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An Electronic Marketing Paradigm for the Information Service Industry

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Background

Broadly defined, EC is a modern business methodology that addresses the needs of organizations, merchants, and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery (Kalakota & Whinston, 1996). How EC influences the strategies of international marketing is of great importance for practical applications and academic research. Therefore, this study analyzes the impact of EC on the international marketing environment, strategies, and future trends in the information service industry.

Electronic Marketing Environment

Historically, technological advances have resulted in social and economic transformation on a vast scale. This is especially likely when new ethnologies are unfolding across time and space. Before analyzing the impact of EC on international marketing strategies, we must have an understanding of the changes of international marketing environment. These circumstances of constant changes are explored respectively as follows:

Business Process Reengineering (BPR)

Because all the products in information service industries can be presented in the forms of texts, graphs, sounds, images, pictures, videos, animations, and any other digital information, these digital products can be transmitted to customers through the Internet without the use of physical distribution channels. As a result, EC is well suited to facilitate reengineering of business processes occurring at many firms. The broad goals of reengineering and EC are also remarkably similar: reduced costs, lower product cycle times, faster customer response, and improved service quality.

Transaction Costs

The theory of transaction costs is usually used to analyze the impact of IT applications on organizational structures and strategic management. Malone, et al. (1987) use transaction cost theory to suggest that IT, by reducing transaction costs, will reduce forces for vertical integration and induce a move to a market structure. Clemon and Row (1992) also employ transaction cost theory to argue that the use of IT, through explicit IT-based coordination, will bring about move to the middle resulting in a network of interacting organizations. Besides, Ciborra (1993) provides a comprehensive discussion of the role of transaction cost theory in explaining IT-enable formation of teams, markets, and hierarchical structures. More recently, Kumar and Dissel (1996) employ the theory to explore the formation of IOSs, analyze the potential conflicts caused by IOSs, and propose the corresponding strategies to prevent the occurrence of conflicts.

Information Asymmetries

The phenomenon of product information asymmetries can be moderated by transmitting the digital products over the Internet, which makes it possible for the consumers to try out the products before purchasing them. Therefore, EC certainly mitigates the degree of information asymmetries in the international markets.

Organizational Structure

Large, hierarchically structured companies continue to downsize in the fact of dramatic shifts from traditional corporate jobs to newly created opportunities in the burgeoning world of small business, entrepreneurial activities, telecommuting, and online marketing. Cyberspace is making it possible for small companies to take advantage of some opportunities traditional affordable only to big companies. Although starting any small business these days is as much headache as adventure, setting up a Web site and opening for business can be simpler and less expensive, with the right professional help, than setting up an equivalent retail store. Within the organization, configurations of work teams will be created and recreated to respond to the everyday challenges of markets (Hoffman et al., 1995). Installing email, for example, on the computers of all members within an organization may mean that from now on members can directly communicate with the head of the organization without having to go through his or her secretary. Email facilitates communication between the bottom of the organizational hierarchy and those at the top, thus having a democratizing effect on organizations. This could represent a change in the communication channels within the department, causing individuals who are threatened by the change to resist it (Markus, 1994).

Global Culture

"Culture rises from geography because place is a primary shaper of the soul. Place is the character of a particular landscape as altered by human occupation. Moreover, culture is what happens when individual souls find themselves gathered and interacting in this place." (Rennie, 1993) Without a doubt, the Internet will expand our opportunities for exposure to the humanities. The world great literature, art, music, film, and media yet to be developed will be, quite literally, at our fingertips. Cultural and multilingual issues arise with the ubiquitous nature of the Internet. Computer-mediated conferencing has facilitated the creation of a virtual global community that stands to redefine our notion of self and community.

Virtual Education

Education is by many measures the world's potentially largest EC industry. Globalization allows new methods of packaging and delivering educational products, to enhance traditional methods of knowledge acquisition and to impart the new skills and tools needed to educate productive and creative members of the information society. Virtual education will become the norm, as some suggested, the least expensive way to deliver the educational products, while face-to-face teaching will be only for the well-to-do.

Governmental and Political Transformation

Information technologies don merely deliver sundry consumer benefits; they constitute part of a society core political infrastructure. Information Technologies do this by establishing an intricate and pervasive network of structurally consequential political influences, opportunities, and constraints. Governments today are faced with increasing difficulty in maintaining the traditional borders that they have relied upon for political control. As these borders crumble, new political forms and arrangements are certain to evolve, in unpredictable ways.

MIS Management

Since more services are based on maintaining customer databases and direct electronic communication links, the MIS management will become even more involved in making the corporate strategic plan a reality. Its success will be based on its ability to translate a service delivery strategy into an effective IT infrastructure. End-customer systems will be very demanding of MIS skills and resources. Internet user demographics projects are currently under way in different countries to collect and analyze survey data on Internet users to determine preliminary information on behavior, attitudes, opinions, and demographics. By taking advantage of similar survey techniques to collect updated information, MIS managers must be extremely end-user focused.

