

MARKETING EDUCATION: PERSPECTIVES OF HIGHLY INVOLVED E-BUSINESS PRACTITIONERS

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ABSTRACT

Practitioner involvement in education can be beneficial in providing links to test practice against theory, to offer authentic, current, and relevant examples to students, and to provide some guidance to faculty in the consideration of curriculum development issues. These links are particularly valuable in the dynamic world of e-commerce. The purpose of this study was to gain insight from electronic-business practitioners who may be considered “highly involved” with e-commerce about their perceptions of the knowledge that students ought to possess for future employability

To marketing practitioners and educators, electronic commerce represents a wealth of challenges. Among the challenges for practitioners are coping with an environment of dynamic change, implementing strategy to utilize and/or respond to technological innovation, and evaluating its effectiveness. Among the challenges for marketing educators are anticipating change, relating theory to innovative practice, and incorporating these ideas into educational curricula in a timely and relevant manner. As in other areas of marketing education, practitioner involvement can be beneficial in providing the link to practice that enables educators to test practice against theory and offer authentic, current, and relevant examples to their students. Because of the dynamic nature of electronic commerce, these practitioner-educator links are particularly crucial. But this raises a relevant question: Do business practitioners with high web involvement possess different perceptions than other business practitioners with respect to the kinds of educational preparation and knowledge students of business should have? One purpose of this investigation was to identify a set of highly web-involved business practitioners, then to ascertain whether these practitioners’ perceptions about marketing education differed from the perceptions of less web-involved practitioners. These perceptions could offer insights about future directions for marketing curriculum.

BACKGROUND

As noted above, one of the challenges for educators in coping with electronic commerce has been to anticipate change and its implications for marketing education. For example, O.C. Ferrell identified information technology as the “driving force that will change the way marketing is conducted by organizations and the methods of instruction used by marketing faculty” (Ferrell 1995, p. 6). Likewise, others have noted the importance of technology (Smart, Tomkovick, Jones, and Menon 1999) and students’ skill sets (Floyd and Gordon 1998), as the twenty-first century evolves. Atwong and Hugstad (1997) asserted implications for marketing education from the rapid growth of the Internet: that Internet-rich marketing curricula and Internet-savvy marketing graduates would more successfully compete in their respective marketplaces. Archrol and Kotler (1999) anticipated that networking skills would be more valuable in managing interorganizational relationships, and that customer-consulting would overshadow product/service concerns.

Key to maintaining relevance in the classroom is staying current with marketing practice and adjusting teaching practices and curricula to coincide with changes in the marketplace. This requires that educators have strong connections to the practice of electronic commerce and monitor the cycles of successes and failures. Volumes have been written in the popular press about the practice of electronic commerce as it affects marketing functions. However, there has been little focus on theory (such as “Is the Internet changing marketing, or vice versa?” Rigdon 1999) or underlying principles (James 2000). Conversely, there is a wealth of practitioner examples and opinions on specific marketing applications, such as public relations, business-to-business relations, Internet advertising, sales, technology management, and e-tailing. These are extremely useful to educators in providing up-to-date examples of electronic commerce successes and failures.

Yet, there is little evidence in the marketing literature that practitioners have been directly involved in the development of innovations in marketing education to keep pace with the continual changes in the realm of electronic

commerce. Williams et al. (2000) consulted business leaders and economists in their study of issues related to electronic commerce to be discussed in business classes. While not specifically dealing with electronic commerce, Karathanos focused on developing educational quality through partnerships with business (1999). Others have noted the importance of a market-orientation (such as employers of marketing graduates), vs. a customer-orientation (the students), in assessing educational quality (Scrabec 2000; Bailey and Dangerfield 2000).

In summary, recent literature has focused on the effects of technology on the practice of marketing or on outcomes marketing educators might seek to achieve regarding students' preparation in electronic commerce. However, little has addressed specific curricula issues related to electronic commerce. This investigation was undertaken, therefore, to begin to fill this void. We sought to identify topics within the scope of a marketing curriculum that could underscore an understanding of current and potential electronic commerce activities. One source for this would be practitioners of electronic commerce.

METHODS

The investigation utilized a descriptive research design, through use of a mailed survey to 2,000 businesses drawn from a population of firms taken from a nationally recognized electronic database of businesses. Industry categories selected for the study were restricted to those that emphasized business-to-consumer sales in a large mid-western state. These industries were selected because our primary interest was in the final stage of the value chain. We do not mean to imply that business-to-business marketing is not an avenue for web-based activities. In fact, there are great opportunities for web-based marketing activities in the business-to-business arena. However, there appears to be a larger gap between possibilities and practice in the business-to-consumer arena. With micro-marketing and mass-customization becoming more common, we believe that business-to-consumer web-based marketing deserves particular attention.

