E-TAILING: AN ANALYSIS OF WEB IMPACTS ON THE RETAIL MARKET

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Abstract

The Web has been changing the retail market in many ways. Following a new market framework, this paper analyzes the unique characteristics of the Web for retail applications, examines its market effects, and presents two perspectives for business response strategies. The Web can either be used as a marketing tool, which is integrated into traditional business strategies, or can be viewed as a new marketplace, which demands new business design. Differences between these two views will have strategic and implementation implications for both traditional and startup retailers as they adapt to Web marketing. Finally, we propose some research issues and challenges that should be addressed to better our understanding and promote the success of this new marketplace.

A Web Market Framework

Electronic retailing, which involves the selling of goods and services to the consumer market via the Internet, is also called e-tailing, e-retailing and electronic commerce (EC) in the business-to-consumer (B2C) market. The emergence of this electronic retail market has been rapid. Dramatically expanding reach (people/location) and range (variety) of information, the World Wide Web can create benefits for both marketers and consumers. For consumers, the Web can provide access to a wide range of products and services with low cost (Bakos 1997), extensive and tailored information, at-home convenience for product comparisons, enhanced interactivity (Cross & Smith 1995), and facilitate the formation of virtual communities (Internet users with common interests) (Armstrong and Hagel 1996). Marketers can benefit from lower real estate-related expenses (Schlauch & Laposa 2001), improved market research (Burke 1996; Murphy et al. 2001), new retail models, increased sales, and enhanced consumer relationships.

During the past few years numerous e-tailing startups have appeared, seeking new market opportunities. However, market development has not been as successful and rapid as expected. Troubled with a lack of profitability, many e-
Retailers, such as valueamerica.com, pets.com, living.com and furniture.com, were forced to close their businesses. Unfortunately, these are not isolated cases, as other e-tailers may soon face this same fate.

Researchers have examined various aspects of B2C interactions to help businesses realize the potential benefits of e-tailing. To understand online consumers, Wolfinbarger and Gilly (2001) examined consumer motivations for online shopping, and Bellman et al. (1999) addressed the personal characteristics that predict online buying behavior. To understand business techniques, Web-based strategies are examined (Graham 2000; Griffith & Krampf 1998); marketing techniques, such as interactive marketing and database marketing, are researched (Jackson & Wang 1995); the future of virtual shopping is analyzed (Burke 1997; Pellet 1996); new business models are reviewed (Werbach 2000; Gulati & Garino 2000); and Web-based information systems (WIS) that facilitate online businesses, are emphasized (Isakowitz 1998; Wang & Head 2001).

Before utilizing the above detailed research findings for strategic advantage, businesses first need to understand the basic Web impacts on the retail market. To understand the opportunities and threats of this evolving retail marketplace, we present a new Web market framework, shown in Figure 1. This framework outlines the Web characteristics that impact the retail market, the market effects from utilizing the Web, and the business response strategies. The framework shown in Figure 1 serves to organize the discussion of this paper.

### Figure 1
Web Market Framework

<table>
<thead>
<tr>
<th>The Web</th>
<th>Retail Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Infrastructure</td>
<td>Service perspective</td>
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<td>Channel integration</td>
<td>New market participation model</td>
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<td>Information intensity</td>
<td>Changed distribution channels</td>
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#### Response Strategies

- View the Web as a marketing tool
- View the Web as a new marketplace

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Characteristics of the Web for Retail Applications

Studying the characteristics of new media technology provides a structured context for understanding its social effects and a basis for media comparison (Williams et al. 1994). The Web is widely recognized for its openness, informality, and interactivity features (Berthon et al. 1996). Researchers have examined Web characteristics from various points of view. Deighton (1997) focused on the addressibility and responsiveness of the Web for digital networked communication. Hoffman and Novak (1996) reviewed objective characteristics of communication media and developed a media typology along two dimensions: impersonal to personal, and static to dynamic. This paper addresses the major characteristics of the Web for retail applications. These characteristics may differ from the features outlined in previous research, since we focus on those aspects that have the greatest potential to affect the retail marketplace.

