

**RESPONDING TO INDUSTRY CONSOLIDATION
IN FRAGMENTED INDUSTRIES:
THE ROLE OF CAPABILITIES IN SMALL BUSINESS SURVIVAL**

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ABSTRACT

Driven by the competitive pressures that accompany industry consolidation in fragmented industries, small business owners and managers are searching for new ways to gain and sustain competitive advantage. This paper reports the results of a study designed to examine which capabilities help small business managers react to the intensified competition that accompanies industry consolidation. Profiles of capability bundles used by managers in a fragmented industry undergoing industry consolidation, specifically the neighborhood drugstore, are developed and differences in performance among the drugstores are examined. Our results suggest that developing capabilities is important to responding effectively to industry consolidation. Further, firms that focus on developing a broad range of capabilities significantly outperform those firms that develop only a narrow range of capabilities.

INTRODUCTION

Fragmented industries, which are industries where there is no clear industry leader, are of particular interest to small business managers because small- and medium-sized companies populate fragmented industries. Some industries are fragmented due to historical reasons (i.e., firms in the industry historically lacked the resources and abilities to consolidate the industry), while other industries are fragmented due to the underlying economic structure of the industry (Porter, 1980). Economic reasons for industry fragmentation include lack of economies of scale, low entry barriers, high transportation costs of raw materials or finished goods, and specialized customer needs. In industries where there are few economies of scale, large companies do not have an advantage over small companies; thus, small companies can compete as efficiently as large companies. For example, if new product introductions and style changes are essential to competition in an industry, mass production may not make economic sense. Other industries may stay fragmented because low barriers to entry allow easy entrance into the industry. For example, restaurants require such small amounts of capital that new restaurants open daily. High transportation costs may make regional production the only cost-effective means of production, which results in a fragmented industry structure. Finally, industries may be fragmented because the consumers have specialized

needs. For example, homebuyers desire that their real estate agents have detailed knowledge of the local community.

Regardless of the underlying reason for industry fragmentation (i.e., historical or underlying economic industry structure), many industries recently have been consolidating. Competitors have noted the strategic benefits and the ultimate financial returns of consolidating fragmented industries and have been scouting out industries that are fragmented for historical reasons. In addition, advances in technology have changed the underlying economic structures of many industries. Flexible manufacturing technologies have allowed manufacturing companies to not only customize production according to customer tastes, but also produce on a massive scale. Advances in communication technology have resulted in consolidation in service industries such as travel agencies and consulting. Indeed the competitive landscape has been altered in a wide variety of industries. Consolidation in previously fragmented industries has been noted in the hand tool (Cicione, 1999), agriculture (Drabenstott, 1999), solid waste and recycling (Biddle, 1999), commercial banking (Blackwell, 1999), lodging (Nardoza, 1998), textile (Morrissett & Smyth, 1997), and restaurant industries (Anonymous, 1997).

Extant research regarding consolidating fragmented industries has focused primarily on strategies for overcoming fragmentation (e.g., franchising, horizontal mergers and acquisitions, and chaining). Little is known about how small businesses should react to consolidation, if they wish to maintain their independence. This paper seeks to address this shortcoming by reporting the results of a study that assessed the relationships between small business performance and the possession of capabilities in the context of a fragmented industry undergoing consolidation. The current study is based on the premise that the capabilities needed by small firms for survival in the midst of industry consolidation may be unique.

CAPABILITY BUNDLES AND PERFORMANCE

The means by which businesses achieve and sustain a competitive advantage over other firms is a central research thrust of strategic management. For nearly two decades, the dominant research paradigm has been Porter's (1980) competitive forces model. The competitive forces model argues that industry forces determine the intensity of competition, which in turn determines the profit potential for individual firms. Porter suggested that firms should seek attractive niches within an industry that are defensible against both existing and potential competitors. In a fragmented industry, an industry niche could be carved out with a focused-differentiation strategy or a focused-low-cost strategy (Porter, 1980). Both the focused-differentiation and low-cost strategies can be achieved by specializing in a particular product type or segment, serving a limited customer segment, or limiting a firm's geographic area.