Businesses selected for the sample were sent a pre-notification letter explaining the study and advising them that a survey would arrive in about one week. A week following the mailing of the survey, a follow-up letter was sent requesting completion of the survey, if that had not already been done. A telephone number was also provided for potential respondents to call for a replacement for undelivered or misplaced surveys. The survey was directed at business owners or on-site managers.

The survey instrument consisted of a booklet design including (1) questions allowing for the identification of e-commerce practitioners, (2) questions regarding their expected hiring practices, (3) questions regarding particular knowledge areas a marketing student should possess,

and (4) demographic questions, including their businesses' actual sales for 1999, from both traditional means and from the Internet, and the anticipated percentage of their 2000 and 2005 sales attributable to the Internet.

E-commerce practitioners were identified through a series of questions about the importance to their businesses of computer and Internet use in selected areas. The specific questions were:

- a. *How important are personal computers to the operation of your business?*
- b. *How important is the Internet, currently, for your sales to customers?*
- c. *How important is the Internet, currently, for your interaction with suppliers?*
- d. *How important is the Internet, currently, for your interaction with financial institutions?*

Respondents indicated their opinions on a four-point scale (1 = *very unimportant* to 4 = *very important*), anchored only at the end values. A four-point scale was selected because of its use in other studies with good results in avoiding the overemphasis on a neutral midpoint (Bearden and Netemeyer 1999).

In particular, the electronic commerce practitioners of interest to this study would be those for whom use of the Internet was very important to their businesses. In the context of the four questions stated above, the concept of importance can be interpreted as a behavioral construct. That is if personal computers are important to the operation of a business and the Internet is important for current sales to customers, and if the Internet is important for current interaction with suppliers, and if the Internet is important for current interaction with financial institutions, then it seems quite reasonable to presume that those businesses currently utilize personal computers and/or the Internet in their operations. Firms who are not currently using personal computers and/or the Internet would be unlikely to respond that these tools are important to their operations. Thus, we will consider businesses with high importance scores to be highly involved with e-commerce.

To identify hiring perceptions, respondents were asked to indicate their preference for hiring, their likelihood of hiring, and the number of graduates they expected to hire in the following two years with a retailing degree, a marketing degree, or some background in electronic commerce. To determine the particular knowledge areas relevant in educational training for prospective employees, the respondents were asked to indicate their perceived level of importance for fifteen knowledge areas. The knowledge areas included topics traditionally found in a marketing or retailing curriculum, plus other skills areas. Their ratings were based on a four-point scale (1 = *very unimportant* to 4 = *very important*.)

Finally, demographic data included characteristics of the practitioners' businesses, such as number of employ-

ees, business classification (independent, chain, franchise), the nature of their business (proprietorship, partnership, corporation), current dollar value of sales for 1999, current percentage of sales attributable to the Internet for 1999, and the anticipated percentage of sales attributable to the Internet for 2000 and 2005. Certain personal information was also requested (age and highest level of education) for comparison purposes.

FINDINGS AND DISCUSSION

One hundred eighty-seven surveys were returned, for a response rate of 9.4 percent. To determine if non-responders were different from responders, t-tests of independent samples were conducted using early and late responders, a technique described in Churchill (2001), and elsewhere (Erevelles et al. 2000; Lambert and Harrington 1990; Armstrong and Overton 1977). No significant differences ($\alpha = .05$) were found for the earliest versus the latest one-third of respondents on demographic variables (number of employees, annual sales in dollars or percent attributable to the Internet, and age). Chi square tests of association revealed no significant relationships ($\alpha = .05$) between early and late responders on type of business (independent vs. not independent), ownership (corporation vs. partnership/proprietorship), type of goods sold (goods vs. services), and owner/manager's educational level. Finally, no significant differences ($\alpha = .05$) were found between early and late responders on any of the fifteen knowledge areas or on any of the four questions used to identify e-business practitioners. Because the relevant statistical tests account for sample size (and differences in size between groups) they provide a statistically sound basis upon which to conclude that there was no evidence of non-response bias.