Compared to the traditional market, the Web market differs along three main dimensions: i) technology infrastructure; ii) channel integration; and iii) information intensity. Table 1 summarizes these differences, which are discussed in the following subsections. This discussion is not meant to be complete and comprehensive, but rather a summary of some important characteristics that retailers should understand about the Web market.

Technology Infrastructure

Advances in technology have provided useful supportive tools in the conventional market. For example, television and radio have greatly facilitated one-way communication. Various information systems can be used to process transactions, collect and analyze data. Technology-based tools have helped marketers perform their marketing strategies more efficiently and effectively in the traditional marketplace.

Table 1
A Comparison of Web and Traditional Markets

<table>
<thead>
<tr>
<th></th>
<th>Web Market</th>
<th>Traditional market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>is a determinant for market development and business strategies</td>
<td>serves as a supportive tool</td>
</tr>
<tr>
<td>Channels</td>
<td>integrated</td>
<td>separate</td>
</tr>
<tr>
<td>Market information</td>
<td>intensive</td>
<td>limited</td>
</tr>
</tbody>
</table>

The Web-based marketplace serves as a platform for advanced technology and applications. Marketers who pioneer new Web-based technology and commercial applications can gain substantial competitive advantage.
The Web opens a new space, cyberspace, for retailing. Customers can visit virtual stores, browse through product offerings, and place orders as they do in traditional stores. In this new space, Web technology supports market features inexpensively, such as 24x7 availability, fewer/no geographic boundaries, interactive two-way communication, customization, automation, search facilitation and information/knowledge sharing. These features help to attract customers and stimulate new market growth. The Web impacts the market through customer satisfaction, product design, value generation, and decision processes. This helps marketers to serve larger audiences more efficiently. The Web also helps to target specific consumer groups, which may be difficult in traditional markets due to high costs or an insufficient customer base. The availability of information gathered through customer interaction allows marketers to produce business intelligence to better support their customers. Through the Web, consumers can access more market information, by ways of company sites, independent evaluator or advisor sites, and through communities with other consumers that share their knowledge and experience.

In an electronic environment such as the Web, advanced technologies, such as multimedia, virtual reality, and software agents, may not only be employed as supportive tools, but can be the foundation for long-term market development. Technology development may further change the market structure, expand the types of products or services suitable for Web markets, affect consumers’ behaviors, and dictate effective marketing strategies. Disadvantages of Web retailing, such as the inability to physically see and touch the merchandise, or concerns about security and privacy, may be alleviated through new technology development, application design, and improved policies and procedures. For example, a clothing retailer can provide a personalized virtual model that can try on garments to aid consumer decision-making, and clearly stated privacy policies can help alleviate consumer concerns. Developing and employing new technologies and applications may provide marketers with new business opportunities and advantages. Marketers may explore new business models and target new market niches by developing new applications. Early adoption of advanced technologies may build sustainable advantages, such as brand name recognition. For example, Amazon was first to take large-scale advantage of the cyber-bookstore market. Adopting the Web as its storefront, Amazon was able to list more than 10 million titles in its electronic catalog in spring 2000 (Turban et al. 2000) and provide customers with extra service through its effective search engines, customer communities created through book recommendations and affiliate marketing, and reminder services using push technology. Similarly, Yahoo! was first to offer an extensive Web directory, and provides users with the ability to personalize content. Early and successful adoption of Web technology has made Amazon and Yahoo! household names.
Channel Integration

The powerful integrated environment of the Web can affect the marketplace in many ways. Many business models, such as those similar to TV and catalog shopping, can be implemented readily online. Different business tools and functions can be integrated. Consumer orders can be automatically processed and routed to suppliers. Information channels are integrated, with information flowing both ways between vendors and customers. This facilitates the gathering and sharing of market knowledge. For consumers, competitors are just a click away, allowing easy comparison of product offerings. More fundamentally, the Web is a combined communication medium and distribution/transaction channel, which is quite different from traditional marketplaces.

