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Generic Strategies for Business-to-Consumer E-Commerce

Youlong Zhuang
University of Missouri-Columbia

Albert Lederer
University of Kentucky

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Youlong Zhuang
Univerity of Missouri–Columbia
huangy@missouri.edu

Albert L. Lederer
Univerity of Kentucky
lederer@uky.edu

Abstract

Business-to-consumer e-commerce transactions continue to increase rapidly while many sites are shutting down. This situation prompts both researchers and managers to wonder what e-commerce strategies retailers are applying to compete successfully. The current study used an email and Web-based survey of 458 retailers from two major portals to identify the benefits of their e-commerce sites. A cluster analysis identified three types of e-commerce retailer strategies: Cost Leadership, Differentiation, and Differentiation with Integration. Further analysis showed that Cost Leadership retailers outperformed Differentiation retailers in both e-commerce and overall firm performance. Differentiation retailers outperformed Differentiation with Integration retailers. Researchers can use the strategies identified here as variables in their future work. Managers might reconsider their own strategies in light of these findings.

Keywords: Electronic commerce, e-commerce strategy, electronic retailing

Introduction

Retailers today are increasingly using e-commerce to compete. For some, e-commerce is completely new. For many, the development of a successful e-commerce strategy is a substantial challenge. But what are the potential e-commerce strategies that retailers are following?

Managers need to understand today's potential retail e-commerce strategies. Many online stores have failed in the past few years leaving managers wondering what strategy they should follow — something traditional, something new, or a combination of the two? They want to know the e-commerce strategy that is most likely to enable their firms to survive and prosper.

Researchers need to understand today's potential retail e-commerce strategies. They have proposed and confirmed the existence of classifications of strategies for the conventional business world. But do such traditional business strategies still apply in e-commerce? If so, do different ones result in different performance? If not, what are the new e-commerce strategies?

The purpose of the current research was to answer the question, what are today's e-commerce strategies among retail firms? Secondarily, it asked, how does their performance differ?

Business Strategy

Researchers have attempted to classify business strategies to provide meaningful implications for management (Chrisman et al. 1988). Placing a firm in one group would suggest that its business decisions differ from those in another. Its performance would also be expected to differ.

Porter's three basic generic strategies of cost leadership, differentiation, and niche represent one such classification scheme (Porter 1980). Firms that apply a cost leadership strategy try to gain competitive advantage by lowering their costs. Firms that apply a differentiation strategy try to gain competitive advantage by providing customer value distinct from that offered by their

competitors. Finally, firms that apply a niche strategy target a specific market segment with either a cost or differentiation approach.

Porter's theory has been applied in the traditional business world but may fit equally well within e-commerce (Porter 2001; Rayport and Jaworski 2002; Zettelmeyer 2000). For example, in the tourism industry, Lowestfare.com aims at providing cost leadership, while Travelocity.com attempts differentiation through better customer service. Lastminute.com implements niche strategy by focusing on cost conscious travelers with the flexibility of traveling on very short notice.

Some observers argue that with the new technological capacities of the Internet, firms can simultaneously compete on the basis of two strategies, cost and differentiation (Cantoni and Rossignoli 2000). For example, Schwab attempts to provide competitive fees for online stock trading as well as high quality customer service.

Another well-known classification scheme of business strategies belongs to Miles and Snow (1978). It is typically viewed as of three or four types. Defenders usually have a highly efficient core technology with a centralized organizational structure. They are typically risk-averse and avoid introducing new products or services. Barnes and Noble, as an example, has been very successful in traditional book retailing. It more recently has attempted to use e-commerce to defend its market share against other online bookstores that are taking its customers.

Prospectors avoid long-term commitments to any type of technological process. They better fit a dynamic environment. As an example, Amazon.com, although a heavy user of information technology, has avoided long-term investment in it to avoid being tied to rapidly changing IT.

Analyzers mix defender and prospector strategies. They maintain a certain level of business risk by waiting to assess the experience of others before entering a market. They balance their technology to serve stable needs with efficiency and dynamic needs with flexibility. Most retailers fall in this category. They have been reluctant to take the risk of the virtual world, but do not want to lose the potential market share available in it.