The Highly Involved E-Commerce Users

The next task was to identify a set of highly involved e-commerce users. To accomplish this, respondents' scores on the four computer/Internet questions were summated, yielding a range of scores from 4 to 16, for purposes of this study called the "high-involvement" score. The mean high-involvement score was 9.2, with a standard deviation of 2.63; the median and mode were both 9. We paralleled Rogers' "High-involvement adopter" paradigm (Rogers 1995) to identify the high-involvement users. Thus, we used one standard deviation above the mean as a criterion for identifying the high-involvement users. This resulted in a score of 11.83, which we have rounded to 12, as the break-point for the summated scores. This translates into importance ratings of three or higher on the four-point scales for personal computers being important to the operation of a business, for the Internet being important for current sales to customers, for the Internet being important for current interaction with suppliers,

and/or for the Internet being important for current interaction with financial institutions.

In our study, firms with a "high-involvement" score of 12 or above numbered 36, or 21.1 percent of the sample, which turns out to be similar to the sixteen percent for "innovators" and "early adopters" in Rogers' paradigm. This group of respondents, then, will be identified throughout the rest of this paper as the "High-Involvement Users."

Could these High-Involvement Users be further distinguished by their perceptions or behaviors? Respondents to the survey were also asked a question regarding their expectations about the importance of the Internet for their business in five years (scaled 1, *much less important than now*, to 4, *much more important than now*.) The High-Involvement Users' mean rating was 3.69. While respondents may have had a general upward bias in rating items such as those used in this study, the absolute rating is of less importance than the comparison of scores between groups or a comparison of one rating with another.

We found that the High-Involvement Users' mean of 3.69 was significantly higher ($\alpha = .05$) than the other respondents' mean rating of 3.15. Further, High-Involvement Users were also more likely to have a web site. To the question, "Does your business currently have a web site?" sixty-six respondents (37.3%) of the 177 who answered this question said "yes," while 111 (62.7%) said "no." Of the 36 High-Involvement User firms, 23 (63.9%) had a web site, while 13 (36.1%) did not. Of the other 134 practitioners, those with high-involvement scores below 12, only 41 (30.6%) did have a web site, while 93 (69.4%) did not. In a crosstabulation of the two variables, having a web site (yes vs. no) and categorized high-involvement scores (less than 12 vs. greater than or equal to 12), a Fisher's Exact Test was significant ($\alpha = .05$). Consequently, the results revealed that not only were the High-Involvement Users more likely to anticipate greater importance of the Internet in their businesses' future, they were also more engaged in current Internet use via their own web sites.

When the high-involvement score was correlated with the respondents' business sales (current and anticipated future sales from the Internet), the results shown in Table 1 resulted.

There was no significant correlation between the high-involvement score and the 1999 actual sales; nor were there significant correlations between the high-involvement score and the 1999 percentage of sales attributable to the Internet or the anticipated 2000 Internet sales. However, a significant, though moderate, positive correlation existed between the High-Involvements' scores and their anticipated 2005 sales attributable to the Internet. There were stronger correlations between the respondents' 1999 percentage of Internet sales and their anticipated 2000 and 2005 sales attributable to the Internet, and between their anticipated 2000 Internet sales and their anticipated 2005 Internet sales. In summary, the High-

TABLE 1
CORRELATIONS OF HIGH-INVOLVEMENT USERS' SCORES WITH SALES

	1999 Sales Dollar Value	1999 Sales Percent from Internet	2000 Sales Percent from Internet	2005 Sales Percent from Internet
Summated Score	.120* .1085 108	.013 .4405 132	.073 .2155 119	.260 .0035 107
1999 Sales Dollar Value		-.030 .3815 102	-.054 .33085 88	-.088 .2185 80
1999 Sales Percent from Internet			.884 .0000 118	.602 .0000 106
2000 Sales Percent from Internet				.804 .0000 108
*Each cell contains: Pearson correlation coefficient, one-tailed significance level, and n.				

Involvement Users appeared to hold positive perceptions about their current and future use of the Internet. Further, these perceptions correlated with their anticipated future sales performance on the Internet.

To determine if the High-Involvement Users differed in other ways, further analyses were conducted on demographic characteristics. The High-Involvement Users were virtually indistinguishable from other business practitioners in the sample on most demographic characteristics. T-tests showed no significant differences at a .05 level in the number of employees (full-time, part-time, at their location, and throughout the state), sales, or the owner/managers' age. Likewise, no significant associations resulted from Fisher's Exact Tests for the nature of business (corporation vs. partnership/proprietorship), types of goods sold (goods vs. services) or owner/manager's educational level. However, a significant difference did exist between the High-Involvement Users and others on their anticipated 2005 Internet sales. High-Involvement Users anticipated an average of 26.43 percent of their sales to be Internet-derived, while the others' mean was 12.57 percent, a t test result significant at .018.

