Association for Information Systems AIS Electronic Library (AISeL)

ICEB 2005 Proceedings

International Conference on Electronic Business (ICEB)

Winter 12-5-2005

The Mapping between Business E-Marketing Mix and Internet Consumers' Decision-Making Styles in E-Commerce

, K. M. Sam

C. R. Chatwin

Follow this and additional works at: https://aisel.aisnet.org/iceb2005

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2005 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

The Mapping between Business E-Marketing Mix and Internet Consumers' Decision-Making Styles in E-Commerce

K. M., Sam¹, C. R., Chatwin²

1 Affiliation: University of Macau,

Address: Faculty of Business Administration, University of Macau, Av. Padre Tomás Pereira S.J., Taipa, Macao

Telephone: 853-3974740

E-mail Address: tonysam@umac.mo

2 Address: School of Engineering, University of Sussex, Falmer, Brighton BN1 9QT

Telephone: +44 (0) 1273 678901

Abstract: As a result of the emergence of E-Commerce, emarketing mix has been widely adopted by most businesses and companies. Currently, the tools of e-marketing mix are provided by the company web site so that the customers can decide whether the company portfolio of products and/or services suits their needs. If we can understand the psychological factors of customer behavior, businesses can know which customers are suitable. This paper presents the relationship between e-marketing mix of particular businesses and psychological factors of customer behavior in order to provide an easier way for both businesses and customers to find their target needs.

Keywords: Consumer Psychological factors, E-Marketing Mix, Internet Marketing

I. Introduction

As a result of the increased utility and bandwidth of Internet communications, the usage of web browsers has increased dramatically. Many users make use of browsers to get different types of information in different media such as text, graphic, animation, audio and video. Hundreds of businesses have exploited this great opportunity to create their own web sites that allow customers to purchase products directly from their browsers. Most commercial companies believe that they can generate a large amount of profit from the web.

Although many web businesses terminated operations or ceased to exist from April 2000 to December 2001, those eretailers developed and introduced new internet-based marketing techniques (e-marketing), which have been widely considered in the formation of current marketing strategy.

Kalyanam & McIntyre (2002) identified more than 30 emarketing tools in their review of: popular business press, research reports from industry, textbooks and the academic literature for e-marketing tools.

Before the electronic age, E. Jerome McCarthy (1960) introduced the 4Ps (product, price, place and promotion) standardization of the marketing mix as a core unifying construct. Later on, van Waterschoot and Van den Bulte (1992) pointed out that the components of "communication" address "barriers to wanting", whereas the sales promotion

function addresses "barriers to acting". They observed that "triggers to customer action" seem necessary in certain situations to induce the exchange. Hence, they termed sales promotion a "situational" function. On the basis of these distinctions, the marketing mix can be reclassified into the "basic mix" and the "situational mix". In additional, since the sales promotion mix can apply across the full spectrum of the basic mix (the rest of the traditional marketing mix), it is considered by van Waterschoot and Van den Bulte to be overlapping. The concepts developed by van Waterschoot and Van den Bulte (1992) can be summarized in the form of the following axioms:

Axiom 1: Marketing functions are the appropriate properties for the classification of marketing tools.

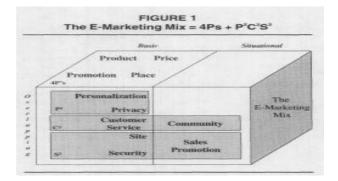
Axiom 2: Some functions are essential and others are situational in nature.

Axiom 3: Some functions have a moderating effect across other marketing functions and are called overlapping functions.

Axiom 4: Functions are accomplished by marketing tools.

Axiom 5: A tool can serve one or several functions.

Based on the above axioms, Kalyanam & McIntyre (2002) created a new E-marketing mix model as illustrated in Figure 1 and mapped the marketing tools and the terms in Table 1 to the new e-marketing mix model, as illustrated in Figure 2.



Proceedings of the Fifth International Conference on Electronic Business, Hong Kong, December 5-9, 2005, pp. 411 - 418.

	Basic	Situational
	Product Price Configuration Engine - Front Asseme Paneng Laure - Borren Asseme Bane Asseme Paneng Laure - Borren Asseme - Bane Asseme Paneng Laure - Antiona Sama Asseme Paneng Laure - Antiona Paneng Laure - Antiona Pa	The E-Marketing
e r + FAQ+ & Hdp l Desk d - Exat Respons p - Out	Customer C ² Service Community	Web Lino • Reputite
Р і - ВонисРарг і - Norigaron A S д - Раде Design A I g		Long ECopes

In the following tables (Tables 1A - 1D), four individual business web sites (randomly chosen) from each of the four types of businesses based on Sam K. M. & Chatwin C. R. (2005): Apparel, I.T. item, Jewellery and Car, are analyzed in terms of the e-marketing mix model from Kalyanam & McIntyre (2002).

