虛擬市場中的電子行銷：
文獻探討與概念性架構

胡亞平

國立中正大學資訊管理學系

摘　　要

　　網際網路的發展使得消費者可以從不同的供應者、購買項目與方式中，選擇其所需要的產品、服務或滿意的價格。基於網際網路及電子商務所造成商業行為改變，本研究以文獻回顧的方式來探討電子行銷在虛擬市場中的相關議題，同時也發展了一個電子行銷與虛擬市場互動的概念性研究架構：包括虛擬的溝通交流空間、虛擬的訊息分享空間、虛擬的電子交易空間及虛擬的產品服務配送空間，此四種虛擬空間建構出以電子行銷為核心的虛擬市場空間。本研究將針對此概念架構進行討論，最後，提出一個結論並對此領域未來的研究方向提出建議。

關鍵字：電子行銷、虛擬溝通、虛擬交易、虛擬配送

Electronic Marketing in Virtual Market-Space: A Literature Review and Conceptual Framework

Hu, Ya-Ping

Dept. of Information Management, National Chung Cheng University

Abstract

The Internet gives a much wider choice of products, services and prices from different suppliers and the means to select and purchase items more readily.   This research involves a literature reviewed, and considers the evolution of the electronic marketing fields to identify a number of fundamental problems.   This study develops a conceptual framework for four perspectives: virtual communication space, virtual information space, virtual transaction space and virtual distribution space, with E-marketing in core position.   After discussion, we make a conclusion and suggestion for the future study.

Keywords: Electronic marketing, Virtual communication, Virtual transaction, Virtual distribution.

1. Introduction

The Internet represents a tremendous opportunity. That is, it gives a much wider choice of products, services and prices from different suppliers and the means to select and purchase items more readily. For traditional marketing, these products and services it gives the opportunity to expand into new markets, offer new services and compete with large businesses.

At the same time, the Internet gives rise to many threats to traditional market space. For examples, Amazon(www.amazone.com), have captured a significant part of their market and struck fear into the existing players. Indeed, the phrase "amazoning a market sector" has become an often-used expression among marketers in USA. As the success stories of companies capturing market share together with the rapidly increasing adoption of the Internet by consumers and businesses has become a fast growing realization, all companies must have an effective Internet presence to prosper, or possibly even survive, thus, there emerging the electronic marketing (E-marketing) and the virtual market-space by using the Information Technology (IT), especially the Internet and World Wide Web.

The benefits of using IT are that if marketers can create realistic systems that measure consumer demand of products and services they can replace expensive prototypes and dramatically reduce design time. A larger number of possible products can be tried and valuable new features can be identified and designed into next generation of products, the use and benefits of IT are likely to increase as virtual reality technology improves. The new virtual business opportunities created by E-marketing, the role of E-marketing in supporting marketing is suggested by applying the definition of marketing by the Chartered Institute of Marketing (www.cim.co.uk): Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably. This definition emphasizes the focus of marketing on the customer, while at the same time implying a need to link to other business operations to achieve this profitability. An alternative term is E-marketing [19, 24] which can be considered to have a broader scope since it refers to all kinds of IT.

This article, therefore, focuses on virtual market-space that first emerged

during the E-marketing wars.   The purpose of this paper is to provide a framework to organize the Internet-based activities of a marketing manner by literature review method.   In the next section, we review the E-marketing and virtual market-space literature to identify the techniques which involved in E-marketing and the related topics, and summarize the frameworks proposed and their limitations.   We then discuss some perspectives on how a marketing taxonomy in virtual market-space should be developed.   These perspectives provide a conceptual model based on which we develop the E-marketing and virtual market-space taxonomy.   The virtual market-space taxonomy is used to categorize the E-marketing tools.   This article closes with a discussion of how the E-marketing and virtual market-space compares to the traditional marketing and the implications of our findings.

2.   Literature Review

There are two perspectives which we reviewed: E-marketing and virtual market-space.   The E-marketing brings us to the aim of this paper, virtual market-space. This point would be developed to a conceptual model to be discussed at the next section.

2.1   E-marketing

Smith and Chaffey [24] note that E-marketing can be used to support three aims: identifying, anticipating and satisfying. As a traditional definition, marketing consists of individual and organizational activities that facilitate and expedite satisfying exchange relationships in a dynamic environment through the creation, distribution, promotion and pricing of goods, services and ideas [8].   This definition is useful since it highlights different marketing activities necessary to achieve the exchange relationship, namely product development, pricing, promotion and distribution.