WWW Challenges

EC is emerging as an increasingly important way for organizations to reach potential customers. However, EC presents many challenges to the organizations that implement it. It has been claimed to allow a company to improve productivity, cash flow, decreased inventory, and enhance customer relations, but empirical research has yet to confirm that organizations view it in this positive fashion. An increasingly Internet literate
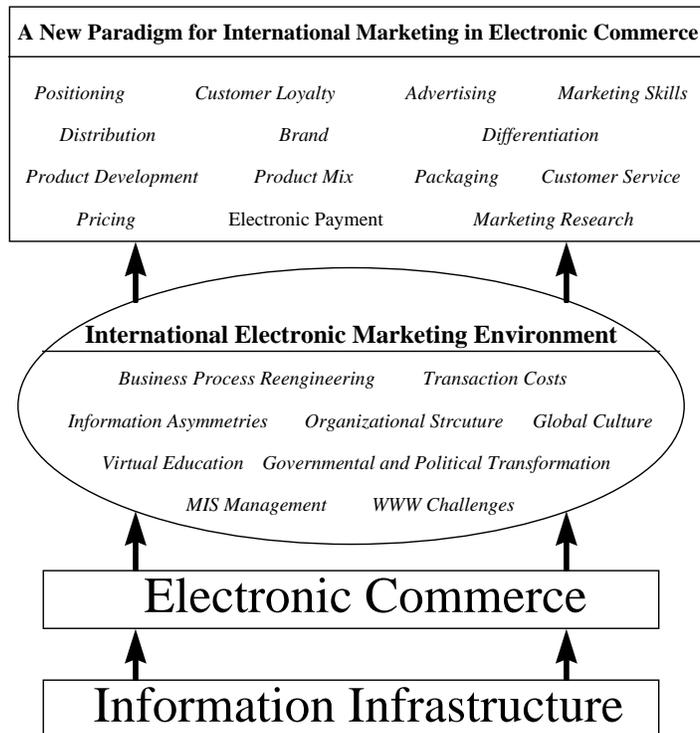
A Conceptual Model for International Electronic Marketing

The lowest layer shown in Figure 1 is the information infrastructure. Kalakota and Whinston (1996) hold that the information infrastructures are composed of information superhighway, multimedia content and network publishing, the messaging and information distribution, and common business services infrastructures. The information superhighway infrastructure includes telecom, cable TV, wireless, and Internet. The common business services infrastructure consists of services for security, authentication, electronic payment, and directories/catalogs.

A New Paradigm

As discussed earlier, the development of EC implies the changes of international marketing environment. Therefore, a new paradigm for electronic marketing deserves further

Figure 1. A Conceptual Model of International Marketing in Electronic Commerce

analyses, including the positioning, consumer loyalty, advertising, marketing skills, distribution, brand, differentiation, product development, product mix, packaging, customer service, pricing, electronic payment systems, and marketing research.

Electronic Marketing Strategies of the Information Service Industry

As a company grows, management may find it necessary to reconfigure both the internal and external forces as part of its strategic response. That means all phases of marketing issues need to be considered when evaluating the Internet commerce. Table 1 shows the electronic marketing strategies and trends of information service industries.

Table 1. Electronic Marketing Strategies and Trends of Information Service Industries

International marketing issues	Electronic marketing strategies and trends
Positioning	The result of market positioning evaluation can be divided into four quadrants, including investment/Growth trengthen the company edge of e-commerce/Be careful on enter/Safe and arvest/Explore
Customer Loyalty	By creating healthy on-line communities, businesses will be able to build customer loyalty to a degree that today marketers can only dream of and, in turn, generate strong economic return (Armstrong and Hagel, 1996).
Advertising	EC allows marketers to collect a large amount of customers personal data and consumption behaviors from the Web to construct their own comprehensive databases, which provide a great diversity of promotion, advertising, and discount policies, depending on consumers' characteristics and product preferences.
Marketing Skills	Marketing personnel must enlarge their domain knowledge, learn how to take advantage of information technology to attract customers and increase the customer loyalty, and realize the strategic impact of EC on international marketing.
Distribution	The distribution strategy in information service industries no longer puts emphasis on the selection of physical distribution channels and store locations, but on that of intermediaries providing value-added and consulting services.
Brand	The development of brand identity is critical to information service providers because brand identity could strengthen consumers trust in their digital products and on-line transaction procedures.
Differentiation	Due to numerous information content, world-wide consumers, lower communication and transaction costs, small companies offering specialized niche products should be able to find the critical mass of customers necessary to succeed.
Product Development	Developers of information products can take advantage of the low-cost communication of the Internet and Intranet to exchange product-related information with each other and improve their management efficiency of project schedules, budgets, and human resources.
Product Mix	The information service industries in EC not only adopt the personalization policy providing consumers with various information, but also undertake the customization policy allowing consumers to select and bundle their desired product mixes, depending on their preferences, leading to the prevalence of micromarketing.
Packaging	Information interfaces of Web sites which become the sole communication channels for on-line companies and consumers will have a great influence on consumers will to browse Web sites and purchase products.
Customer Service	The customer service strategy of information products in the EC environment is to provide customers with global, instantaneous, interactive, and personalized services.
Pricing	To tailor the product to a variety of markets, information service providers should design various pricing policies in accordance with the content mix, transmitted speed, accuracy, priority, and other related services of information products.
Electronic Payment	Due to the face-to-face communication in the on-line marketing circumstances, where all the payment and settlement procedures are carried out on the Internet, the security and convenience of electronic payment systems have a great influence on consumers desires to make transactions on Web sites.
Marketing Research	The Internet, a new media with fast information distribution and feedback, expands the acquisition channel of market data and decreases the difficulty and cost of conducting international marketing research.

Conclusion

This paper focuses on the impact of EC on the electronic marketing strategies of the information service industry. First, this study analyzes the changes of international marketing environment, and then presents a conceptual framework to expound the relationship among the information infrastructure, EC, the international marketing environment, and the new paradigm for international marketing. Lastly, this paper discusses the impact of EC on several international marketing issues, including positioning, consumer loyalty, advertising, marketing skills, distribution, brand, differentiation, product development, product mix, packaging, consumer service, pricing, electronic payment and marketing research in the information service industry.

References
References available upon request from first author (mtang@mis.nccu.edu.tw).