The reactor makes inconsistent managerial choices. As a result, predicting how it will compare to the other strategy types is difficult. Miles and Snow consider it a non-strategy, but others believe it appropriate in an extremely stable environment (Hrebiniak and Joyce 1985). The e-commerce world is far from such an environment. Perhaps, the reactor approach is therefore not actually a strategy in e-commerce, although organizations might still make many inconsistent managerial choices with regard to it.

E-Commerce Strategy

Strategic alignment between IT and business strategy has become one of the most important issues facing business and IS executives (Computer Sciences Corp. 1998). To align their IT and business strategies, firms integrate the planning processes for each (Henderson and Venkatraman 1999). This enables IT both to support and shape business strategy.

E-commerce, as today's increasingly emerging application of IT, can thus be used to support and shape business strategy. As an example of support, if a firm's business strategy is to provide low cost, the firm's e-commerce strategy can focus on providing more efficient transaction processing by reducing the costs of order entry, billing, customer support, and marketing. As an example of shaping business strategy, when management plans market expansion in e-commerce, it no longer considers the numbers of their online shoppers who require location in the proximity, but must instead work harder with its shipping firms to increase distribution efficiency (Alba et al. 1997).

Such examples not only suggest the existence of e-commerce strategy, but also illustrate how business strategy and e-commerce strategy can mirror each other. That is, depending on its business strategy in Porter's terms, a firm's e-commerce strategy might use the Internet to lower its cost of doing business, expand its market share, or provide better customer service. One the other hand in Miles and Snow's terms, a firm may invest in e-commerce because it wants to be the "first mover" in its industry, react to its competitors' e-commerce efforts, or simply "test the water" in this new environment.

Independent Variables to Identify E-Commerce Strategy

Thus, the accomplishments of e-commerce would be expected to reflect realized business strategy. A through literature review of both academic and trade journals, without consideration of any specific strategy classification scheme, identified 31 e-commerce accomplishments. They demonstrate the benefits that retailers seek from their e-commerce effort.

Presumably all retailers are not equally interested in all of these benefits. This would be because different retailers would have different e-commerce strategies to correspond to their different business strategies. For example, reducing the cost of customer support may be a major objective of some retailers. They can use e-commerce to reduce such costs by letting customers learn product prices or track the shipping of their purchases without telephone interaction. Other retailers might emphasize other benefits to correspond to the particular goals in their business strategies.

Some firms (such as Miles and Snow's prospectors), who depend heavily on e-commerce, might seek the back-end efficiencies of online billing and auditing more so than other firms (such as Miles and Snow's reactors) who are risk averse and reluctant to make the most of e-commerce until they see how others use it. These reactors may delay out of the fear of security breaches because they feel that e-commerce security remains risky.

Previous research has shown that similar, general IT benefits predict business strategies (Lederer, Mirchandani, and Sims 1997). Thus, clusters of these benefits as achieved by different retailers are used in the current study to identify e-commerce strategies.

Dependent Variables: Firm Performance and E-Commerce Performance

Retailers presumably choose their business strategies (and hence e-commerce strategies) to affect their performance. Ironically, that assessment of performance resulting from e-commerce— in fact, from any IT—may be difficult. The intangible value of IT has made it common in research to employ perceptual assessment of its accomplishments.

For example, one study of the impact of IT in traditional retailing used ten scaled perceptual items (Powell and Dent-Micallef 1997). The current research adopted two performance variables from that study, respectively analogous to IT performance and overall company performance. Minor adjustments were made to fit e-commerce. In particular, the term, IT, was changed to e-commerce or e-commerce site. The e-commerce performance items in Table 1 directly represent effects attributable to e-commerce while the firm performance items in Table 2 represent the synergistic organizational outcomes after e-commerce implementation.

Table 1. E-Commerce Performance Measures

EP1: E-commerce applications have dramatically increased our productivity.
EP2: E-commerce applications have improved our competitive position.
EP3: E-commerce applications have dramatically increased our sales.
EP4: E-commerce applications have dramatically increased our profitability.
EP5: E-commerce applications have improved our overall performance.