More recent research, however, has recognized that the dominant paradigm (i.e., competitive forces model) is incomplete and has begun to incorporate the role of resource-based capabilities in gaining and maintaining competitive advantage (Chandler & Hanks, 1994; Long & Vickers-Koch, 1995; McGee & Finney, 1997). Reaching back to the traditional strategic management concept of distinctive competence (e.g., Selznik, 1957; Andrews, 1971), the resource-based view argues that competitive advantage results from a firm's resources and capabilities. Resources include capital equipment, worker and management skills, reputation, and brand names (Barney, 1991). Resources are not productive in and of themselves, however, and a firm's skill at effectively coordinating and using its resources constitutes the firm's capabilities. In other words, capabilities are a firm's ability to bring various resources together and deploy them advantageously (Day, 1994). While resources are relatively tangible, capabilities are much less so, and are often deeply embedded in

organizational routines and practices, which makes them less subject to imitation by present or potential competitors (Dierickx & Cool, 1989).

The best test of a capability's value is whether it allows the firm to offer superior customer value or permits the business to deliver products or services to customers in an appreciably more cost-effective way. Wal-Mart's cross-docking system is an often-cited example of how an inimitable capability led to competitive advantage (Stalk, Evans, & Shulman, 1992). While Wal-Mart has the same resources (e.g., retail space, employee skills, equipment) as many other discount chains, it is distinguished by its unique capability to manage its resources for maximum productivity. This retail chain's sophisticated cross-docking system provides Wal-Mart with substantial cost advantages by improving its ability to reduce shipping and handling costs.

The interaction between competitive advantage and capabilities is well researched and results suggest that those firms that develop and exploit bundles of capabilities generally outperform firms that do not (Conant, Mokwa, & Varadarajan, 1990; Hambrick, 1983; McDaniels & Kolari, 1987). Indeed, bundling capabilities (i.e., combining capabilities together or layering capabilities) often leads to competitive advantage (Porter, 1996). Yet, the extant literature has generally focused on large companies operating in stable industry contexts (e.g., Chandler & Hanks, 1994; Droge, Vickery, & Markland, 1994). As a consequence, we know very little about the role that bundles of capabilities play in providing a competitive advantage for the small business trying to survive industry consolidation.

There are, however, two research streams that have begun to examine the role that capabilities play in the success of smaller businesses. The first research stream involves entrepreneurial orientation, distinctive marketing competencies, and organizational performance (Conant, Smart, & Solano-Mendez, 1993; Smart & Conant, 1994). Smart and Conant (1994) found a significant relationship between the entrepreneurial orientation (e.g., propensity to take risk, ability to identify new opportunities) of a small business manager and the small business' possession of marketing capabilities (e.g., merchandising presentation, advertising effectiveness, store layout). Further, a link between entrepreneurial orientation and firm performance was found. However, this study stopped short of measuring any direct relationship between marketing capabilities and performance. In a subsequent study (Conant, Smart, & Solano-Mendez, 1993), a link was found between highly focused marketing capabilities and superior organizational performance. Thus, although this research stream focused on marketing capabilities rather than a broad range of capabilities, it does indicate the potential explanatory power of a firm's capabilities.

The second research stream examined the relationship between capabilities and competitive advantage for a broad sample of small, local retailers facing an environmental jolt (i.e., a large, unexpected change in a firm's environment – Meyer, 1982). Specifically, McGee and colleagues examined the competitive situation *immediately after the arrival* of a large, national discount chain into the local competitive environment (McGee, 1996; McGee & Finney, 1997; McGee & Love 1999). Not surprisingly, the arrival of a large, national retailing chain had a negative impact on the performance of smaller, existing retailers in the area (McGee, 1996). More importantly, local retailers that responded to the mass-merchandisers' arrival by intensifying their focus on their own store's capabilities outperformed those who did not (McGee & Finney, 1997; McGee & Love, 1999).

In summary, a search of the existing literature reveals that marketing capabilities are important determinants of organizational performance, and the possession of capabilities are vital to a small firm's survival in the wake of environmental jolts. However, existing studies do not specifically address the context of industry consolidation. Thus, it is important that the

role of capability bundles in surviving consolidating industries be examined. Accordingly, the research question for this study is "Which bundles of capabilities help a small business to gain and sustain competitive advantage in a fragmented industry that is undergoing consolidation?"

