PERFORMANCE EFFECTS OF THREE FOCI IN SERVICE FIRMS

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Service businesses are often urged to focus because otherwise they will falter. In effect, the “focus or falter” argument suggests that focus by service firms is likely to result in superior performance. Service firms might focus on serving selected customer segments, capitalizing on distinctive internal capabilities, and serving particular geographic regions. Each focus offers certain potential benefits. This study collected data from the chief executives of 198 service firms to develop systematic evidence on the performance effects of these three foci. We found that a focus on selected customer segments was associated with higher performance, but a focus on either internal capabilities or geographic regions was associated with lower performance.

Recently, Davidow and Uttal (1989) extolled the advantages of a focus on customer segments, or homogeneous sets of customers, by service firms. They suggested that focus promotes good customer service by allowing firms to meet customer needs closely. Focus also leads to a better match of supply with demand because it helps businesses to forecast demand accurately, to alter demand, and to expand the role of customers in producing service. In addition, Davidow and Uttal suggested that a lack of focus makes providing good service impossible. Hence, they concluded that a service business without a focus will falter.

This call for focus in service businesses is not new. A decade ago, Carman and Langeard urged service firms not to “serve the needs of too many sociodemographic segments” (1980: 7). Normann also noted the dangers of offering multiple services, writing that “it is difficult to mix service management systems, which represent delicate formulas for poised success, without destroying something valuable in the process... Even mixing images can lead to great confusion” (1984: 98). Heskett (1986) urged service businesses to focus on distinctive internal capabilities, customer segments, or geographic regions because doing so would lead to certain competitive advantages. In effect, “focus or falter” suggests that focus by service firms is

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likely to result in superior performance. This argument does not suggest that a service firm should not offer multiple services but that if it does, it should maintain its focus.

The focus or faltter argument about distinctive internal capabilities is similar to the relatedness hypothesis that researchers on diversification have offered. Proponents of the relatedness hypothesis have argued that exploiting relationships among businesses is likely to result in superior performance (see Ramanujam and Varadarajan [1989] for an extensive review of the diversification literature). This hypothesis has been subjected to many empirical tests, but the performance effects of the different ways in which businesses might be related in diversified firms have not been examined. However, several empirical studies of goods-producing diversified firms have found performance variations within the category of related-diversified firms (Barton, 1988; Bettis & Mahajan, 1985; Biggadike, 1976; Dubofsky & Varadarajan, 1987; Kitching, 1967; Lubatkin & Rogers, 1989; Nathanson & Cassano, 1982). In his seminal 1974 work, Rumelt recognized the need to examine such within-category differences:

Before the work of classifying the firms was begun, it seemed useful to sub-divide the Related Business category into three subclasses. These subclasses would serve to differentiate among those firms that had diversified by relying chiefly on (1) relationships among markets served and distribution systems; (2) relationships based on similar production technologies; or (3) the exploitation of science-based research. It was found, however, that while individual moves to diversify were easily placed in one of these subclasses, few firms had used one type of relationship with enough consistency to warrant its use as characterizing the firm’s strategic posture as a whole. Consequently, the attempt was abandoned (1974: 17).

The focus or faltter argument with respect to customer segments and geographic regions applies to individual service businesses. Recently, some researchers have suggested that the notion of focus on customer segments may also be useful when a firm offers multiple services; these arguments are discussed later in this article.

Although it would be interesting to examine the performance effects of different foci adopted by goods-producing firms, I studied service firms because the extant literature on service businesses offers mainly normative guidance on the foci they should adopt when devising growth strategies (Carman & Langeard, 1980; Heskett, 1986; Nayyar, 1990; Normann, 1984). There is no systematic evidence on the performance effects of different foci adopted by service firms.

One reason for this apparent lack of research on foci in service firms might be that services are either similar to goods or can be treated as such because consumers buy benefits, not goods and services (Brown & Fern, 1981; Enis & Roering, 1981; Levitt, 1972). Therefore, the vast body of research on goods-producing firms has been seen as applying to service firms.
as well. Several recent studies have suggested, however, that services are different from goods (Heskett, 1986; Lovelock, 1981; Mills & Moberg, 1982; Murray & Schlacter, 1990; Normann, 1984; Thomas, 1978). These differences stem from variations in buyer behavior in relation to goods and services and the substantively different characteristics of goods and services. Variations in buyers' behavior include risk perception differences that arise from the intangibility of services and the general difficulty in evaluating the quality of services (Murray & Schlacter, 1990).