Table 1A: E-Marketing mix	model from Kalvanam &	McIntvre: Appa	rel industrv

	Promod	La Redoute	River Islands	L.L. Bean
Pro	duct: Mainly for women outfit Allowing immediate effect on different colors Product features clear and simple. No multi-angle views. Very clear symbols for washing precautions Clear indication of available sizes Allow for exchange if items are not suitable	 Product: Target to both kids, men and women No immediate effect on different colors Long descriptions of product features No multi-angle views Simple washing precaution instructions Allow for ordering even though there is not enough stock Allow for exchange if items are not suitable 	 Product: Target to both men and women No immediate effect on different colors Simple descriptions of product features No multi-angle views, but has closer views Simple washing instructions Allow for ordering even though there is not enough stock Allow for exchange if items are not suitable 	 Product: Target to both men, women and kids Immediate effect on different colors Long descriptions of product features No multi-angle views, but has larger view Simple washing instructions Allow for ordering even though there is not enough stock Provide a user-friendly option for backorder situation Allow for exchange if items are not suitable
Pric • Pro	ee: Set up by the company motion: Outbound e-mails to registered users listing updated items	 Price: Set up by the company Promotion: Big discount sales price Online advertisement for half price 	 Price: Set up by the company Promotion: Free gift for sales over a certain limit Account card available to 	Price: • Set up by the company Promotion: • Big discount sales price • Online advertisement for big discount
•	Banner advertisement for free or reduced price delivery for some products Sales price available Some suggestions to create customers' look		accumulate points to get cash voucher and discount promotions.Gift voucher available for free lucky draw	
Place •	ce: Created in 1975 as a French family company, collections can be found in the chain of fashion shops and promod.com	 Place: Originated in France, providing different sites for different countries. 	 Place: Many stores in UK and an international franchise presence. 	 Place: Many stores in United States
•	sonalization: Follow-up individual customer orders after signing in. Get you to proper language version of site	 Personalization: Check whether your latest order has been processed Check your latest balance View your previous statements 	 Personalization: Check for transactions and back-ordered items 	Personalization: • Check for transactions and back-ordered items

Privac	cy:	Privacy:	Privacy:	Privacy:
1	Cookies created for processing and shipping of orders	 Cookies can track who has seen which web pages and any advertisements that may be placed on them and to track the effectiveness of online advertising generally. 	 Cookies are used to keep track of where you are, which browser type being used, which pages have been visited, etc. 	 Cookies are used to keep track of where you are, which browser type being used, which pages have been visited, etc.
Custo	mer Service:	Customer Service:	Customer Service:	Customer Service:
•]	FAQ & Help available	• FAQ only for My Account	 Help desk provided, convenient for customers to 	Help desk provided in
	Accepts comments from customers through on-line and give feedback through e-mail.	 Accepts e-mail from customers 	 Convenient for customers to get more information Accepts help through e-mail, phone or post 	 different languages Help information provided in different languages Accepts help through email and phone.
Site:		Site:	Site:	Site:
•	Searching mechanism available through list box Clear layout with white background color	No searching mechanismLayout acceptableClear classification of	 Searching mechanism available, but only through text box Layout is OK. 	 Searching mechanism available through list and text box. Layout is quite good
• •	Very clear classification of product	product	Clear classification of product	Clear classification of product
Comn	nunity:	Community:	Community	Community
•]	None	• None	Hiring advertisement	Gift certificate
Secur	ity:	Security:	Security:	Security:
	SSL protocol is employed during transaction	• Only mention with high confidence	 SSL protocol with 128-bit strong encryption is adopted 	 SSL protocol with 128-bit strong encryption is adopted
Sales	Promotion:	Sales Promotion:	Sales Promotion:	Sales Promotion:
•]	Promotional code offered.	• Order Code offered.	• None	• Promotion code offered.