Many researchers have recognized the Web’s basic characteristic as a communication medium (Pellet 1996; Griffith & Krampf 1998). Compared to information push from marketers to customers through traditional media such as television, the Web is a “pull” medium where customers purposely search for desired information. The Web can empower micro-segmentation marketing, even one-to-one marketing, unlike traditional communication mediums such as telephone, television, radio and newspaper. The Web as a communication medium can be simplex (one-way), duplex (two-way), or multi-plex (multiple-way). The communication can be one to one, one to many, many to one, and many to many with the same or different time dimensions.

The Web may also serve as a distribution/transaction channel. The Web is often considered a distribution channel for digital assets only, since physical goods must be handled offline. The underlying argument is that distribution and transaction functions are often differentiated (Peterson et al. 1997), where the distribution channel is used for logistic operations and the transaction channel for sales. Such a division helps to explain some business models in the conventional market, such as brokerages, where the brokers never physically handle or take title of products. According to Walters (1977), distribution channels carry out two tasks: title movement and physical movement. This distribution channel principle includes both distribution and transaction concepts. After a customer completes an order and provides payment through a commercial Web site, the title movement is completed. Physical movement is the process of delivering products or services to the purchaser, which may or may not happen through the Web, depending on the nature of the product. In the electronic marketplace, more and more services and digital/information product providers employ the Web as a full distribution channel. In the case of physical goods, while the Web cannot actually deliver the products, an important part of the distribution task, title movement, occurs at the Web site. The Web can also serve to facilitate the delivery process by allowing customers to access information such as delivery status. Also, from the consumer’s perspective, distribution and transaction channels may tend to converge. Even in cases where merchandise is directly
delivered from manufacturers and virtual retailers do not handle the goods, customers assign merchandise quality and delivery responsibility to the retailers. For these physical goods, the Web may be considered a transactional channel or a (partial) distribution channel.

The Web marketplace is a unique combination of a communication medium and a distribution/transaction channel. This combination makes the Web an integrated interactive environment, where consumers' communication and purchasing behaviors can be carried out through the same infrastructure. This differs from television and catalog sales, which serve as communication tools rather than marketplaces. The integrated Web channel also facilitates consumer interaction and favors interaction marketing. This interaction includes information exchange (communication) before, during and after the purchase behavior (distribution). Throughout the decision making process, manufacturers can interact directly with consumers and apply advanced marketing techniques. For example, the "made to order" concept, which was traditionally reserved for special product transactions in the business-to-business (B2B) market, can now be applied through mass customization in the Web retail market.

**Information Intensity**

Information availability is limited in the traditional market. While electronic techniques, such as POS, have been used to collect information for inventory management and customer analysis, they have limited potential. First, the information collected through these systems does not tend to be extensive, since it simply includes merchandise descriptions and quantities sold. While some stores also collect customer account data, valuable information generated through personal interaction with customers, such as their preferences, is typically lost. Surveys and analysis by stores and brand manufacturers are generally conducted, if at all, on a limited sample basis. Second, information collection and analysis in the traditional market is primarily performed from the marketer's point of view and for the marketer's use and purpose. Information that directly facilitates consumers' information searching or market evaluation is not as easily available. Electronic techniques used in the traditional retail market tend to be supportive tools, and do not emphasize the customers' views, roles or power.

The Web is a truly information-intensive environment. Vast amounts of information can be collected, integrated, processed, presented, and accessed through the Web by both marketers and consumers. Marketers now can track detailed information for all e-tailing consumer interactions, not just select samples. However, soft market features, such as reputation and reliability, may be more difficult to gather and evaluate. Consumers can gain more market knowledge for criteria comparison, however potential problems of information overload may increase perceived searching costs (Head et al. 2000). Marketers may provide
tools to facilitate consumer information collection, but may have to redesign their marketing strategies since competitors can also accumulate market knowledge and match price differences.

**Market Effects**

The Web characteristics outlined in the previous section can create some fundamental changes to the retail market. This section analyzes these effects on the retail market, as shown in Figure 1. The Web adds an e-tailing service element, leads to a new market participation model, and can alter distribution channels.

**The Service Perspective**

What are the differences between buying online and offline? Many products sold by online retailers are the same as offline merchandise. A book is a book and a toy is a toy. The primary attraction of online shopping is the service value perspective, where customers claim to enjoy rich information and convenience.