Table 2. Firm Performance Measures

FP1: Since we built our e-commerce site, our financial performance has been outstanding.
FP2: Since we built our e-commerce site, our financial performance has exceeded our competitors'.
FP3: Since we built our e-commerce site, our sales growth has been outstanding.
FP4: Since we built our e-commerce site, we have been more profitable than our competitors.
FP5: Since we built our e-commerce site, our sales growth has exceeded our competitors'.

Similar subjective performance measures have been widely used in organizational research (Lawrence and Lorsch 1967; Dess 1987; Powell 1992). Such measures are valued because varying firm accounting conventions do not affect them and because financial information is often unavailable to the public.

Research Propositions

This research attempted to answer the following two questions. First, are there distinct e-commerce strategies applied by retailers? The presumption behind this question is that groups of the benefits would reflect such strategies. An affirmative answer might support the contention above that organizations do follow distinct e-commerce strategies linked to business strategies. Second, if such e-commerce strategies exist, do different ones result in better performance? Widely different performance among retailers might suggest that dissimilar strategies would lead to such differences. In effect, the following two propositions are tested:

Proposition 1. There are different types of e-commerce strategies such that retailers place varying degrees of emphasis on different e-commerce benefits for each.

Proposition 2. The most effective e-commerce strategy will emphasize e-commerce benefits different from other e-commerce strategies.

Methodology

The research focused on the retail industry for several reasons. The industry has been an early participant in e-commerce with substantial, potential benefits from it. Due to the Internet's surging popularity and the increased consumer confidence in its security, business-to-consumer e-commerce retailing has become more attractive and popular (Guay and Ettwein 1998). Moreover, retailers often use IT to improve customer service, reduce costs, and compete more effectively (Moriarty and Swartz 1989). Such retailers as Wal-Mart and Tesco have created substantial competitive advantage via e-commerce (Hackbarth and Kettinger 1999). Many dot coms have failed, but business-to-consumer retail sales continue to grow (Biggs 2001).

Subjects were managers of their organization's e-commerce. Two major retailer portals were selected because they were popular, well-respected, and represented many retailers and a wide variety of products (Willmott 2000). The first, www.mysimon.com, had over 2,000 retailers at the time of data collection. The other, stores.yahoo.com, had over 5,000. Many sites appeared on both so duplicates were eliminated. E-mail addresses were collected from each site.

To improve data reliability and validity, the questionnaires were evaluated rigorously by pilot testing prior to administration. Five local retailers with e-commerce sites were selected to represent various sizes and products. These pilot subjects completed the survey and provided face-to-face comments. They discussed the benefits and features of their sites, and their oral comments corroborated their survey answers. The survey was revised after each of the first four pilot tests to make it clearer and easier to complete. The fifth resulted in no changes.

A short message was then e-mailed to the primary subjects, the managers responsible for their organizations' e-commerce sites at the 4,088 companies on the two e-commerce retail portals. The message included a link to the survey Web site.

The survey asked them to identify the address of their e-commerce site. It also contained items for the e-commerce benefits, as well as the e-commerce performance (Table 1) and overall company performance items (Table 2). Subjects responded on 1 (strongly disagree) to 5 (strongly agree) scales. Finally, the instrument asked demographic questions.

After respondents completed the survey and submitted it online, they received a request that a second subject in their organization complete a three-minute survey. The secondary survey contained the e-commerce and firm performance items, demographics questions, and a request for the e-commerce site address to link to the primary instrument.

Data Analysis

Exploratory Factor Analysis of the 31 Benefits

Exploratory factor analysis was applied to the 31 benefits items using the principal component extraction method and Varimax rotation with Kaiser Normalization and Eigenvalues exceeding one. (Varimax was chosen under the assumption that different

retailers seek different benefits.) It required that factor loadings exceed .50, and that each item load on exactly one factor. One item was deleted on each subsequent run for failing to meet the criteria finally leaving five factors with 27 items. Table 3 shows the final factors with meaningful names, loadings, Cronbach's alpha, Eigenvalues, and variances explained.