Table 1B: E-Marketing mix model from Kalyanam & McIntyre: Jewellery industry

Zoo Jewellery	Jazz It Up	Gold Jewellery	Mondera
 Product: Target to both kids, men and women Product features simple and not detailed. No multi-angle views. Allow for return if items are faulty. 	 Product: Target to both kids, men and women Product features simple and not detailed. No multi-angle views. Allow for money back within 7 days, but not for earrings or body jewellery 	 Product: Target market not mentioned Detailed product features No multi-angle views Allow for product return Offering different sizes and gold to choose when buying 	 Product: Target to both men and women Detailed product features No multi-angle views Allow for product return Customize the product by customers
Price:Set up by the company	Price:Set up by the company	Price:Set up by the company	Price: Set up by the company
 Promotion: Outbound e-mails to users listing updated items Big discount sales price Banner advertisement for sale. 	Promotion: • None	 Promotion: Outbound e-mails to users listing updated items Discount for repeat buyers 	Promotion: Outbound e-mails to users listing updated items
 Place: Physical store first Created in 1992 at England 	Place:Based on UK.	Place: • Online Jewellery store in Scotland	 Place: Online Jewellery experts since 1999 in America
Personalization: • None	 Personalization: Allow for remembering personal details 	Personalization:Allow for keeping track of orders	 Personalization: Allow for remembering personal details Also allow for checking orders

Privacy:	Privacy:	Privacy:	Privacy:
• Cookies created for processing and shipping of orders, also record IP address for monitoring web site performance	 Cookies can keep track of customers' names and addresses, etc. 	 Cookies used to keep track of recently viewed products 	 Cookies used to identify repeat visitors IP address recorded for monitoring web site traffic performance
Customer Service:	Customer Service:	Customer Service:	Customer Service:
• Accepts comments from customers through on-line and give feedback through e-mail.	Accepts e-mail from customers about specific type of questions	 Help desk provided Accepts e-mail and other communication channels from customers 	 Help desk provided FAQ available Accepts e-mail from customers
 Site: Searching mechanism available through text and list box Clear layout with white 	Site: No searching mechanism Layout acceptable Clear classification of	Site: Searching mechanism available through text box Clear layout with white background	 Site: Searching mechanism through text strings or item number Clear layout with white
 Very clear classification of product 	product	ouckground	 Clear classification of product
Community:	Community:	Community:	Community
• None	• None	• None	 Can get more knowledge about jewellery Wish list available Customer rating available
Security:	Security:	Security:	Security
• SSL protocol is employed during transaction	• SSL protocol is employed during transaction	• SSL protocol is employed during transaction	• SSL protocol is employed during transaction
Sales Promotion:	Sales Promotion:	Sales Promotion:	Sales Promotion:
• Promotional code offered.	• None	• None	• Reference code offered

Table 1C: E-Marketing mix model from Kalyanam & McIntyre: I. T. items industry

Applied Computer	ComputersPlus	Circuitcity.com	Etronics
 Product: Product features simple and not detailed. No 3D views. Allow for return based on product manufacturer No product photos provided 	 Product: Product features simple and not detailed. No 3D views. Allow for product if they are defective or wrong No product photos provided 	 Product: Detailed product features 3D view available Allow for product return Product photos provided 	 Product: Detailed product features No 3D view Allow for product return Product photos provided
Price:	Price:	Price:	Price:
• Set up by the company	• Set up by the company	• Set up by the company	• Set up by the company
Promotion: • None	 Promotion: Outbound e-mails to users listing updated items Sales price available 	 Promotion: Online updated news release Sales price available Banner advertisements appeared 	 Promotion: Outbound e-mails to users listing updated items
Place:	Place:	Place:	Place:
• Based on the United States	• Based on the United States	Physical stores in America	• Retail outlet at United States
Personalization:	Personalization:	Personalization:	Personalization:
• Allow for remembering personal details and keeping track of orders	 Allow for remembering personal details and keeping track of orders 	 Allow for keeping track of personal details and orders 	Allow for remembering personal detailsAlso allow for checking orders

Privacy:	Privacy:	Privacy:	Privacy:
Cookies created for recording customer personal information.	• Cookies can keep track of customers' personal information and visited pages, etc.	 Cookies used to keep track of recently viewed or purchased products IP address may also be obtained 	 Cookies used to identify repeat visitors IP address recorded for monitoring web site traffic performance
Customer Service:	Customer Service:	Customer Service:	Customer Service:
 Accepts comments from customers through on-line and give feedback through e-mail. 	 Help desk provided Accepts e-mail from customers 	 Help desk provided Accepts e-mail and from customers Accepts online chat with customers 	 Help desk provided Accepts e-mail from customers
Site:	Site:	Site:	Site:
 Searching mechanism available through text box, but quite detailed. Clear layout with white background color Not very clear classification of product 	 Searching mechanism available through text box and list box Layout acceptable Clear classification of product 	 Searching mechanism available through text box and list box Clear layout with white background Clear classification of product 	 Searching mechanism through text and list box Clear layout with white background Clear classification of product
Community:	Community:	Community:	Community
• None	• None	 Providing job opportunity Customer rating available Gift cards available Commitment to community make life easier 	• Wish list available
Security:	Security:	Security:	Security
• SSL protocol is employed during transaction	• SSL protocol is employed during transaction	• SSL protocol is employed during transaction	• SSL protocol is employed during transaction
Sales Promotion:	Sales Promotion:	Sales Promotion:	Sales Promotion:
• None	• None	• None	• None