Finally, crosstabulations between the high-involvement summated scores (categorized into two groups, those below 12 and those at 12 and above) with type of business arrangement, showed that High-Involvement Users were less likely to work for independent firms

(versus chains, franchises, or "other") than other business practitioners (see Table 2). Less than sixty percent of the High-Involvement Users were from independent firms, while almost eighty-five percent of other practitioners were from firms characterized as independent.

High-Involvement Users' Views of Educational Preparation.

In this study we wanted to investigate the perceptions of highly involved users of electronic commerce regarding the importance of certain knowledge areas in marketing education. Consequently, respondents were asked to respond to the following question, "When you consider the educational training that an ideal employee would have, how important do you consider knowledge in the following areas?" with response categories ranging from 1 (*very unimportant*) to 4 (*very important*) for fifteen areas. T-tests for independent samples were conducted for the High-Involvement Users versus the others on these ratings. Results are provided in Table 3, with the knowledge areas listed in descending order of importance to the High-Involvement Users. In all fifteen areas, the High-Involvement Users had higher mean ratings than the others. The ratings were significantly higher on ten of the fifteen areas at $\alpha = .05$, and were higher on two others at $\alpha = .10$. For only three of the fifteen knowledge areas rated

TABLE 2
CROSSTABULATION OF BUSINESS ARRANGEMENT BY HIGH-INVOLVEMENT
SCORE FOR HIGH-INVOLVEMENT USERS AND OTHERS

Business Arrangement	High-Involvement Users (E-score = 12+)	Others (E-score = < 12)
Independent	20* 58.8 %	109 84.5 %
Chain, franchise, or other arrangement	14 41.2 %	20 15.5 %
*Each cell contains n and column percent, respectively. Fisher's Exact Test significance level (2-sided) was .003.		

was the higher importance rating for High-Involvement Users not significantly higher than for other businesses in the sample.

Most notably, the significant differences involved customer-relationship or communication areas: interpersonal skills, consumer behavior, e-commerce, advertising/promotions, creative writing, and graphics, for example. Several of the other skills related more to the functions of the operation: purchasing, merchandising fundamentals, retailing strategy, and channels of distribution. Worth noting is that the High-Involvement Users' rating on the "e-commerce" area was their seventh highest rating, while for the others, that area was rated twelfth of the fifteen areas. While respondents had the opportunity to write in other knowledge areas not identified in the list, none did so.

The respondents were asked questions intended to uncover the extent to which these employers expected to hire employees capable of conducting e-business. In two separate questions, respondents were asked to indicate their preference for, and their likelihood of, hiring a potential employee with a degree in retailing, a degree in marketing, and with some background in e-commerce. Respondents indicated both their preference and their likelihood on a 0 to 10 point scale (with 0 representing *not at all likely* and 10 representing *extremely likely*). Independent sample t-tests were conducted on the differences in mean ratings between the High-Involvement Users and others. In every case the High-Involvement Users rated the items higher on average than did the other group. The mean difference was significantly ($\alpha = .05$) higher for five of the six items rated. Results are given in Table 4.

The High-Involvement Users were more likely than others to express a *preference* for hiring a graduate with a marketing degree and more likely to *prefer* hiring a graduate with a background in electronic commerce.

Further, the High-Involvement Users were more *likely* than the other practitioners to hire a graduate with a degree in retailing, a degree in marketing, or with some background in electronic commerce.

Finally, when asked how many college graduates they *expected* to hire in the next two years, with particular bachelor's degrees and some background in electronic commerce, there were significant differences between High-Involvement Users and other business practitioners. While the relationships between High-Involvement Users and others in their expectations of hiring a graduate in retailing was not significant, fully one-third (33.3%) of High-Involvement Users (compared with only 11.8% of others) expected to hire a graduate with a degree in marketing (significant Fishers' Exact Test of .016). Even more striking was the percent of High-Involvement Users (39.3, compared with 19.4% for other practitioners) who expected to hire, in the next two years, a college graduate with some background in electronic commerce (Fisher's Exact Test significant at .043).

CONCLUSIONS AND IDEAS FOR FUTURE STUDY

High-Involvement Users of electronic commerce do appear to be identifiable. They appear to have different perceptions from other business practitioners about the educational qualifications of the employees that they will hire, and different expectations for future hiring. Notably, they have different expectations about their businesses' sales performance attributable to the Internet.