In the sections that follow, this paper identifies bundles of capabilities. Because capabilities are more effective when bundled in reinforcing manners (Barney, 1991), a logical next step was to use taxonomy-building procedures to identify profiles of capability bundles. These procedures produced four "generic capability types" that reflect bundles of capabilities for the small independent retailers in a consolidating industry. These four capability types were then compared across a composite performance measure to determine which bundles of capabilities, if any, lead to competitive advantage. The results are presented and discussed along with their implication for both practitioners and researchers. Finally, future research suggestions are offered.

METHODOLOGY

Sample

The traditional U.S. independent retail pharmacy industry was selected as the domain of this study. Members of this industry are typically community drugstores that deliver traditional pharmacy services and whose nonprescription inventory goes beyond health care items to include other merchandise lines traditionally associated with pharmacy sales, such as cosmetics and beauty aids, stationary, tobacco, candy, greeting cards, photographic supplies and similar items (Maline, 1997).

This industry was selected because it is an industry that was previously fragmented, but is rapidly consolidating (Tarlach, 1998). Communities across America have long depended upon their local drugstore for medication, over-the-counter (OTC) products, sundry items, and medical advice. In many small towns and rural areas, the local pharmacist is not only a respected small businessperson, but also the primary allied healthcare professional. Most such local pharmacists owned the small, retail pharmacy in which they work. Until the last several decades when their numbers began a precipitous decline, these independently owned retail establishments ruled the pharmacy marketplace.

Today, the neighborhood drugstore struggles to compete with a variety of retailing outlets. Large chains are starting to dominate the pharmacy marketplace. While total sales have increased for all pharmacies, the market share served by independent pharmacies has declined from nearly 100 percent in 1935 to less than 25 percent today. The number of independent operators has decreased by nearly 50 percent, from more than 50,000 to about 25,000, during the last decade alone (National Community Pharmacy Association, 2000).

Data

A modified version of Dillman's (1978) "total design method"¹ was used in this study to enhance response rate and response quality. Prior to distribution, the survey instrument was pretested on eight independent pharmacists to ensure that there were not any interpretation difficulties. Then, an initial survey-booklet, including a cover letter and a postage-paid return envelope, was sent to 700 independent drugstores randomly selected from the 1,826 independent pharmacies located in the state of Texas in 1997. The cover letter explained the overall goals and objectives of the research project and how the data would be used. A reminder postcard was subsequently mailed to all potential respondents approximately one week after the initial mailing. In addition, a second booklet with a second cover letter was sent to all nonrespondents approximately three weeks after the reminder postcard.

Measuring Capabilities. Capabilities, the primary focus of this study, were measured using an adaptation of the instrument developed by Conant, et al (1993) and subsequently used by McGee and Finney (1997). Some of the Likert-type scale items focused on planning process variables while others focused on marketing effectiveness. This dual focus is consistent with capability scales employed by other researchers (e.g., Hitt & Ireland, 1985). The multiple-item, perceptual scale required respondents to comparatively rate their organization against competitors on twenty-seven capabilities. Twenty-one of the items (e.g., handling customer complaints, effectiveness of pricing strategies, employee training) were evaluated on seven-point scales with values ranging from "much worse" to "much better". Six of the items (e.g., quality of customer service, awareness of store strengths) were evaluated on similar seven-point scales with values ranging from "much higher" to "much lower."

Measuring Organizational Performance. Pharmacy performance was also measured by asking respondents to compare their financial performance to other pharmacies on the following four dimensions: 1) gross profit, 2) net income after taxes, 3) total sales growth, and 4) overall pharmacy performance/success, using the same seven-point Likert scales previously described. Although the merits and potential shortcomings of this measurement approach have been debated in the extant literature, subjective performance measures were chosen for the following reasons. First, small firms are often reluctant to provide financial data (Sapienza, Smith & Gannon, 1988). Second, objective financial data were not publicly available. Third the performance measures used in the current study are quite similar to the measures used by the National Association of Retail Druggists in its surveying activities (Ukens, 1997). Finally, previous research has demonstrated that managerial assessments are generally quite consistent with objective performance data, both internal (Dess & Robinson, 1984) and external (Venkatraman & Ramanujam, 1987) to the organization.