The intangibility of services, firm inability to inventory services, and buyer difficulty in determining service quality are some of the frequently mentioned characteristics of services not shared by goods (Heskett, 1986; Lovelock, 1981; Mills, 1986; Normann, 1984; Sasser, Olsen, & Wyckoff, 1978; Shostack, 1977; Thomas, 1978). One consequence of these service characteristics is that they result in information asymmetries between buyers and sellers (Darby & Karni, 1973; Mills, 1986; Nelson, 1970, 1974; Zeithaml, 1981). In a previous work (Nayyar, 1990), I suggested that such information asymmetries could be a source of competitive advantage for diversified service firms. Since buyers find it difficult to evaluate services, they favor their current service providers when searching for suppliers of other services. Therefore, service firms can gain an advantage if they serve multiple needs of their existing clients. I noted that this benefit to diversified service firms does not arise from the economies of scale that are a cause for the existence of multiproduct firms (Panzar & Willig, 1981; Rumelt, 1982; Teece, 1980).

This study of service firms examined the performance effects of three foci—customer segments, distinctive internal capabilities, and geographic regions. I tested the focus or falter argument using data on the degree of focus in 198 large U.S. service firms.

**Benefits of Focus**

**Focus on Customer Segments**

Essentially, a focus on customer segments encourages service businesses to segment the general market carefully and tailor their services to meet the needs of selected customer segments. Segmentation allows research into the needs of each set of customers. Firms can then serve homogeneous sets of customers well by designing different core services for each set. Such a focus results in superior performance for a service firm because it facilitates identification of the elements of service operations that are of strategic importance and concentration of the firm's efforts, investments, and controls (Davidow & Uttal, 1989; Heskett, 1986). In addition to the competitive advantages to be gained from closely meeting the needs of customers, a focused service strategy yields benefits from streamlining operations, resulting in improved productivity and service quality (Heskett, 1986). A focus on customer segments also prevents employee confusion that may arise from con-
licits among the behaviors required to satisfy customers with differing needs (Normann, 1984). Clarity in the behaviors required from service employees promotes good service, resulting in satisfied customers, who explicitly or implicitly give positive feedback to service providers. This feedback lowers employee turnover and raises employee morale (Schneider & Bowen, 1985).

In addition, buyer-seller information asymmetries benefit service firms that serve multiple needs of their customers (Nayyar, 1990). Buyers make purchase decisions on the basis of the price and quality of the various alternatives that they are considering. The quality of a service is, however, difficult to evaluate because of its intangibility and the simultaneity with which it is produced and consumed (Holmstrom, 1985; Mills, 1986). This difficulty complicates the choice decision for potential buyers. Hence, buyers seek information that will allow them to make better choices (Stigler, 1961). Generally, the sellers of services have more information than buyers do about the true quality of their services. This information asymmetry leads to "moral hazard," or an incentive to exert less than complete effort in delivering a service, for sellers; for buyers, the asymmetry leads to "adverse selection," or an increased likelihood of picking a poor-quality supplier of a service (Holmstrom, 1985; Mills, 1986).

Potential buyers of services have an incentive to solve such problems. They might do so by favoring current service providers with whom they are satisfied when evaluating alternate providers of other services they need. Therefore, service providers who have made a favorable impression on existing buyers find it easier to influence them—as opposed to entirely new buyers—to try new goods or services. From the perspective of potential buyers, reputation reduces some adverse consequences of information asymmetries in buyer-seller relationships. Service firms can exploit buyers' incentives to solve selection problems by meeting multiple needs of existing satisfied customers because doing so yields a competitive advantage (Nayyar, 1990).