Table 3. Final Rotated Component Matrix of Exploratory Factor Analysis (N=458)

	F1	F2	F3	F4	F5
Factor 1 Back-end Efficiency (Eigenvalue=4.39 , Variance Explained=16.2%, alpha=.89)					
BNFT5 facilitated order entry processing	.73	.13	.09	.20	.17
BNFT2 facilitated billing	.71	.19	.28	.13	.02
BNFT3 facilitated electronic auditing	.71	.12	.33	.06	-.03
BNFT9 improved control of data	.69	.19	.26	.14	.25
BNFT12 improved operational efficiency	.68	.21	.07	.42	.28
BNFT6 facilitated shipment tracing	.65	.08	.30	.04	.10
BNFT11 improved operational effectiveness	.62	.26	.07	.43	.32
Factor 2 Market Expansion (Eigenvalue=3.98 , Variance Explained=14.8%, alpha=.86)					
BNFT18 provided access to new markets	.12	.80	.04	.07	-.01
BNFT22 provided opportunities for niche marketing	.09	.74	.10	.16	.03
BNFT13 increased customer awareness of our products/ services	.15	.73	-.06	.06	.31
BNFT14 increased sales	.19	.71	-.07	.13	.27
BNFT21 provided customers with better information about products/services	.09	.60	.04	.19	.43
BNFT17 permitted differentiating our products/services from those of competitors	.15	.58	.22	.06	.31
BNFT19 provided better information for management decision making	.39	.51	.33	.14	.20
Factor 3 Inventory Management (Eigenvalue=3.35 , Variance Explained=12.5%, alpha=.88)					
BNFT30 streamlined the inventory replenishment	.27	.07	.82	.22	.05
BNFT31 streamlined the procurement processes	.27	.10	.80	.22	.06
BNFT29 reduced the time required to repackage products/ services	.25	-.01	.72	.17	.11
BNFT27 reduced inventory costs	.16	.04	.66	.44	.14
Factor 4 Cost Reduction (Eigenvalue=3.06, Variance Explained=11.3%, alpha=.86)					
BNFT23 reduced administrative costs	.22	.24	.23	.79	.02
BNFT24 reduced customer support costs	.25	.12	.20	.78	.13
BNFT28 reduced marketing costs	.07	.10	.30	.73	.11
BNFT26 reduced information processing costs	.26	.13	.49	.58	.05
Factor 5 Customer Service (Eigenvalue=2.86 , Variance Explained=10.6%, alpha=.79)					
BNFT15 permitted better interaction with customers	.09	.43	-.01	.09	.73
BNFT20 provided customer intimacy	.01	.20	.30	.01	.66
BNFT10 improved customer service	.38	.14	-.01	.26	.64
BNFT16 permitted better understanding of customers	.19	.46	.22	.01	.58
BNFT7 helped maintain current customers	.46	.09	-.03	.12	.56

All of the items in the final structure seem reasonably well placed. Those in Back-end Efficiency focus generally on accounting functions. Those in Market Expansion emphasize the selling of products and services. Inventory Management items stress procuring, storing, and repackaging merchandise. Cost Reduction items focus on reduced costs in various areas of the organization. Finally, the items in Customer Service concern improved relations with customers.

Perceptual Bias

The effect of functional background of informants in survey data can produce perceptual bias (Martinez and Dorfman 1998) that reduces data reliability (Waller, et al., 1995). Given that a high percentage of the subjects were Web masters or IT managers responsible for justifying the need for their e-commerce sites, their responses may be biased. Discriminant analysis, used to test inter-rater reliability of the five benefits factors across the four informant positions (i.e., CEO or owner; Web master or IT manager; marketing, sales and customer service; other managerial positions), failed to identify any differences (Wilks' Lambda=.68, p=.39). This result is consistent with the absence of perceptual bias based on functional area of responsibility. Moreover an ANOVA test on the functional area showed a difference at the .05 or greater level of significance for only one of the 27 individual items (BNFT28: *Our e-commerce site has reduced marketing cost*s with F=5.64, p=.001, N=458), thus again failing to detect perceptual bias (Olson 1995).