Hagel and Armstrong [14] provide one of the earliest perspectives when they identified the power of virtual communities. Alba et al. [1] discussed the benefits of interactive home shopping and consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. Some scholars introduced the notions of permission marketing and viral marketing, also focused on building Web sites that are robust and scale with traffic, and cyber-branding [12, 25, 6].   Consistent with their focus on a particular aspect of E-marketing, these scholars do not provide a survey of E-marketing tools or offer a

framework for integrating them.

Previous research has demonstrated the multidimensional and context-dependent nature of perceived customer value [28, 3, 21] from the customer value and strategic perspectives, it regarding the Internet has also been a popular topic of enquiry. Besides, some scholars provided a perspective on making business sense of the Internet and disruptive technologies [11, 5]. From the point of economies, the new economics of information have been transformed into strategy which identified 10 rules for the new economy and provides new opinions of specific E-marketing tools [9, 22, 10]. Thus, the Internet has produced a hybrid consumer who sits at the convergence of traditional and digital media, and they also introduced the notion of convergence marketing [28].

There are more than 30 E-marketing tools and terms currently in use from their review of the marketing literature [16]. The applications can be grouped into five categories which is shown in Table 1, according to the type of customer benefits that e-business technologies make possible. The information technologies, by integrating and accelerating business process, speed up response and delivery times. The network and internet create new business opportunities for exploiting computer-based or information-based products and services which referred to as the virtual market-space. As we discussed the E-marketing, this opinion emerging an important topic: virtual market-space will be discussed at next.

Table 1 Applications of E-marketing tool

Accelerated marketing	Virtual market	Personalization	Community marketing
build to order	Information	customization	email list
distribution to order	Communication	Individualization	net paper
Billing	Distribution	Rules-based system	groupware
new product expansion	Transaction	collaboration filtering	games and simulations

Source: Kalyanam and Mclntyre [16]

It is obviously that E-marketing tools have been launched, and the competition is becoming more and more sophisticated in those marketing approaches. The E-marketing ad spend is on its way up, so exploring about all the different E-marketing channels that can support the marketing efforts is a good strategic move. And this article will focus on virtual market-space which emerging at the E-marketing fields.

2.2 Virtual market-space

The new virtual business opportunities are created by E-commerce. World-wide

economy is increasingly based on information and on intangible value. This evolution causes virtual forms of market-space. Virtual market-place is the platform to bring together supply and demand as well as technology and economic requirements to optimize the employment of resources and administration as well as the selling process [4].

In order to coordinate various commercial contacts different topic-oriented electronic market places (EM) increasingly emerge, EM is considered to be a trade system initiated for specific business transactions [17]. In other words, it coordinates needs of market participants within the virtual market according to certain competition processes and a virtual market space is created due to the initiative of a market place coordinator (or a market organization) which has no ownership of the traded goods.

The core function of the EM facilitating trading transactions for buyers and/or sellers—has remained [13]. Virtual market tries to minimize transportation costs, that is, customers can navigate the markets to find goods they want to buy [26]. Thus, there are several kinds of marketing channels which only exists in virtual space; for example, the Internet. The key feature of virtual market is the separation of physical goods and

information [26]. Therefore, in a typical virtual market transaction, the information will be transferred from physical suppliers, information mediators (information producers, and virtual markets) and customers.

Virtual market-spaces can be categorized into four virtual spaces by using the information communication distribution communications: a virtual information space, a virtual communications space, a virtual distribution space and a virtual transaction space [2]. There is an important issue, the customer, e-business became clear that the race was on to acquire customers, that is, all kinds of virtual market-space should be focused on "customer" [23]. A marketplace as a historically evolved institution allows customers and suppliers to meet at a certain place and at a certain time in order to communicate and to announce buying or selling intentions, which eventually match and may be settled [13]. And previous work on Web shopping, though, has raised e-retailers' concerns about the low purchasing rate and moderate overall satisfaction of on-line shoppers [15, 20]. Thus, recent work shows that consumers have increasingly favorable attitudes toward on-line shopping [18].

By literature reviewed, the consequence shows there are four virtual spaces for virtual marketplace in E-marketing. And this

initiates our conceptual framework to discuss at next.