Service firms can benefit from information asymmetries in many situations. For example, public accounting firms often provide management consulting services to buyers of their auditing services. Buyers readily transfer their impressions of the service quality that their accounting firm delivers to its consulting services since the quality of such services is difficult to evaluate ex ante. Specific examples of service firms that benefit from a focus on customer segments are American Express, which provides financial services to buyers of its travel-related services, and Sears, Roebuck and Company, which provides financial services to its retail clients. Davidow and Uttal (1989), Heskett (1986), and Normann (1984) gave several other examples of service firms that appear to benefit from a focus on customer segments while meeting their customers' needs for multiple services. Hence,

*Hypothesis 1:* The relationship between a focus on customer segments and performance in service firms will be positive.
Focus on Internal Capabilities

A focus on internal capabilities implies that firms produce and deliver products (goods and services) that share some unique factor of production, whether a management or distribution system, a product or process technology, or plant and equipment (Heskett, 1986). Sharing factors of production, or "leveraging" internal capabilities, across several products might result in economies of scope that arise when the joint cost of producing two or more outputs is less than the sum of the costs of producing each output by itself (Rumelt, 1982; Teece, 1980). If the shared factor exhibits economies of scale, if there are no further opportunities for its use in one product, and if transaction costs prevent an efficient market in the shared factor, economies of scope provide a motive for firms to produce multiple outputs because they reduce joint costs of production (Teece, 1980). Shared factors can include not only a firm's physical resources but also its distinctive, or core, competence (Hitt & Ireland, 1985; Prahalad & Hamel, 1990; Selznick, 1957).

Like goods-producing firms, service firms may share a variety of internal capabilities among businesses. For example, firms that are primarily in the hotel business may apply their expertise in efficiently meeting the boarding and lodging needs of travelers to providing similar services to patients in hospitals and nursing homes. ARA Services, a large, diversified U.S. firm, maintains municipal vehicles using its vast automobile-fleet maintenance facilities, and Delta Airlines services the aircraft of other airlines using its maintenance facilities at many airports. Thus,

\textit{Hypothesis 2: The relationship between a focus on internal capabilities and performance in service firms will be positive.}

Focus on Geographic Regions

Analyses of the potential benefits of geographic focus can be conducted within a country or worldwide. Within-country analyses address local, regional, and national issues. In contrast, worldwide analyses address international, world-regional, and global issues. At both levels of analysis, however, the potential benefits of geographic focus arise from understanding, responding to, and taking advantage of varying environmental conditions across geographic areas (Ghoshal, 1987; Kim, Hwang, & Burgers, 1989). These variations include differences in political, cultural, demographic, economic, and regulatory conditions. Porter (1986) suggested, however, that differences in these conditions are simply a matter of degree, so that a framework for analyzing global strategies can be readily applied to the determination of strategy within large countries consisting of several regions or cities. Hence, businesses need to determine geographic regions in such a way that differences among them are salient.

The geographic focus argument suggests that exclusive attention to conditions within particular geographic regions results in benefits for service
firms owing to the intensity with which the firms can provide service to their customers (Heskett, 1986). Operating within a limited geographic region allows a firm to remain close to its customers and intensively meet their needs and to respond quickly and effectively to changes in customer needs. A high market share in a limited geographic region might also permit a service firm to maintain a higher level of service than a firm with smaller market shares in many different geographic regions. This density effect might also permit a service firm to maintain a network of sites at which it can provide service to its customers. Firms facing smaller customer densities would be at a cost disadvantage if they attempted to duplicate the network of the market share leader in a given market region (Heskett, 1986).

Carman and Langeard (1980) alerted service firms to the dangers of expanding into out-of-country markets, noting that service firms face substantially more risk than goods-producing firms from such growth. Those authors reasoned that such differences in risk arise because service firms cannot simply enter foreign markets by first exporting to and then investing in them. Instead, service firms must at the onset invest in the foreign markets to serve customers face to face. Therefore, service firms face greater difficulties than goods-producing firms in learning about foreign markets, avoiding mistakes, demonstrating the value of the services they offer, controlling quality, obtaining the necessary human resources, and dealing with host governments. Although not suggesting that service firms avoid expansion into foreign markets altogether, Carman and Langeard urged "that it be approached with considerable caution, evaluation and flexibility" (1980: 21). Providing some empirical support for this view, Channon (1978) reported a decline in return on capital with increasing levels of overseas activity for a sample of British service firms.