Cluster Analysis

Ward's minimum variance criterion was chosen for a cluster analysis based on its accuracy in identifying clusters in several simulation studies. It has been used in both marketing and information systems research (Punj and Stewart 1983; Segars and Grover 1999). The criterion is minimization of total within-group sums of squares. More specifically, 458 firms were assigned to clusters based on their similarity across all measures of the e-commerce benefits.

In determining the appropriate cluster solution, the statistic pseudo F was used. The pseudo F was defined as the mean square between clusters divided by the mean square within clusters. Clustering solutions, ranging from 2 to 9 clusters, were plotted against pseudo F. Sudden changes in the pseudo F were used to identify the appropriate number of clusters to retain. Semi-partial R square was used to confirm visual conclusions.

The analysis suggested the existence of three distinct clusters across the five e-commerce benefits dimensions. Table 4 shows the mean factor scores and standard deviations of the five factors across the three clusters. It also contains the number of firms within each cluster.

Table 4. Three E-commerce Strategy Profiles: Means and Standard Deviations of Benefits

Dimensions			
	Cluster 1 (n=131)	Cluster 2 (n=99)	Cluster 3 (n=228)
	Mean (std. dev.)	Mean (std. dev.)	Mean (std. dev.)
Back-end Efficiency	4.35 (.55)	2.41 (.82)	3.78 (.59)
Market Expansion	4.56 (.48)	3.46 (.80)	4.20 (.55)
Inventory Management	4.02 (.66)	1.81 (.69)	2.76 (.67)
Cost Reduction	4.45 (.47)	2.00 (.71)	3.17 (.65)
Customer Service	4.28 (.61)	2.98 (.81)	3.84 (.61)

In order to identify the benefits that firms are seeking within each cluster, AONVA with Tukey's test was used to assess the differences among factor means. Table 5 shows the first cluster. Market Expansion, with the highest mean, differed from Back-end Efficiency, Customer Service, and Inventory Management ($p<.05$). Cost Reduction, with the second highest mean, differed from Inventory Management ($p<.05$). We refer to this cluster as the *Cost Leadership* cluster. (Because Market Expansion had the highest mean in all three clusters, we do not refer to any using it.)

Table 5. Comparison of Factor Means within Cost Leadership Cluster (#1)

Factors	N	Subset		
		1	2	3
Market Expansion	131	4.56		
Cost Reduction	131	4.45	4.45	
Back-end Efficiency	131		4.35	
Customer Service	131		4.28	
Inventory Management	131			4.02

Table 6 shows the benefit differences in the second cluster. Market Expansion differed from Customer Service ($p<.05$) and the other three factors. Customer Service differed from Back-end Efficiency, Cost Reduction, and Inventory Management ($p<.05$). Back-end Efficiency differed from Cost Reduction and Inventory Management ($p<.05$). The emphasis on Customer Service in this cluster distinguishes it from the other two clusters, suggesting that differentiation may be the underlining strategy for these firms. We thus refer to this cluster as the *Differentiation* cluster.

Table 6. Comparison of Factor Means within Differentiation Cluster (#2)

Factors	N	Subset			
		1	2	3	4
Market Expansion	99	3.46			
Customer Service	99		2.98		
Back-end Efficiency	99			2.41	
Cost Reduction	99				2.00
Inventory Management	99				1.81

Table 7 shows the benefit differences in the third cluster. Market Expansion again differed from Customer Service ($p<.05$) and the other three factors. Customer Service differed from Cost Reduction, and Inventory Management ($p<.05$). Back-end Efficiency differed from Cost Reduction and Inventory Management ($p<.05$). Cost Reduction differed from Inventory Management ($p<.05$). Due to the prominence of Back-end Efficiency (it did not differ from Customer Service for these firms), we refer to this cluster as the *Differentiation with Integration* cluster.