Service components are embedded in the online shopping channel. Some researchers have realized the service components of product design in e-tailing and indicated that e-tailers are faced with a unique set of challenges in the management of their customers' perceptions (Kolesar & Galbraith 2000). Service components are most prominent in information/knowledge and delivery aspects of e-tailing. E-tailers are faced with the challenge to design usable and useful Web storefronts to facilitate customer navigation. Many e-tailers feature a large portfolio of products, requiring powerful search tools/methods to tailor to the heterogeneity of consumer information requirements. The Web encourages after-sales service by facilitating access to rich information and customer interaction. Customer relationship management (CRM) systems have become popular tools to support these relational interactions. CRM systems can automatically record detailed consumer activities and can be used to build consumer profiles from various tangible and intangible activities. By understanding consumers better, marketers can employ relationship marketing techniques in the retail market to provide personalized services.

Consumers often view online shopping as being more risky than traditional shopping channels. Orders are contracted before consumers receive, or in many cases physically evaluate, the merchandise. The delivery process may generate risk if consumers do not receive their orders in the time and conditions expected. Consumers may also risk higher privacy loss. While enjoying personalization and enhanced service, most consumers view the misuse of market information as a violation (Head & Yuan 2001). Marketers should solicit consumer permission to use market data, and must not compromise consumer privacy concerns. The value added from service components must outweigh the perceived risk of shopping online.
New Market Participation Model

Due to its channel integration and information intensity features, a new participation model has emerged in the Web market. Figure 2 (a) illustrates a traditional market interaction model and Figure 2 (b) shows the new Web market participation model. Marketers and consumers interact through communication mediums and distribution channels. Both the marketers and consumers perform information-processing and decision-making tasks. Market participation is determined by interaction and information-processing/decision-making activities.

As Figure 2(a) shows, in the conventional marketplace, the market participation of marketers is active while the participation of consumers is passive. Information is pushed by marketers to consumers through traditional mass marketing mediums such as newspaper, television, and radio. Consumers' information acquisition and processing are mostly passive and restricted. Due to communication limitations, consumers tend to make decisions individually, or in small family groups, and then actively deliver their purchasing decisions to the distribution channel. Marketers then passively receive feedback information. Several key points must be emphasized. First, it may be difficult to accumulate rich and valuable consumer information in the traditional market, since the communication medium and distribution channels are usually separated. Second, the dashed line indicates that consumers seek information and marketers seek feedback actively, but to a limited extent. Consumers may have limited access to valuable information, since most information in the traditional market is designed for the masses rather than the needs of the individual. Seeking relevant and personalized information can be time- and cost-consuming, resulting in consumers' largely pas-
sive access of information. On the other hand, marketers are active during the communication phase but mostly passive during the feedback phase. Consumers determine the amount of feedback they wish to provide, and this feedback may be buffered, distorted, and delayed as it must often pass several distribution layers. Although there are some passive marketer activities, overall we consider marketers as active participants in the conventional market, which implies their greater power to influence this market.

Figure 2(b) shows the new participation model in e-tailing. The Web is an integrated channel, which greatly facilitates information access, collection, and analysis for all market participants. Both consumers and marketers can actively participate in the market in all interaction phases. While consumers can dramatically increase their market power, various marketers can also enhance their market capabilities. The communication medium and distribution channel are not market buffers but serve as an interaction carrier. Both marketers and consumers can establish direct contact with each other. Therefore, the capability of the communication medium and distribution channel does not limit the power of market participants. Timely and accurate feedback can be delivered to manufacturers, and consumers can find information that fits their specific needs.