In contrast, however, in a study comparing riskiness, Shaked (1986) found that the mean probability of insolvency for domestic firms was significantly higher than that for multinational firms. He also found that the average systematic risk of the latter was significantly lower than that of the former. These findings suggest that firms are not likely to face more risk by expansion into foreign markets than they face by staying in their home-country markets only.

International participation also may result in benefits for a firm. Research on international market diversification has found a positive relationship between the intensity of international market operations and profitability (Leftwich, 1974; Severn & Laurence, 1974; Rugman, 1979; Wolf, 1977). To the extent that economic activities in different regions of the world are less than perfectly correlated, participation in multiple geographic regions should lower the risk of performance variations (Buhner, 1987; Caves, 1982; Miller & Pras, 1980).

A broad scope of operations also increases costs. Institutional and cultural factors erect formidable barriers (Kogut, 1985). Geographically diverse operations may prevent a firm from tailoring its activities to serve a particular geographic area better than focused competitors meeting the needs of
limited areas (Porter, 1985). The growing similarity of countries in available infrastructures, distribution channels, and consumer preferences, and the integrating role of information technologies and ease of travel may reduce some of these costs.

These conflicting arguments on the costs and benefits of a focus on geographic regions do not suggest any clear hypothesis. Therefore, I simply attempted to obtain an empirical answer to the following research question: What is the performance effect of a focus on geographic regions by service firms?

**METHODS**

**Sample**

The sample was drawn from the Service 500 list compiled by Fortune (Fortune, 1987) and the service firms in The Corporate 1,000 published by the Monitor Publishing Company (1987). Firms in these classifications obtain more than 50 percent of their revenues from businesses in service industries. I excluded utilities, government and noncommercial educational, scientific, and research organizations, and firms receiving more than 10 percent of their revenues from nonservice businesses. Constraints on access, time, and funding limited the number of firms I could contact. Therefore, I selected a random sample of 400 service firms. These firms were in a wide variety of service industries; their activities spanned the full range of Standard Industrial Classification (SIC) codes assigned to nonmanufacturing industries, excluding utilities and government and noncommercial educational, scientific, and research organizations. The sample firms ranged in size from $250 million to over $15 billion in annual revenues in 1987, with an average of $2.1 billion. The sample therefore comprised large U.S. service firms.

A pretested, self-administered, structured questionnaire was sent to the chief executive officers (CEOs) of the sample firms in late 1988. After follow-up efforts, I received 285 responses, representing a response rate of over 71 percent. Of the responders, 57 declined to participate, mostly because of concern over data confidentiality, although the cover letter accompanying the questionnaire contained assurances that only aggregate data would be reported. The large number of declines was not unexpected because I requested confidential information on corporate and business strategy. I discarded 30 questionnaires either because data were missing and could not be obtained even after follow-up efforts or because a responding CEO had been with a firm for less than two years. I used the latter criterion to ensure that the CEOs were sufficiently well informed about their firms' strategies. These procedures resulted in 198 usable responses, representing an effective response rate of 49.5 percent. Table 1 lists the primary industries in which the sample firms participated.

Table 2 gives results of tests of nonresponse bias. These tests did not reveal any differences between responders and nonresponders in terms of
TABLE 1  
Primary Industries of Sample Firms