Table 7. Comparison of Factor Means within Differentiation with Integration Cluster (#3)

Factors	N	Subset			
		1	**2**	**3**	**4**
Market Expansion	228	4.20			
Customer Service	228		3.84		
Back-end Efficiency	228		3.78		
Cost Reduction	228			3.17	
Inventory Management	228				2.76

Table 8 summarizes the mean scores and standard deviations of the e-commerce performance and firm performance constructs for each cluster. Table 9 shows the results of multiple ANOVA tests for differences in the clusters. The tests indicated that the differences were significant for both e-commerce performance and firm performance. The last column (R square) of Table 9 shows that different emphases on e-commerce benefits explain a significant proportion of the variance in the two performance measures.

Table 8. Three E-commerce Strategy Clusters: Means and Standard Deviations of E-Commerce Performance and Firm Performance

	Cost Leadership (#1) (n=131)	**Differentiation** (#2) (n=99)	**Differentiation/ Integration** (#3) (n=228)
	Mean (std. dev.)	Mean (std. dev.)	Mean (std. dev.)
E-commerce Performance	4.43 (.60)	2.74 (.84)	3.84 (.68)
Firm Performance	3.65 (.78)	2.64 (.97)	3.26 (.85)

Table 9. Multiple Analysis of Variance for E-Commerce Performance and Firm Performance Across the Three Clusters

	DF	**Sum of Squares**	**Mean Square**	**F Value (p)**	**R Square**
E-commerce Performance					
Cluster	2	163.57	81.78	167.68 (.0001)	.424
Error	455	221.93	.49		
	457				
Firm Performance					
Cluster	2	57.47	28.73	39.27 (.0001)	.147
Error	455	332.94	.73		
	457				

Table 10 compares the means of the clusters for both e-commerce performance and firm performance. Using Tukey's test, *Cost Leadership* performance was greater than *Differentiation with Integration* performance, and *Differentiation with Integration* performance was greater than *Differentiation* performance for both dependent variables ($p<.001$). These significant differences illustrate that e-commerce performance exhibits a considerable range across the three profiles.

Table 10. Tukey's Test

Comparison of Means of E-commerce Performance among the Three Clusters				
Cluster	**N**	**Cluster Means**		
1: Cost Leadership	131	4.43		
2: Differentiation	99		2.74	
3: Differentiation/ Integration	228			3.84
Comparison of Means of Firm Performance among the Three Clusters				
Cluster	**N**	**Cluster Means**		
1: Cost Leadership	131	3.65		
2: Differentiation	99		2.64	
3: Differentiation/ Integration	228			3.26

Discussion

Based on the five major benefits factors, cluster analysis identified three strategy groups. They are referred to as *Cost Leadership*, D*ifferentiation*, and *Differentiation with Integration*. A noteworthy finding was that the Market Expansion factor provided the greatest benefits in all three strategies.

One of the major changes e-commerce has brought about is interactive marketing. It is much different from traditional mass and direct marketing. It provides access to new markets, opportunities for niche markets, greater customer awareness of the products and services, and thus increased sales. More importantly, it provides customers with better information on products and services to assist in purchasing decisions (Childers, et al. 2001; Ariely 2000).

Second to Market Expansion benefits, each group of retailers had a different focus for its e-commerce endeavor. Companies in the *Cost Leadership* group stress the use of e-commerce as a way to reduce the cost of doing business through lower expenditures for administration, customer support, marketing, and information processing. Companies in the *Differentiation* group take advantage of e-commerce's extra channel to improve Customer Service, and thus better interact with, understand, and maintain current customers, and provide customer intimacy. *Differentiation with Integration* firms resemble *Differentiation* firms except that in addition to attempting to improve Customer Service, they also emphasize the integration of front-end and back-end processes.

Both measures of online retailer performance in this study differed across the three types of firms. *Cost Leadership* firms led the three groups in both e-commerce performance and firm performance. Reducing costs in the digital economy, as in the physical economy, remains a top way to make a profit.