3. Conceptual Framework

As we reviewed the literatures, the conceptual framework is developed as shown in Figure 1.
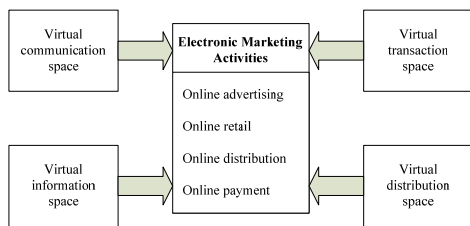

Figure 1 Conceptual framework

Figure 1 is a conceptual framework for virtual market-space with E-marketing in core position, that is, E-marketing should be surrounded by all activities of virtual market-space with new technologies.

To stretch this framework, there are some extended competencies from basic activities which are shown as Table 2:

Table 2 Basic activities for framework

Virtual market-space	Basic activities in new channels	Extended competencies
Virtual information space	Accessing company and product information	Visibility, marketing mix, local regulations
Virtual communication space	Relationships, ideals and opinion building	Dynamics of internet-based communications
Virtual	Initiating and	Security, legal
transaction space	executing transactions	implications, trade regulations
Virtual distribution space	Distributing products and services	Reliability and speed of distribution, substitution effects

Source: This study

The exploration of this framework will be discussed at next section, then the conclusion and future study will be considered.

4. Discussion

We will discuss five perspectives of the conceptual model including electronic marketing, virtual information space, virtual communication space, virtual transaction space, and virtual distribution space. Besides the five perspectives of conceptual model, there are some virtual marketing activities as important as our conceptual model will be discussed too. Those activities include advertising, retailing, distribution and payment.

4.1 Virtual information space

The virtual information space consists of new Internet-Based channels through which economics agents can display information about themselves and the products and services they offer; there includes web sites which provide information, such as brochure sites where

companies publish catalogues of their products and services, information services providing financial information and bulletin boards advertising employment opportunities. In addition to creating new opportunities in virtual information, the Internet can also create new opportunities to offer related services, such as Internet marketing and advertising, consulting services and information searching, gathering and filtering agents, etc.

4.2   Virtual communication space

The virtual communications space includes new opportunities in which economic agents can exchange ideas and experiences, influence opinions or negotiate. For examples, blog systems, chat rooms and videoconferencing. These opportunities deserve a special mention as a number of new marketing practices have developed using the Internet; these are discussed more fully latter in the sections on real-time, interactive and community marketing.

4.3   Virtual transaction space

The virtual transaction space consists of new Internet-based channels through which economics agents can exchange formal business transactions, such as orders, invoices and payments; this can range from simple email and online order forms to online ordering using a credit or debit card and online accounts.

4.4   Virtual distribution space

The virtual distribution space consists of new distribution channels for variety of products and services. The first category of products includes those products that can be efficiently distributed by means of Internet. These are products that can be digitized and transmitted through computer networks, such as text, pictures, digital music, digital video, software and computer games. The second category includes such services as text, voice or video-based consulting and training.

4.5   Electronic marketing activities

It is possible to run a completely virtual business where all the normal marketing activities are done online. Some of the marketing activities that can now be done virtually include advertising, retailing, distribution and payment, and we discuss those activities as follows.

Online advertising

The most popular form of web advertising is the banner as or display advertising. This is the advertisement

often found on web pages at the top of the browser window.　However, there are signs that use of banner ads is waning as the "click-through" rates (rates of customers clicking on the advertisement to access the sponsor) fall.　Nevertheless, over time, as banner ads have become commonplace, web surfers have become more discriminating. The biggest problem with banner ads arises for brand advertisers.　A company with a well-known brand, such as Coca-Cola, gains little from advertising on the Web which will help build the brand.　A Coke banner does not allow the user to buy Coca-Cola online, at least at present.　All it can do is link the user to a website that provides information on the company and the product.

There is another difference between direct-response advertisements and branding campaigns. Offline branding campaigns usually require media saturation to have a significant impact.　Although this possible to achieve with a passive medium, such as television, where the user can switch off or engage in other activities, such as talk or making a coffee, it is more difficult to achieve online without irritating users. Advertisers have tried to counter the trend by making banner advertisements more active.

Another popular technique is rich media expanding banners – banners that have some functionality and product identity built into them.　This provides immediate benefits for customers, rather than simply forcing them to link to another site.　For example, using rich-media techniques, some banners ads now give customers information and left them order products and perform other tasks right on the banner.　This model allows more targeted responses.　For example, a company, such as Timberland, which wishes to market its fashion footwear for city use while continuing to reach its traditional outdoors market, and he could set up different advertisements on different types of sites.　The banner could play a short promotional video clip, take down consumers' details and advertising agency Double-Click reported an increase in the use of rich media increasing.