<table>
<thead>
<tr>
<th>Industries</th>
<th>Number of Firms</th>
</tr>
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<tbody>
<tr>
<td>Air transport</td>
<td>11</td>
</tr>
<tr>
<td>Amusement and recreation services</td>
<td>9</td>
</tr>
<tr>
<td>Banks</td>
<td>15</td>
</tr>
<tr>
<td>Business services</td>
<td>7</td>
</tr>
<tr>
<td>Communication</td>
<td>7</td>
</tr>
<tr>
<td>Consulting services</td>
<td>7</td>
</tr>
<tr>
<td>Eating places</td>
<td>18</td>
</tr>
<tr>
<td>Financial services</td>
<td>9</td>
</tr>
<tr>
<td>Health services</td>
<td>17</td>
</tr>
<tr>
<td>Hotels</td>
<td>19</td>
</tr>
<tr>
<td>Insurance</td>
<td>11</td>
</tr>
<tr>
<td>Personal services</td>
<td>8</td>
</tr>
<tr>
<td>Real estate</td>
<td>7</td>
</tr>
<tr>
<td>Repair and maintenance services</td>
<td>3</td>
</tr>
<tr>
<td>Retailers</td>
<td>18</td>
</tr>
<tr>
<td>Transport (except air) and transportation services</td>
<td>15</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
</tr>
</tbody>
</table>

assets, revenues, net income, return on equity, market-to-book value of equity, and Jensen’s alpha, a stock-market measure of firm performance that accounts for industry participation and risk.

Data Collection

On the premise that the pursuit of focus exploits a service firm’s distinctive competence (Selznick, 1957; Snow & Hrebinjak, 1980), I collected data on the degree of focus in service firms using CEOs as key informants (Siedler, 1974). It may be argued that a researcher should use multiple respondents from each firm rather than a single informant to test the reliability of reported data. The use of multiple respondents, however, is more appropriate for recording perceptual data, such as data on organizational culture.

TABLE 2  
Results of Tests of Nonresponse Bias

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Responders</th>
<th>Nonresponders</th>
<th>t</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>s.d.</td>
<td></td>
</tr>
<tr>
<td>Assets in billions of dollars</td>
<td>7.930</td>
<td>25.740</td>
<td></td>
</tr>
<tr>
<td>Revenues in billions of dollars</td>
<td>2.100</td>
<td>7.620</td>
<td></td>
</tr>
<tr>
<td>Net income in millions of dollars</td>
<td>148.610</td>
<td>366.330</td>
<td></td>
</tr>
<tr>
<td>Return on equity</td>
<td>13.280%</td>
<td>147.860%</td>
<td></td>
</tr>
<tr>
<td>Market-to-book value of equity</td>
<td>1.273</td>
<td>0.899</td>
<td></td>
</tr>
<tr>
<td>Jensen’s alpha</td>
<td>-0.019</td>
<td>0.021</td>
<td></td>
</tr>
</tbody>
</table>
or the dimensions of informal organizational structures (Campbell, 1955; Siedler, 1974). In contrast, I required relatively objective data to assess realized, not perceived, focus. The use of a key informant was therefore appropriate. One issue that needed to be addressed was the choice of an appropriate key informant. Focus is a fundamental strategic choice for firms, and since it is highly likely that CEOs will be adequately informed of their firms' focus strategies, they were therefore the most appropriate informants for such data. The use of CEOs as informants in this study is also consistent with the practices of previous researchers who have examined organizational strategies (Shortell & Zajac, 1990; Snow & Hrebinjak, 1980; Zajac & Shortell, 1989).

A pilot test of the questionnaire in ten large, diversified U.S. service firms, which were subsequently excluded from the study, was also conducted. During this pilot test, I studied each firm closely and observed the process the CEOs adopted as they collected the information needed to complete the questionnaire. These observations indicated that CEOs interpreted the questions and the instructions as intended and usually collected data to complete the questionnaire.

CEOs were asked to consult, if necessary, with appropriate persons in their firms when collecting data to complete the questionnaire. Follow-up contacts, letters that accompanied returned questionnaires, and comments on questionnaires indicated that the CEOs often consulted members of their staffs and other highly placed, potentially well-informed members of their top management teams before completing the questionnaires. Several CEOs and other senior executives from the responding firms also discussed the issues connected with this research with me after responding to the questionnaire. These actions heightened my confidence in the reliability and validity of the data provided by the firms and the belief that the CEOs had at least approved the contents of the returned questionnaires.

Measures of Degree of Focus

Jacquemin and Berry (1979) defined an entropy measure of diversification; similarly, I used entropy as a measure of dispersion of firm revenues among customer segments, sets of service businesses with no shared resources, and geographic regions. Appendix A defines these entropy measures. High values on the measures indicate low degrees of focus.