For educators, these distinctions are relevant, in a number of respects. First, this provides some direction for marketing education, at least in the near term. In the range of topics rated by the respondents, it is true that the High-Involvement Users held knowledge about e-commerce to

TABLE 3
T-TESTS OF HIGH-INVOLVEMENT USERS VS. OTHERS
ON KNOWLEDGE AREAS

Knowledge Areas	n	Means	1-Tailed Significance
Customer service *	31*** 116	3.81 3.66	.0635
Interpersonal skills **	31 114	3.74 3.46	.0035
Consumer behavior **	33 115	3.57 3.23	.0035
Practical experience	31 115	3.35 3.23	.2295
Basic understanding of business operations	32 115	3.31 3.16	.1245
Ability to analyze and interpret data *	32 114	3.19 2.95	.0575
E-commerce **	30 114	3.13 2.46	.0000
Advertising/promotions **	30 115	3.03 2.72	.0135
Purchasing **	31 114	2.84 2.50	.0095
Basic understanding of retailing	31 111	2.81 2.77	.4140
Merchandising fundamentals **	31 112	2.81 2.54	.0225
Retailing strategy **	29 112	2.79 2.49	.0140
Channels of distribution **	28 112	2.64 2.15	.0035
Creative writing **	31 113	2.61 2.26	.0125
Graphics **	29 113	2.38 2.10	.0365
* High-Involvement Users mean is significantly higher than for others at $\alpha = 0.10$. ** High-Involvement Users mean is significantly higher than for others at $\alpha = 0.05$. *** The top number in this and next column represents the High-Involvement Users, while the bottom number represents the Others. Differences in sample sizes are accounted for in the calculation of t-test significance levels.			

TABLE 4
T-TESTS OF HIGH-INVOLVEMENT USERS VS. OTHERS ON
HIRING PREFERENCES AND EXPECTATIONS

Qualifications	n	Means	1-Tailed Significance
Prefer a degree in retailing	28*** 106	4.82 4.46	.3035
Prefer a degree in marketing *	31 105	7.32 4.95	.0000
Prefer some background in electronic commerce *	31 106	7.48 5.25	.0000
Likely to hire a degree in retailing **	30 99	4.87 3.40	.0140
Likely to hire a degree in marketing *	31 99	6.77 4.10	.0000
Likely to hire some background in electronic commerce *	30 98	6.30 4.09	.0000
* High-Involvement Users mean is significantly higher than for others at $\alpha = 0.01$. ** High-Involvement Users mean is significantly higher than for others at $\alpha = 0.05$. *** The top number in this and next column represents the High-Involvement Users, while the bottom number represents the Others. Differences in sample sizes are accounted for in the calculation of t-test significance levels.			

be more important than other practitioners held it to be. However, it is also true, and perhaps more useful for educators, that the High-Involvement Users rated other knowledge areas higher than e-commerce, notably customer service, interpersonal communications, consumer behavior, and the ability to analyze and interpret data, for example. They seem to be saying that a traditional education will still serve a student well, for at least some time into the future. Given the slow pace of curricular change at most academic institutions, we educators might take some comfort in the stability of the traditional curriculum for meeting the needs of a changing marketplace.

However, indicators clearly exist for devoting more attention to the call by High-Involvement Users for graduates who can meet their electronic commerce needs in the future. Nearly forty percent expected to hire someone with an e-commerce background in the next two years. Given the uncertain e-economic environment of the early twenty first century, students with a strong traditional foundation along with a basic appreciation for, and understanding of, e-commerce should be well positioned for launching successful marketing careers.

As we seek to identify business practitioners for short- and long-term alliances (such as for classroom speaking, membership on advisory boards, or placement for interns), practitioners such as the High-Involvement Users are likely to provide better examples of business leadership and forward thinking in the area of e-commerce. Further, paying attention to High-Involvement Users such as these might lead us to better evaluate other service programs, such as academic or career advising, and to be better counselors or mentors for students interested in pursuing marketing related careers.

There is more to be learned. It would be desirable to expand our understanding of the High-Involvement User group. These respondents were solicited from organizations engaged primarily in business-to-consumer relationships. Do the attributes identified in this study apply in business-to-business relationships, as well? Do they apply internationally? In addition, it would be helpful to know, in greater detail, the aspects of each knowledge area that the High-Involvement Users value. For example, one knowledge area that differed between High-Involvement Users and others was retailing strategy. Specifically,

what aspects of retailing strategy are important to High-Involvement Users? Answering these and other questions

will help us, as educators, to better understand how we can improve e-commerce education.

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