Online retail

In online retailing the most common method used on websites is to mimic aspects of the real store. Where there is a real store as well as a website a webcam can be used to provide live video images of the store and the staff.　A webcam can also become an added value service in itself.　For example, beachheads.co.uk; a surfing equipment retail

in the UK, and longbeachsurfcam.com, a surfing retail in long beach, both provide live webcams of local beaches, allowing surfers to see the conditions before setting out.

Online distribution

The Internet is ideally suited for distribution of digital products and services, and, as is discussed in previously, information and news service providers have been providing online distribution ever since the beginning of commercial consumer networks, even pre-dating the popularization of the Internet. There is a lot of news and information sites available offering live news reports, stock prices and even the latest prices for fish in markets.

What has been made possible or more cost-efficient as the technology has improved is the use of the Internet for other products, such as software and games, and other services, such as live entertainment. Many software companies are now using the Internet for software distribution, particularly for updates. For example, Microsoft allows MS office users to download clip art from a library of several hundred on it site, while Norton allows users of its antivirus software to download updates of fixes for new viruses. The online distribution of software has also led to a wealth of sites offering freeware and shareware, in addition to pay software. Well-known sites include Tucows.com, simtel.net, and download.com.

Increasingly, more and more entertainment products are also being distributed this way; this has happened to a large extent in music, following the development of the MP3 format, which allows music tracks to be distributed online. As the speed and volume of data that can be carried on the Internet improved similar prospects are likely for other form of entertainment. Live pop concerts are already being broadcast on the Internet as well as "adult entertainment" using live webcams. As new data compression technologies are developed or broadband transmission becomes commonplace, it is conceivable for entire feature length films to be easily download.

Online payment

The most common method of payment online is by credit cards. However, in countries where credit cards are not commonly available other methods are also being tried. For example, in China,

customers can come into a store and buy online credit which can be used to buy online products. Other companies are bypassing the credit card system altogether. For example, B2B sites usually offer a credit facility for business. Some companies offer specialist electronic bill payment services. Cable and Wireless also offer the facility for users to have online bills from websites added to their telephone bill using special software from e-Charge.

1. Conclusions and Future Study

While the previous sections have focused on the new market-space used in E-commerce, these results lead us to the conclusion that the four types of virtual market-spaces will change the traditional business acts. Especially for the E-marketing, it is arising from the ability of e-business technologies to provide customers benefits in five aspects: faster processing, virtual products and services, personalization, interactivity, many-to-many communication.

Because IT and other technology improves, other methods will undoubtedly arise. Therefore, e-business technology has become more widespread and has been adopted by mainstream organizations, the main issue is now less about whether or how marketing can be done electronically, but more about a recurring question since computers were first invented, which marketing activities can best be done by humans and which activities are best undertaken by IT.

There are some issues to be studied in the future, such as techniques of E-marketing and virtual market-space. In this article, we concern about the general concept of virtual marketing by reviewing the related literatures. Further research on this topic would be suggested as follow: 1) An empirical study for virtual market-space. 2) A thorough research for virtual marketing activities in depth. 3) Customer relationships on the Internet. 4) A deep study for virtual community in marketing area. Furthermore, subsequent research could be based on this foundation. This research is a conceptual literature review. Future research could conduct a case study longitudinally to understand the impact of this framework in depth. Future research could be targeted at the important knowledge-intensive industries, for instance, healthcare industry, to understand their differences and similarities. In addition, this research is mainly to understand the impact

of E-marketing on virtual market space; future research could try to examine enterprise performance by using it.

References

[1] Alba, J., J. Lynch, B. Weitz, C. Janiszewski, R. Lutz, A. Sawyer, and S. Wood, "Interactive Home Shopping: Consumer, Retailer and Manufacturer Incentives to Participate in Electronic Marketplaces," *Journal of Marketing*, 61 (3), 1997, pp. 38-53.

[2] Angehrn, A., "Designing mature Internet business strategies: The ICDT model," *European Management Journal*, 15(4), 1997, pp. 361-369.

[3] Bolton, R. N., and J. H. Drew, "A multistage model of consumers' assessments of service quality and value", *Journal of Consumer Research*, 17, 1991, pp. 375– 384.