Survey Response

The three-step survey mailing resulted in the return of 286 surveys. Adjustments to the original sample size of 700 resulting from questionnaires that were undeliverable (e.g., business had closed, or no forwarding address provided) reduced the number of independent pharmacists who may have participated to 658. In addition, 16 surveys were excluded from the study because of omitted items. Thus, a total of 270 surveys were available for analysis, representing a 41 percent response rate.

Ninety-three percent of the respondents described themselves as pharmacist/owner, four percent as pharmacy manager, and three percent miscellaneous/other titles. Respondents also indicated that, on average, their pharmacies generated slightly less than \$1 million in annual sales (mean = \$976,889; s.d. = \$863,477) and employed an average of six people (mean = 6.9; s.d. = 3.8). The sample's average annual sales level is comparable to the industry wide average of \$1.15 million (Ukens, 1997), thereby increasing confidence in the study's generalizability.

To detect any potential nonresponse bias, a telephone survey was conducted with forty randomly-selected nonrespondents. Nonrespondents were compared to respondents on the basis of size (square footage), prescription department's size, years in operation, number of employees, and prescription sales as a percentage of total revenues. Comparisons between respondents and nonrespondents using t-tests revealed no significant differences between the two groups at p .05. These findings suggest that non-response bias was negligible. Thus, the results of this study may also be used to make inferences to the entire population of independent pharmacies.

RESULTS

Since this was an exploratory study, one of its major objectives was to provide profiles of capabilities. Cluster analysis was used to develop the profiles because cluster analysis groups firms that exhibit similar characteristics. Because of the large number of variables, it was necessary to reduce the number of variables into factors with factor analysis. The details of the factor analysis and cluster analysis are presented in the Appendix. The cluster analysis resulted in four clusters. The cluster profiles are presented in Table 1.

Table 1
Cluster Profiles
(N=270)

Cluster 1: Well Rounded (n = 93)

The retailers in this group focused on developing and maintaining all capabilities. No capabilities were ignored and most are treated as important.

Cluster 2: Lackers (n = 31)

The retailers in this group were the polar opposite of those in the previous group. There was no particular emphasis on developing or maintaining any of the capabilities.

Cluster 3: Promoters (n = 41)

The retailers in this group focused primarily on promotional and presentation activities. These pharmacies placed a heavy emphasis on advertising, public relations, and store layout and appearance. They placed considerably less emphasis on any of the other capabilities.

Cluster 4: Cost Controllers (n = 105)

The retailers in this group focused primarily on developing and maintaining capabilities in cost control and tight control over pricing. The other capabilities received considerably less emphasis.

Cluster one represents retailers that attempted to develop and maintain strengths in each of the four types of capabilities. We labeled pharmacies in this cluster "Well Rounded." Well Rounded pharmacies did not ignore any major capability. Cluster two represents retailers that were the opposite of those in cluster one. We labeled these pharmacies as "Lackers" because they lacked any capabilities. We labeled the pharmacies in cluster three as "Promoters." Promoters placed a relatively greater emphasis on advertising, public relations activities, and store layout. Finally, we labeled the pharmacies in the fourth cluster as "Cost Controllers." Cost Controllers focused primarily on capabilities involving cost containment and tight control over the store. These firms tended to compete primarily on price.

After grouping the pharmacies into clusters, an ANOVA was used to assess the performance differences among the four identified "capability profiles." Performance was measured using the aggregated performance scale items. As shown in Table 2, statistically significant differences were detected among the groups ($F=12.12$, $p < .001$). Moreover, a Tukey-Kramer paired comparison produced identifiable patterns of performance. Well Rounded retailers outperformed all other retailers. Cost Controllers and Promoters outperformed Lackers, but were essentially equal to each other. Thus, pharmacies that emphasized all four capabilities (service, promotion, market segmentation and cost control) outperformed those that focused on any single group of capabilities. However, pharmacies that emphasized any one of the four capabilities outperformed those retailers that lacked all of the capabilities.