Changes in Distribution Channels

The Web empowers manufacturers. Due to the communication ability of the Web market, manufacturers can connect to large consumer bases without location limitations, which may allow them to vertically integrate retailing functions and eliminate distribution layers. Avoiding traditional wholesale and retail channels may reduce the final consumer price and facilitate quicker service. Customers may be able to interact with manufacturers during the entire marketing cycle, from product design to post-purchase service even to old product recycling. Direct interaction benefits manufacturers by enhancing market understanding and building consumer relationships through pricing and personalization. Dell Computer Corporation (www.dell.com) is an example of efficient online retailing through shortening the distance between manufacturers and consumers.
However, with fewer distribution layers, there may exist a value gap (Gallaugher 2001). Distribution layers add value, which may be lost through disintermediation. For example, retailers perform certain functions in distribution such as delivery, storage, and insurance. They have some advantages that manufacturers may lack, such as larger product profiles, retailing expertise and market knowledge. Retailers are product collectors and market organizers in certain industries, such as the grocery sector, providing convenience to consumers that manufacturers could hardly substitute. Customers may search and compare products more easily at a one-stop site without interacting with various individual manufacturers. The success of disintermediation will depend on appropriate adjustments of the generated value gap by decreased costs or providing additional services. In non-commodity industries that have few manufacturers and carry similar products, such as the PC industry, the benefits provided by retailers may have less value.

New intermediaries are also appearing that may expand distribution channels. Auto-By-Tel and Charles Schwab's OneSource mutual funds network are among many successful efforts that have created market makers by displacing an existing weak point in the distribution chain with a technology-driven value enhancement (Gallaugher 1999). In these cases, online marketers can design products and services for customers' needs, which can not be effectively provided in traditional markets. A good example is Garden.com (Welles 1999), which is an e-tailer for garden supplies. This company distributes knowledge, takes orders online, and ships products directly from its suppliers to its customers. In this way, Garden.com becomes a sole marketing and customer service company for its suppliers and targets a special group of customers who value time and product knowledge.

The Internet allows for the re-organization of distribution channels to better match consumers' needs. It may decrease distribution layers, possibly lowering costs and facilitating direct interaction. It may induce online and offline competition. And it may create additional distribution layers to provide service and value for consumers.

Response Strategies

The Web has the power to fundamentally influence the retail market. Facing this challenging and changing market phenomenon, retail businesses are adapting their strategies to take advantage of new opportunities. This section addresses the business response strategies shown in Figure 1.

Retailers can consider the potential impact of the Web from two perspectives. The first perspective considers the Web as one of many tools available for marketers to communicate and sell their products to customers (Peterson et al. 1997; Deighton 1997; Burke 1997). The second view recognizes the potential power of the Web to create a new marketplace (Mahajan & Wind 1989). We have
developed a summary, shown in Table 2, that outlines the main differences between these two views. To the best of our knowledge, such a comparison has not been adequately defined in previous work. It is important to note that although we separate these two perspectives, various combinations are also possible. However, it is of value to separate and clearly outline the two views in order to provide a basis for further investigation.

Separating the role of the Web as a tool and as a marketplace is similar to the concept of separating sustaining and disruptive technologies (Christensen 1997). We propose that by using the Web as a marketing tool, businesses are actually adopting a sustaining approach to employ new technology. By viewing the Web as a new marketplace, business strategies are more disruptive, and may thus lead to more dramatic changes in the organization. Different views will generate different strategies, which will have different implementation implications.

**The Web as a Marketing Tool**

Peterson et al. (1997) argues that the Web will have major effect on communication, will influence transactions, but will have no effect on distribution unless the good is based on digital assets. Businesses, which view the Web as a marketing tool, mainly employ it as a communication tool to take advantage of its benefits in lower costs, interactivity, personalization, digitization, automation, and constant communication. Most traditional retailers who do not currently sell their products/services through their sites hold this view. Many traditional retailers construct their site to foster better communication and public relations. Consumers can obtain corporate information, and may be encouraged to subscribe to customized electronic flyers/newsletters. Many businesses, which sell through both traditional and Web channels, such as Business Depot (www.businessdepot.com), also follow this model. The Website of Business Depot is simply another store front or interactive catalog.

When viewing the Web as a marketing tool, value proposition focuses on improving existing products and services by expanding their reach and range. The communication power of the Web allows companies to effectively provide information to consumers without geographical or time limitations. From the consumer's point of view, their information access is dramatically expanded and decision making is facilitated. Customers can easily evaluate competing offers through available tools or services. For example, Realtor.com offers a Web-based mortgage financial calculator (www.realtor.com/ResourceCenter/FinanceCenter), which is not available through traditional channels.