Table 1D: E-Marketing mix model from Kalyanam & McIntyre: Car industry

CarsDirect	Cars.com	Discounted New Cars	ComeBuy Cars
 Product: Target to new and used cars Product features detailed Only larger view. Customize car features 	 Product: Target to new and used cars. Product features detailed Product photos provided, but only for larger view 	 Product: Target to new cars Product features detailed Product photos provided, but cannot be enlarged 	 Product: Target to used cars Product features quite detailed, but not good enough Some of product photos provided and can be enlarged
Price:	Price:	Price:	Price:
• Set up by the company	• Set up by the company	• Set up by the company	• Set up by the company
 Promotion: Outbound e-mails to users listing updated items Low price for new cars available 	Promotion: • Rebates available	 Promotion: Online updated news release Outbound e-mails to users listing updated items Sales price available 	Promotion: • Online updated news release
Place:	Place:	Place:	Place:
 Based on the United States 	Based on the United States	Based on Australia	• Based on UK
Personalization:	Personalization:	Personalization:	Personalization:
• Allow for remembering personal details so that buyer reports can be provided	• None	• Allow for remembering personal details for suitable cars	 Allow for remembering personal details Also allow for checking orders

Privacy:	Privacy:	Privacy:	Privacy:
• Cookies created for recording user behaviour at the web site.	 Cookies can keep track of customers' personal information and visited pages, etc. IP address also recorded 	 Not mentioned about cookies Mention about personal information kept confidential 	• Not mentioned
Customer Service:	Customer Service:	Customer Service:	Customer Service:
FAQ provided	• Payment calculator	 No help desk provided 	FAQ provided
 Help desk provided 	provided	FAQ provided	• Accepts e-mail from
 Accepts comments from customers and give feedback through e-mail. 	 Help desk provided Accepts e-mail from customers 	 Accepts e-mail from customers 	customers
Site:	Site:	Site:	Site:
• Searching mechanism available through list box.	• Searching mechanism available through list box	• Searching mechanism available through list box	• Searching mechanism through text and list box
 Clear layout with white background color 	Layout acceptableClear classification of	• Clear layout with white background	• Clear layout with white background
• Very clear classification of product	product	• Clear classification of product	• Clear classification of product
Community:	Community:	Community:	Community
• Customer rating available	• Customer rating available	• None	• None
Security:	Security:	Security:	Security
• Using known encryption and security standards	• SSL protocol is employed during transaction	• Not mentioned	• Not mentioned
Sales Promotion:	Sales Promotion:	Sales Promotion:	Sales Promotion:
• None	• None	• None	• None

According to the above comparisons, there are different e-marketing strategies used by different business web sites in a particular industry. Why are there different e-marketing strategies from different business web sites in a particular industry? It is due to the fact that their target customers are different. Figure 3 illustrates different requirements from customers and businesses:

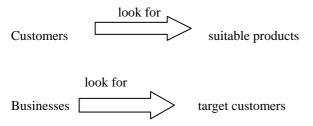


Figure 3: Different Requirements from Customers and Businesses

Services can be provided such that businesses can get only those target customers (relating to the e-marketing mix of a particular business) and at the same time customers can get their preferable products (relating to the psychological factors of customers). In this way, it is beneficial to both parties.

II. Psychological Factors of Customer Behavior

Based on the psychological factors from Sam K. M. & Chatwin C. R. (2005) of customer behavior, the following facts have been discovered:

1. Consumers have different psychological factors for different types of products

2. In addition to the psychological factors specific to product, it is necessary to consider the psychological factors specific to the web site (online business) as a result of the emergence of e-marketing.

According to (Retailers' Search Engines Boost Online Sales,

http://www.realseo.com/archives/cat_search_engines_news.