Table 2
Results of Analysis of Variance
Differences in Pharmacy Performance (n = 270)

	Well Rounded (W) mean = .31	Cost Controllers (C) mean=.03	Promoters (P) mean=-.28	Lackers (L) mean=-.64	Univariate F-Value	Tukey Paired Comparison
Relative Performance					12.12***	Well Rounded > All Others Cost Controllers and Promoters > Lackers

DISCUSSION

The results of this study suggest that it may be possible for small retailers to successfully compete in an industry that is undergoing rapid consolidation. The key seems to be developing and maintaining *all* types of capabilities. In other words, the most successful independent retailers understand the implications of the environmental changes they encounter; re-evaluate *every* element of their business practices from the ground up; and develop strategies that continuously respond to these changes, enhance their competitive positions, and improve their pharmacies' overall performance.

In broad terms, successful independent retailers must:

- Develop a continuous process to identify the wants of their customers and then meet or exceed these expectations.
- Design every aspect of the retail operation to enhance their customer's shopping experience. This includes ensuring that customers receive the best possible service.
- Identify and pursue a distinct target market. This includes effectively promoting a quality-oriented image.
- Establish budgetary controls and cost containment practices that enable the pharmacy to operate efficiently.

Interestingly, the results of this study stand in sharp contrast to some earlier studies (McGee & Finney, 1997) which suggest that the development of a few distinctive capabilities, particularly superior customer service and a quality based image, may lead to higher performance. This study's findings may suggest, instead, that superior customer service may simply be the price of entry into the contemporary retailing marketplace. That is, superior customer service is now demanded by customers to such a degree that providing it may simply allow the firm to remain in business, but may no longer provide a competitive advantage. The availability of alternate retail outlets allows the customer to seek out other merchants when the level of customer service at one location does not suit them.

To succeed and prosper in the retailing marketplace today, independent retailers need to emphasize multiple capabilities, therefore offering their customers something commonly called "value" (Arthur Anderson LLP, 1995). Although no two retail customers perceive value in the same way, most consumers typically define value as a combination of such factors as high quality products, personalized service, shopping convenience, and fair prices. Gone are the days when premium prices automatically meant high quality. Consequently, it is

up to the independent retailers to learn how their clientele defines value and to establish merchandising strategies and pricing policies that will, in turn, lead to customer loyalty.

Additionally, the results of this study suggest that the deck may be stacked against those independent retailers who do not have accurate record keeping systems and a basic understanding of financial analysis and control. These foundations of finance should support all strategic decision making, and independent retailers need to integrate financial strategies throughout all areas of their retailing operations. Only then can independent storeowners identify potential problems and react in a timely manner.

Because this study was not longitudinal, the long-term implications of pursuing a broad spectrum of capabilities should be examined in future research. Once a firm gains the requisite capabilities to compete at the newly established productivity frontier, tradeoffs among cost and non-cost features must be made (Porter, 1996). Hence, while simultaneously developing capabilities in service, promotion, market segmentation and cost control may lead to superior performance in the immediate wake of industry consolidation, over the long-term, pursuing multiple capabilities may be disadvantageous. Future research should examine the long-term performance implications of pursuing a wide-range of capabilities.

These findings should be interpreted in light of the limitations. The study was conducted in a single industry, using self-reported subjective measures of capabilities and organizational performance. Although the generalizability of findings from single-industry studies does have some limitations, such studies also provide the desirable feature of a high degree of control over market and environmental peculiarities. The advantages and disadvantages of self-reported subjective measures have been discussed at length in the research literature and do not need to be elaborated here. Finally, this study is somewhat exploratory in nature, and it remains for other researchers, therefore, to replicate these results.

In sum, the results of this study support the substantive linkage between the resource-based capabilities and performance of a firm in a fragmented industry undergoing consolidation. Businesses with a limited range of capabilities outperform firms that do not emphasize any capabilities. However, superior performance depends on the possession of a wide spectrum of capabilities. Indeed, survival for small firms in the wake of industry consolidation may depend on it.

¹ Dillman and associates' specific and empirically supported recommendations were designed to maximize the response rate. Dillman's (1978) method specifies that the survey be pretested, and that an initial mailing be followed by a reminder postcard and second mailing to those managers not responding to the first.