Employing the Web marketing tool will not tend to dramatically change the organization's customer groups or advertising criteria. Companies can better serve the same group of customers. For example, Office Depot employs the Web to improve its existing store and catalog services. Without opening more stores
Table 2  
Different Views of the Web

<table>
<thead>
<tr>
<th>Strategic Aspects</th>
<th>The Role of the Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristic</td>
<td>A Marketing Tool</td>
</tr>
<tr>
<td>Value provided</td>
<td>Improve existing product/service value</td>
</tr>
<tr>
<td>Main function</td>
<td>Communication tool</td>
</tr>
<tr>
<td>Competitive strategy</td>
<td>Expanding reach/range</td>
</tr>
<tr>
<td>Effect on consumers</td>
<td>More efficient and complete information access</td>
</tr>
<tr>
<td>Target customers</td>
<td>Existing, with same value criteria</td>
</tr>
<tr>
<td>Strategic focus</td>
<td>A technology tool that can facilitate existing strategies</td>
</tr>
<tr>
<td>Business functions affected</td>
<td>Facilitate implementation of existing marketing functions</td>
</tr>
<tr>
<td>Main relationship with existing marketplace</td>
<td>Complementary and integrating, one of several marketing tools</td>
</tr>
<tr>
<td>Product selling potential</td>
<td>Limited</td>
</tr>
<tr>
<td>Marketing implication</td>
<td>Improved interaction, market micro-segmentation, possible one-to-one marketing</td>
</tr>
<tr>
<td>Market structure effect</td>
<td>Not obvious</td>
</tr>
<tr>
<td>Strategic potential</td>
<td>Short-term</td>
</tr>
</tbody>
</table>
or printing more catalogs, customers can access updated and accurate information through the Web and complete transactions online. The Gap’s (www.gap.com) target customers are not dramatically different online than offline. However, their online customers can be better served through more extensive information and product availability, and service integration between their online and traditional stores.

As a new technology tool with strong communication power, the Web can be used to support existing strategies by facilitating the implementation of existing marketing functions. The Web serves as one of many marketing tools, such as television, and marketers try to benefit from the strengths provided by different media. The functions of these media are often complementary, and most marketers use them simultaneously to enhance results. The Web is particularly powerful for consumer interaction. Companies can acquire more consumer informa-

### Table 2 continued

**Different Views of the Web**

<table>
<thead>
<tr>
<th>Implementation Aspects</th>
<th>The Role of the Web</th>
<th>A Marketing Tool</th>
<th>A New Marketplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation feasibility</td>
<td>Realistic, based on the major current market capability</td>
<td>Developing, based on substantial analysis of future markets</td>
<td></td>
</tr>
<tr>
<td>Organizational effect</td>
<td>Structural or functional change in communication-related departments</td>
<td>Re-organization of the entire organization</td>
<td></td>
</tr>
<tr>
<td>Major function of the Web</td>
<td>Web communication</td>
<td>Web selling</td>
<td></td>
</tr>
<tr>
<td>Marketing plan participants</td>
<td>Marketers</td>
<td>Both marketers and consumer</td>
<td></td>
</tr>
<tr>
<td>Market research/prediction</td>
<td>Normal</td>
<td>Difficult</td>
<td></td>
</tr>
<tr>
<td>Uncertainty</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Complexity of Web information systems used</td>
<td>Low to medium complexity</td>
<td>Highly complicated and integrated</td>
<td></td>
</tr>
<tr>
<td>Relationship between strategy and implementation</td>
<td>Well researched strategies guide scheduled implementation</td>
<td>Trial-and-error, emphasis on feedback and adjustment</td>
<td></td>
</tr>
</tbody>
</table>
tion and feedback through the Web channel and deliver targeted messages more efficiently.

Businesses with this view do not expect the Web to create dramatic structural changes in the market. Major distribution chains remain relatively stable. The potential to use the Web as a marketing tool to seek strategic advantage is often limited and short-termed, since competitors can quickly copy the strategy. Necessary resources, such as technology and corresponding marketing expertise, may be easy to gain with existing strategies and consumer base.