[4] Bönke, D., "Electronic Commerce in Tourism", European Commission (Ed.): Electronic Commerce and Networking in Europe", Proceedings of "EURO-MED Net 98, Nicosia, Cyprus 1998, pp. 5-12.

[5] Bower, J.L., and C. M. Christensen, "Disruptive Technologies: Catching the Wave", *Harvard Business Review*, January – February, 1995, pp. 43-53.

[6] Breakenridge, Deirdre, "Cyber-branding", Upper Saddle River, NJ: 2001, Prentice Hall.

[7] Chartered Institute of Marketing, http://www.cim.co.uk

[8] Dibb, S., S. Simkin, W. Pride, and O. Ferrell, "Marketing. Concepts and Strategies", 4th European ed. Houghton Mifflin, New York, 2001, Chapter 1.

[9] Evans, P., and T. S. Wurster, "Blown to Bits", Cambridge, MA: Harvard Business School Press. 2000.

[10] Fiore, F., "E-Marketing Strategies, Indianapolis, IN: QUE 2001.

[11] Ghosh, S., "Making Business Sense of the Internet", *Harvard Business Review*, March-April 1998, pp. 126-135.

[12] Godin, Seth., "Permission Marketing", NewYork: Simon&Schuster. Dobbs Ferry, NY: Do You Zoom, Inc. 1999.

[13] Grieger, M., "Electronic marketplaces: A literature review and a call for supply chain management research", *European Journal of Operational Research*, 144, 2003, pp. 280–294.

[14] Hagel, J., and A. Armstrong, "Net Gain: Expanding Markets Through Virtual Communities", *The McKinsey Quarterly*, Winter 1997, pp. 8-25.

[15] Jarvenpaa, S. L., and T. P. Pike,

"Consumer reactions to electronic shopping on the World Wide Web", *International Journal of Electronic Commerce*, 2, 1996–1997, pp. 59–88.

[16] Kalyanam, K., and S. McIntyre, "The e-marketing mix: A contribution of the e-tailing wars", *Journal of the Academy of Marketing Science*, 30(4), 2002, pp. 487-500.

[17] Kollmann, T., "Marketing for Electronic Market Places – The Relevance of Two Critical Point of Success", *Electronic Markets*, 8(3), 1998, pp. 36-39.

[18] Lohse, G.L., S. Bellman, and E. J. Johnson, "Consumer buying behavior on the internet: findings from panel data", *Journal of Interactive Marketing*, 14, 2000, pp. 15–29.

[19] McDonald, M., and H. Wilson, "E-marketing: Improving marketing Effectiveness in a Digital World", Financial Times/Prentice Hall, Harlow, 1999.

[20] Moon, Y., and F. X. Frei, "Exploding the self-service myth", *Harvard Business Review*, 78, 2002, pp. 26-27.

[21] Parasuraman, A., "Reflections on gaining competitive advantage through customer value", *Journal of the Academy of Marketing Science*, 25, 1997, pp. 154–161.

[22] Porter, M. E., "Strategy and the Internet", *Harvard Business Review*, March 2001, pp. 63-78.

[23] Reibstein, D. J., "What Attracts Customer to Online Store, and What Keeps Them Coming Back", *Journal of the Academy of Marketing Science*, 30(4), 2002, pp. 465-473.

[24] Smith, P. R., and D. Chaffey, "E-marketing Excellence – at the Heart of E-Business", 2nd ed. Butterworth Heinemann, Oxford. 2005.

[25] Strauss, Judy and Raymond Frost., "E-Marketing", Upper Saddle River, NJ: Prentice Hall, 2001.

[26] Wang, H., "A conceptual model for virtual markets", Information & Management, 32, 1997, pp. 147-161.

[27] Wind, Y., V. Mahajan, and R. E. Gunther, "Convergence Marketing: Strategies for Reaching the New Hybrid Consumer", Upper Saddle River, NJ: Prentice Hall, 2002.

[28] Zeithaml, V. A., "Consumer perceptions of price, quality, and value: A means–end model and synthesis of evidence", *Journal of Marketing*, 52, 1988, pp. 2–22.

Hu, Ya-Ping is a doctoral student in the Department of Information Management at

National Chung Cheng University. He received a Bachelor and MBA degree from National Yunlin University of Science and Technology. His current research interests are in the areas of knowledge management, IT performance assessment and E-marketing. E-mail: yapinghu@mis.ccu.edu.tw