REFERENCES

- Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster analysis*. Newbury Park, CA: Sage.
- Andrews, K.R. (1971). *The concept of corporate strategy*. Homewood, IL: Irwin.
- Arthur Anderson LLP (1997). *Small store survival: Success strategies for retailers*. New York, N.Y.: John Wiley and Sons.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Biddle, D. (1999). Independents face waste industry consolidation. *Biocycle*, 40, 38-42.
- Blackwell, K. (1999). 1998—the year of bank mergers. *America's Community Banker*, 8,8

- Chandler, G.N., & Hanks, S.H. (1994). Market attractiveness, resource-based capabilities, and venture performance. *Journal of Business Venturing*, 9, 331-349.
- Cicione, M. (1999). Changing times. *Industrial Distribution*, 88, H4-H5.
- Conant, J.S., Mokwa, M. P., & Varadarajan, P. R. (1990). Strategic types, distinctive competencies, and organizational performance: A multiple measures-based study. *Strategic Management Journal*, 11, 365-383.
- Conant, J.S., Smart, D. T., & Solano-Mendez, R. (1993). Generic retailing types, distinctive competencies, and competitive advantage. *Journal of Retailing*, 69(3), 254-279.
- Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Retailing*, 58, 37-52.
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absences of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5, 265-273.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504-1511.
- Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley and Sons.
- Drabenstott, M. (1999). Consolidation in U.S. agriculture: The new rural landscape and public policy. *Economic Review*, 84(1), 63-71.
- Droge, C., Vickery, S., & Markland, R. E. (1994). Sources and outcomes of competitive advantage: An exploratory study in the furniture industry. *Decision Sciences*, 25(5/6), 669-689.
- FFCA report says narrow margins, fierce competition changing industry. (1997). *Nation's Restaurant News*, 31: 12.
- Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1992). *Multivariate data analysis*. (3rd Ed.) New York: MacMillan.
- Hambrick, D. C. (1983). Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. *Academy of Management Journal*, 26(1), 5-26.
- Hitt, M. A., & Ireland, R. D. (1985). Corporate distinctive competence, strategy, industry, and performance. *Strategic Management Journal*, 6, 273-293.
- Ketchen, D.J. & Shook, C.L. (1996). The application of cluster analysis in strategic management research: An analysis and critique. *Strategic Management Journal*, 17, 441-458.
- Long, K., & Vickers-Koch, M. 1995. Using core capabilities to create competitive advantage. *Organizational Dynamics*, 24(1), 6-22.
- Maline, N. (1997). Exploding Rx market propels retailers to new height. *For the Pharmacist*, (May), 10-18.
- McDaniels, S. W., & Kolari, J. W. (1987). Marketing strategy implications of the Miles and Snow strategic typology. *Journal of Marketing*, 51(4), 19-90.
- McGee, J. E. (1996). When Wal-Mart comes to town: A look at how local merchants respond to the retailing giants arrival. *Journal of Business and Entrepreneurship*, 8(1), 43-52.
- McGee, J.E. & Finney, J. B. (1997). Competing against retailing giants: A look at the importance of distinctive marketing competencies. *Journal of Business and Entrepreneurship*, 9(1), 59-70.
- McGee, J.E. & Love, L.G. (1999). Competitive advantage and the small independent retailer: The role of distinctive competencies. *Journal of Business and Entrepreneurship*, 11(1), 85-98.
- Meyer, A.D. 1982. Adapting to environmental jolts. *Administrative Science Quarterly*, 27, 515-536.
- Morrisett, B. & Smyth, J. (1997). Industry consolidation continues. *Textile World*, 147, 140-145.

- Nardoza, F. J. (1998). Beyond consolidation – Getting ready for the next millennium. Lodging Hospitality, 54, R1-R2.
- National Community Pharmacy Association. (2000). Independent Pharmacy Today: Poised for the New Millennium. November 3, 2000 <<http://www.ncpanet.org>>.
- Porter, M. E. (1980). Competitive strategy. New York: Free Press.
- Porter, M.E. (1996). What is strategy? Harvard Business Review, 74, 61-78.
- Sapienza, H. J., Smith, K. G., & Gannon, M. J. (1988). Using subjective evaluations of organization performance in small business research. American Journal of Small Business, 12(2), 45-53.
- Selznik, P. (1957). Leadership in administration. New York: Harper & Row.
- Smart, D. T., & Conant, J. S. (1994). Entrepreneurial orientation, distinctive marketing competencies and organizational performance. Journal of Applied Business Research, 10(3), 28-8.
- Stalk, G., Evans, P., & Shulman, L. E. (1992). Competing on capabilities: The new rules of corporate strategy. Harvard Business Review, 70(March/April), 57-69.
- Tarlach, G.M. (1998). There's strength in numbers in new era of health care. Drug Topics, 142, 74-76.
- Uken, C. (1997). Keep it up. Drug Topics, 141(8), 18.
- Venkatraman, N., & Ramanujam, V. (1987). Measurement of business economic performance: An examination of method convergence. Journal of Management, 13, 109-122.