This sustaining approach to Web utilization has minimal effects on strategy formulation, and thus implementation tends to be relatively easy and realistic. Without major shifts in consumer characteristics and industry relationships, companies can adjust their practices gradually. It is not difficult to open a Web site to provide company and product information or for catalog sellers to introduce an online catalog. Since this view facilitates existing marketing strategy, structural or functional changes are mostly expected in communication-related departments.

The suitability of the Web for product selling depends to a large extent on the characteristics of the products and services (Peterson et al. 1997) and is limited to certain product categories. Generally, products that have a low outlay, are frequently purchased, have an intangible value proposition, and can be highly differentiated, are more likely to be purchased through the Web (Phau & Poon 2000). As industry practice shows, products such as books and toys are among the best selling products online. Thus, it is necessary to explicitly consider product characteristics when evaluating Web strategies.

Marketers are major players in the implementation of communication-related changes. They help open the Web channel, design available functions, collect market information, promote interaction, and offer more alternatives to consumers. Without major market or consumer changes, existing business expertise may be readily applied to new media. With business expertise, financial stability, and existing branding, traditional retailers can implement online channels with relatively low risk. The major business process influenced by this implementation is B2C communication. Other relationships, such as business procurement, may not be affected. The Web information systems (WIS) used to implement this marketing tool will be of low to medium complexity, depending on the level of Web service provided. For the case of Business Depot, which had catalog selling experience and an existing infrastructure, less market research and organizational changes were needed to initiate its online business. With an existing market and customer base, the uncertainty and risk involved in this venture was relatively low.

Using the Web as a marketing tool, companies can design a well-researched strategy through their understanding of the market, configuration of media effects, and cost allocation. Such a strategy will help guide a scheduled implementation to ensure success.
The Web as a New Marketplace

Mahajan and Wind (1989) consider the Web a "market discontinuity." Businesses, which explore the Web channel as an emerging new marketplace that facilitates a full range of interaction, may find that it co-exists and competes with traditional markets. Online retailers must provide incentives for consumers to change their shopping patterns or explore new markets. New value must be defined and appreciated by consumers to compete with existing market channels. For example, customers must value the flexibility and convenience of Web shopping. Businesses need to explore market niches/boundaries to fit the new value with customers' needs, and seek appropriate business models to achieve these needs. Target customers will be new and existing groups with different value criteria, which may be difficult to achieve through traditional channels. For example, ThePeachTree (www.thePeachtree.net), an online grocery-shopping provider, contracts with local grocery stores and provides shopping convenience to consumers. For consumers of thePeachTree, an additional distribution layer is added. ThePeachTree, using the Web communication advantage, seeks the market niche for customers who have time constraints or who will pay extra for the convenience of this service.

In addition to using the Web for information searching, consumers can increase their market power through high involvement in business processes and virtual communities. These are new Web-centered strategies, which are restricted in traditional markets by fixed physical assets and slow transfer of information (Werbach 2000). Some researchers have noted the commercial effects of Web groups (Wotring et al. 1995; Armstrong & Hagel 1996; Kozinets 1999). Communication convenience allows consumers to form communities outside their traditional work or family groups. Such communities accumulate information or knowledge by learning from the experiences of individual community members. Information collection costs and times are often reduced for individuals within a community. Opinions from other consumers are often more valued than messages from marketers, especially in a Web market, where trust is critical and more difficult to build. Not only do groups have a strong effect on purchasers' decision-making, but they may also affect market variables such as products and prices. For example, stocks that capture the attention of participants in chat rooms can move noticeably in price (Bruce 1997). The Web, as an interactive marketplace, also gives the consumer data selection and personalization power. Customers can select information of interest and personalize presentation forms for their own use. Personalized Web pages, which can be constructed fairly easily, increase customer power (Rousseau et al. 1999). Customers on the Web have greater control over what they view and examine. They can select their own path through the information network, process the data, or initiate communication with marketers.
While businesses still need to consider product/service characteristics to design proper strategy, viewing the Web as a new marketplace dramatically expands the possible product categories suitable to online selling. Businesses are not limited by traditional models and strategies, but actively seek new value and strategies. Many business functions are affected when trying to achieve value in the Web marketplace. For example, some e-tailers may hold minimal or no inventory, and mainly handle information. The range of information goods can still be greatly expanded. Marketers may also design new marketing campaigns that substantially differ from traditional ones. Market structures may fundamentally change in the new marketplace. Old intermediaries may disappear and new ones emerge. Consumers may have different decision making patterns and market participation roles. Major industry relationships may be redefined. Since these e-tailers are realizing new value definitions and constructing new operational structures, strategic advantages may be longer lasting.