The *Differentiation* firms were lowest in both measures of performance. These firms use Customer Service to distinguish themselves from their competitors. Their performance lagged behind the other firms perhaps because consumers tend to be less loyal in the virtual world (Rayport and Jaworski 2002). Loyalty is especially important to online retailers because it predicts word-of mouth promotion and the willingness to pay more (Srinivasan, et al. 2002).

In fact, the Customer Service of the firms in this group might even help their competitors. For example, a retailer using intelligent software to assist its customers cannot prevent them from purchasing their products elsewhere. The availability of so much information on product prices on Web sites at little or no cost and in a ready to use format (Sharma and Krishnan 2000) also helps make switching costs much lower than in the physical world.

The two performance measures of the *Differentiation with Integration* firms fell below those of the *Cost Leadership* group but above those of the *Differentiation* group. The *Differentiation with Integration* firms vary from *Differentiation* firms in that Back-end Efficiency was equally important to Customer Service in the former whereas Back-end Efficiency was much more important than Customer Service in the former. This relative emphasis on Back-end Efficiency by the *Differentiation with Integration* firms probably explains why they outperformed the *Differentiatio*n group. Back-end Efficiency has, after all, great potential to reduce

costs. (As noted above, the prominence of the *Cost Leadership* group suggested the importance of the impact of Cost Reduction in predicting performance.)

Another way to understand the performance differences between the three types of firms may be through the number of top benefits for each strategy after Market Expansion. More specifically, the *Cost Leadership* group achieved three (Cost Reduction, Back-end Efficiency, and Customer Service) about equally, *Differentiation with Integration* achieved two (Customer Service and Back-end Efficiency) about equally, and *Differentiation* achieved only one (Customer Service). Analogously, *Cost Leadership* had the best performance, *Differentiation with Integration* had the second best, and *Differentiation* had the third best.

This suggests that e-commerce strategy may be broader than traditional retailing strategy. Traditional retailers tend to perform better when they emphasize the few things they do best. However, this study may suggest that online retailers can focus simultaneously on several objectives and gain benefits from all of them. Synergistic effects may be more likely in the e-commerce environment than the traditional one. For example, retailers can reduce order entry processing costs by allowing customers to purchase online; increase their Back-end Efficiency by automatically redirecting orders to suppliers; and improve service by allowing customers to help each other.

Implications for Research

Researchers might use the three strategies identified here as independent, dependent, or control variables in future studies. For example, they might consider in more detail how the strategies predict performance and they might use performance measures different from those in the current study. They might also seek the antecedents of the strategies. For example, they might ask why firms follow their particular e-commerce strategy. In response to the current interest in resource-based theory, they might use e-commerce strategy as a control variable when attempting to find the relationship between various business resources and firm performance (Christiaanse and Venkatraman 2002).

The current study was based on a large-scale survey of many retailers. More might be learned via qualitative research in which the details of these e-commerce strategies could be made more apparent.

The current study identified the strategies realized by the retailers based on the benefits actually accomplished by e-commerce. Future research might focus instead on the methods by which organizations intended to accomplish these benefits.

The current study examined the retail industry. Future research should consider other industries and compare the findings to those in this study. Business strategies differ by industry (Porter 1980), and perhaps e-commerce strategies do likewise.

Much has been written about the importance of the alignment between business strategy and IT strategy. Future research might thus attempt to assess the degree of alignment between e-commerce and business strategy for individual firms. Furthermore, such research might ask if performance is enhanced when the two strategies are aligned.

Finally, although Porter's and Miles and Snow's strategy classifications are both quite popular, this research tended to link retail e-commerce strategies more closely with the former than the latter. Future research might thus tailor items specific to Miles and Snow's categorization scheme in order to examine it more directly.

Conclusion

E-commerce provides benefits to many retailers. Through an examination of these benefits, this research contributed by demonstrating that e-commerce retailers currently follow *Cost Leadership*, *Differentiation*, and *Differentiation with Integration* strategies, and that *Cost Leadership* retailers outperform *Differentiation* retailers who outperform *Differentiation with Integration* retailers. These findings provide a foundation for future researchers to study e-commerce marketing strategies. They also provide implications for retailers who want to get the most from their e-commerce investments.

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