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APPENDIX

FACTOR ANALYSIS AND CLUSTER ANALYSIS PROCEDURES

Because cluster analysis is sensitive to the number of variables used and multicollinearity among clustering variables (Ketchen & Shook, 1996), the first step in developing the profiles was reducing the number of variables into factors with factor analysis. This technique is an effective tool for determining whether the data can be condensed into a more parsimonious set of factors while at the same time revealing underlying relationships or patterns in the data (Hair, Anderson, Tatham, & Black, 1992). The 27 retailing capabilities and four performance measures were factor analyzed using a principal components factor analysis with varimax (orthogonal) rotation. Five factors were retained and are presented in Table A-1 (next page). Factor one, which we labeled "service image", includes the capabilities of effectively handling customer complaints, offering high quality products, ability to know and understand current customers, and ability to differentiate a store's overall image. Advertising effectiveness was one of the predominant features of the second factor -- "promotion and presentation." This factor also includes superior public relations and keen merchandising skills, and a greater emphasis on new product selection. Factor three -- "performance" represents the performance construct. As expected, all four performance variables loaded quite heavily on this factor. The fourth factor, which we labeled "segmentation," represents knowledge of potential customers and ability to effectively segment and target customers. Finally, the fifth factor -- "control of retailing" -- represents the ability to contain costs, establish control and evaluation of retail programs, and implementation of effective pricing.

The next step in the capability profile development process involved cluster analysis. This multivariate technique groups observations on the basis of similarity across several characteristics (Aldenderfer & Blashfield, 1984; Hair et al., 1992). The four factors that represented capability components were used as clustering variables in a non-hierarchical cluster analysis. Non-hierarchical cluster analysis was preferred because it is less susceptible to outliers or other anomalies in the data and therefore less likely to produce misleading results (Hair et al., 1992). A four-cluster solution was selected on the basis of minimal distance between observations and cluster means, and interpretability of the results (Hair et al., 1992). The four-cluster solution resulted in a pseudo F-statistic of 122.8 and a cubic clustering criterion of 11.9.

Table A-1
Principal-Components Factor Analysis of Capabilities

	Factor Loadings*					Communality
	Factor 1 Service Image	Factor 2 Promotion & Presentation	Factor 3 Performance	Factor 4 Market Segmentation	Factor 5 Control of Retailing	
Quality of Customer Service	.74					.61
Handling of Customer Complaints	.67					.53
Store Image	.62					.66
Quality of Products	.58					.40
Knowledge of Current Customers	.55					.40
Allocation of Financial Resources	.52					.58
Public Relations Effectiveness		.57				.46
Advertising Effectiveness		.52				.35
Selection of New Products		.50				.46
Awareness of Store Strengths		.48				.43
Civic Involvement		.45				.36
Putting Plans Into Action		.44				.46
Store Layout/Merchandise Presentation		.42				.32
Net Income			.89			.81
Gross Profit			.85			.74
Overall Performance and Store Success			.78			.67
Total Sales Growth			.62			.50
Accuracy of Sales and Profit Forecasting				.61		.54
Ability to Segment and Target Markets				.55		.48
Ability of Differentiate Store Offerings				.52		.39
Knowledge of Prospective Customers				.51		.43
Knowledge of Industry Trends				.40		.25
Effectiveness of Cost Containment					.65	.55
Control and Evaluation of Retail Program				.40	.64	.70
Effectiveness of Pricing Strategies		.40			.63	.64
Eigenvalues	3.46	3.19	2.93	2.56	2.16	

*These five factors accounted for 64.0% of the total variance