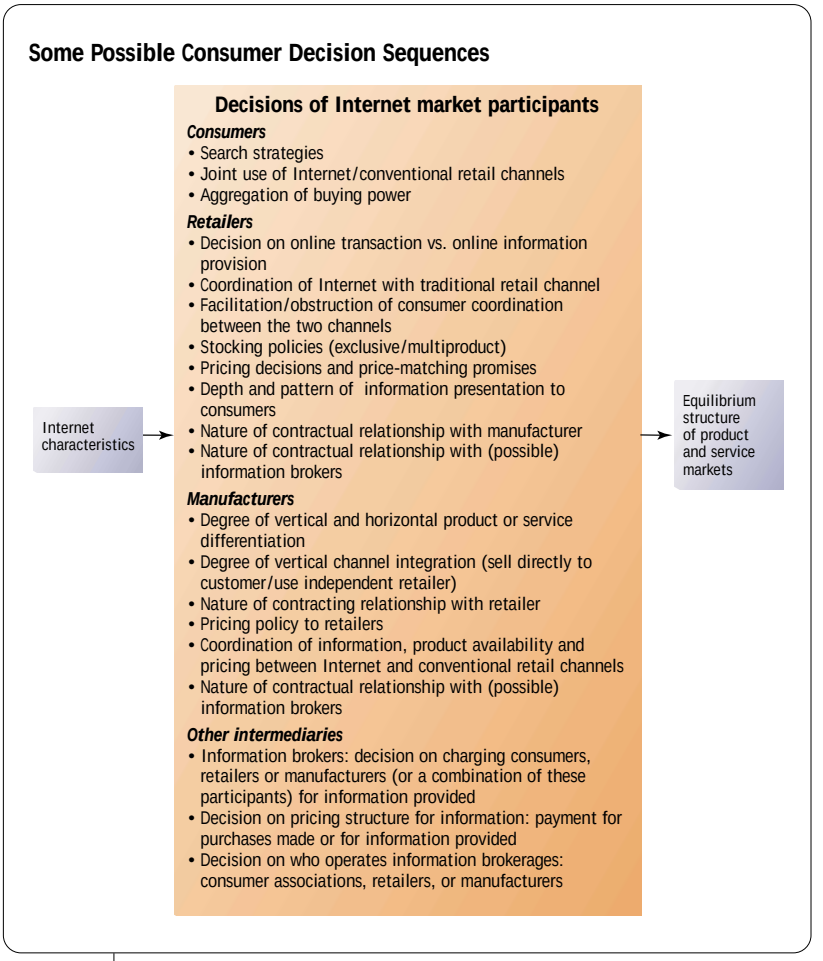

FIGURE 5.0 **Examples of Decisions of Internet Market Participants that Impact Consumer Market Structure**

products and services. Finally, although most discussions of the impact of the Internet on competition emphasize its use as an electronic market, we believe that whatever occurs on the Internet will also affect conventional retailers. The opportunity that the Internet offers consumers in terms of increasing choice sets by making a larger number and wider variety of competing firms available may of itself foster price reductions by conventional retailers.

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