<u>html</u>), there is a 40% increase in the total number of consumers who visited a retail website's search engine made an online purchase from 2003 to 2004. It shows that search engine has become more important. Online customers can enter search criteria, namely; budget, product features, brand name, portability and quality rating, to refine the product list displayed on screen (ref: <u>http://www.spec-direct.com/Case Studies.asp?page id=17</u>). Each of the above criteria is associated with a particular psychological factor of customer behaviour (Point 1 above) as shown in figure 4:

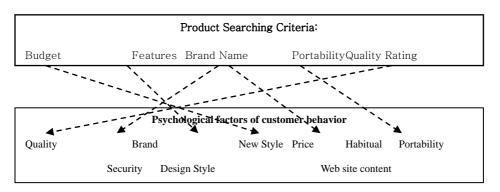


Figure 4: Relationship between Product searching criteria and customer psychological factors

III. E-Marketing Mix

E-marketing mix, when compared with the traditional marketing mix, should be designed in such a way that can reflect the current situation of E-commerce. The e-marketing

mix model designed by Kirthi Kalyanam & Shelby McIntyre (2002) can fully reflect the current situation by identifying basic and overlapping functions and mapping e-marketing tools to those functions. By integrating this e-marketing mix model with the diagram shown above, the following result is achieved, see figure 5:

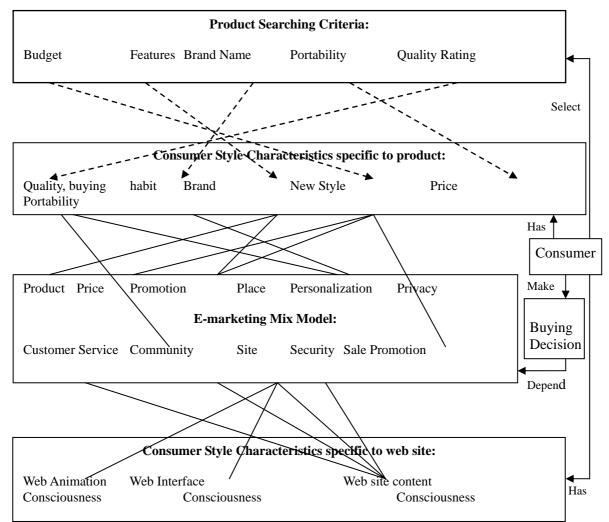


Figure 5: Relationship between E-marketing mix model and Internet Consumers' Decision-Making Styles

Relationship of E-marketing mix model & psychological factors specific to products

If customers demand new style products, they may prefer those web sites, which can offer customisation, allowing them to tailor-make their own products. In addition, they may also want those online businesses which frequently promote some new items on their web sites.

If the customers demand is for low price products, they may select those online businesses which can provide lower prices or e-coupon, or advertise sales promotions on their web sites.

If customers are getting used to particular brands or products, they may prefer those online businesses which can provide personalized services to them so that updated information about particular brands can be obtained easily.

If customers have a habit of buying the same highquality products, they will be concerned about the user rating of these products and also the personalized services about the history of their purchasing records.

Relationship of E-marketing mix model & psychological factors specific to web site

If customers are annoyed by the effect of web animation and prefer a good design interface, only those web sites with less animation effects and a good user interface (e.g. list box) will be suitable for them.

If consumers make a high demand on the services (including searching, communication, security) and product information, those web sites which can provide: a strong searching mechanism, a good communication tool such as email facility, chat-room service, and a high security standard such as 128-bit encryption standard and detailed product features - will be most suitable for them.

IV. Conclusion

By integrating the E-marketing mix model of a particular business with psychological factors of customer behavior, the target customers can easily be found. If only the target customers are allowed to enter the business web site and those visitors who are not their target customers are filtered out, it can reduce the workload on the business web site. Furthermore, when more target customers are directed to a particular business web site, the business can generate more profits. One of the future enhancements of this paper is to develop an intelligent agent to provide convenience to customers as well as attracting more potential customers to business web sites based on the corresponding e-marketing mix of particular business.

References

- Kirthi Kalyanam & Shelby McIntyre "The Marketing Mix: A Contribution of the E-Tailing Wars," Journal of the Academy of Marketing Science, 30, No. 4, 2002, p. 483-495
- [2] McCarthy, E. Jerome "Basic marketing: A Managerial Approach. Homewood, IL: Irwin.", 1960
- [3] Retailers' Search Engines Boost Online Sales, <u>http://www.realseo.com/archives/cat_search_engines_news.html</u>, November 2004
- [4] SpecDirect, Case Studies:
- <u>http://www.specdirect.com/Case_Studies.asp?page_id=17</u> [5] Van Waterschoot, Walter & Christophe Van den Bulte "The 4P
- Classification of the Marketing Mix Revisited," Journal of Marketing, 56 (October), p.83-93