Most retailers with this view focus on Web selling. Consumer groups with new value criteria and shopping patterns are forming and expanding. They must actively play their new role in Web shopping. On the other hand, industries will continue to evolve and companies will re-organize to adopt new business models. Werbach (2000) outlines many of these organizational changes, such as relationship structures and outsourcing roles. A focus of outsourcing in the traditional marketplace is to gain efficiency. In the electronic marketplace, outsourcing is facilitated by the domination of information manipulation, and a focus may be to assemble virtual corporations. Organizations may need to reconfigure not only their business-to-consumer perspectives, but also their B2B and intra-business (intra-B) operations. Facilitating and managing consumer-to-consumer (C2C) communication and knowledge sharing may become a major aspect of business intelligence. Therefore, Web information systems will be more complex due to integration and interaction requirements. Information should be seamlessly transferred among the parties involved.

These strategies are still developing and are mostly based on prediction and analysis of future markets. Since the new market is still in its early formation stage, businesses and consumers need to learn and evolve with this new Web marketplace. Market prediction and analysis is difficult due to shifts in market forces (Mahajan & Wind 1989) and the speed at which Internet-related changes are occurring (Peterson et al. 1997). Thus, the strategy formation and implementation processes are largely trial-and-error based. Feedback from early implementation is needed and used for strategic adjustment.

The success of each view depends on the current market situation, the maturity of technology and the readiness of consumers. Even within the same market, either strategy may lead to success when targeted at different customers.
Conclusions and Future Research

This paper presented a general Web market framework to guide our discussion. We outlined three main Web characteristics (technology infrastructure, channel integration, and information intensity) that impact the retail market. The effects of these impacts include an increased service perspective, a new market participation model, and changed distribution channels. Retailers may respond to these impacts and effects by either viewing the Web as a marketing tool or as a new marketplace. We have examined these two perspectives along several strategic and implementation dimensions. The success of these response strategies will depend on the types of products and services being marketed, corporate and market culture, technology maturity, and consumer readiness.

The development of e-tailing accelerates competition. The online channel has to compete with offline stores and new entrants with innovative products, services or business designs. To survive, businesses must possess certain significant competitive factors. Brand, economies of scale, and size seem to be important to e-tailers (Gallaugher 1999). Further research needs to systematically analyze competitive factors for e-tailers in order to provide effective guidelines.

Currently, with competitors being a click away, loyalty and trust are harder to build in the Web environment. However, e-tailers need to build consumer loyalty to survive and thrive in this highly competitive landscape. Guidelines to develop and build this loyalty and trust should be addressed in future research.

Further research is also needed in applying new technology development to business processes and strategies. As previously outlined, technology is essential to market development and marketers may gain substantial benefits from early adoption. Web-based information systems serve as the storefront for consumers and must be easy to use. E-commerce usability is a new area in human computer interaction and critical to online business success.

Consumer information is viewed as an important asset to businesses. Using this information, marketers may provide superior products and services at better prices. However, consumers are demanding more control on the use of such information. There is a delicate balance between perceived value and cost (Wang et al. 2001). Further research may explore the factors, such as trust, which may serve as the threshold (Long et al. 1999) of value for information and privacy concerns.

E-tailing is a market practice that is still in its infancy. Viewing the Web as a marketing tool, marketers incorporate the Web into their traditional strategies. Viewing the Web as a new marketplace, businesses emerge with new product/service designs, targeted customers, and strategies. Traditional methods to evaluate the success of a business seem insufficient in the new economy. Despite
increasing sales, many e-businesses are not profiting. In this developing market, many businesses aim to build a brand name and customer base, while leaving profitability a long-term consideration. Research needs to be conducted to categorize e-market assumptions and assess their validity. With further research and understanding, the Web retail market can prove to be a significant and profitable marketplace.

References


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