The questionnaire was designed to ascertain the division of each firm's total revenues among its top ten businesses, distributed across different customer segments and geographic regions, and also to obtain data on the presence of resources shared among different businesses. The CEOs were requested to fill in three data matrices, shown in Figures 1 and 2.

**Focus on customer segments.** To fill in the first matrix, the CEOs answered five questions. First, I requested a list of a firm's ten "most significant businesses (in terms of revenues)." I asked for information on ten businesses since that is the maximum number that firms are required to report in their 10K filings. It is also the maximum number of segments on which data are
available for each firm in the COMPUSTAT business segment data base. Hence, these two sources of secondary data served to check the data reported on the questionnaires. I obtained over 90 percent correspondence between the primary and secondary data with respect to the numbers and sizes of the businesses of each firm. Discrepancies were resolved in consultation with the CEOs of the concerned firms.

Second, each CEO listed the top ten customer segments that the firm served. Third, each CEO entered the proportion of total firm revenues obtained from each of the firm's businesses (last column, Figure 1). These proportions summed to 100 percent for all sample firms, indicating that collecting data on at most ten businesses was adequate.

Fourth, the proportion of total firm revenues obtained from each customer segment was entered (last row, Figure 1). Fifth, for each business the CEO entered the proportion of total business revenues obtained from each customer segment it served in the appropriate boxes of the matrix.

From these data, I computed a measure of the degree of focus on customer segments in two steps. First, I calculated the entropy due to multiple customer segments served by each business of the firm. Second, I computed a weighted average degree of focus for each firm using the revenue shares of the businesses in the total revenues of the firm as weights (Appendix A).

Focus on internal capabilities. The second matrix had two parts. First, I requested a list of each firm's top ten businesses, as in the first matrix. Second, each CEO identified significant resources shared among businesses: "For each pair of businesses, i.e., each box of the matrix, please list any significant shared resources between those businesses." The questionnaire described significant resources as strengths or assets: "physical plant or

**FIGURE 1**

Matrix Used to Collect Data on Degree of Focus on Customer Segments

<table>
<thead>
<tr>
<th>Businesses of the firm</th>
<th>1</th>
<th>2</th>
<th>...</th>
<th>10</th>
<th>Proportion of total firm revenues from business</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td></td>
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<td>...</td>
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<td></td>
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<tr>
<td>10</td>
<td></td>
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</tbody>
</table>

Proportion of total firm revenues from customer segment
FIGURE 2
Matrix Used to Collect Data on Degree of Focus on Internal Capabilities

<table>
<thead>
<tr>
<th>Businesses of the firm</th>
<th>2</th>
<th>3</th>
<th>...</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>2</td>
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<td>9</td>
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<tr>
<td>10</td>
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</tbody>
</table>

equipment,” personnel’s “specialized knowledge or skills,” or “special routines or repertoires.” Shared resources across any two businesses indicated the presence of a focus on an internal capability. Since I requested identification of significant resources, I assumed that such resources reflected the distinctive competences of the firms and, as such, were the ones most likely to meet the requirements for providing benefits from economies of scope to firms that used them in multiple businesses. Hence, shared resources across businesses were a surrogate for a focus on internal capabilities.

From these data, I identified sets of businesses that shared resources. An entropy measure of focus on internal capabilities was computed from the revenue share of these sets of businesses in total firm revenues (Appendix A). This measure is exactly equivalent to the measure of unrelated diversification used in some studies (Jacquemin & Berry, 1979; Palepu, 1985) except that those studies defined relatedness more broadly to include relationships owing to similarities in products, markets, and technologies.

Focus on geographic regions. Assuming that differences among regions of the world were likely to be more salient than differences within the United States with respect to the ability of service firms to ascertain and respond to customer needs, I chose to assess the degree of focus on geographic regions defined globally. Drawing on the global diversification literature, with a view toward minimizing data collection complexity, I listed nine geographic regions on the questionnaire: North America (the United States and Canada); South America; the Union of Soviet Socialist Republics and Eastern Europe; Western Europe; the Pacific Rim; China; other Asian countries; Africa; and Australia and New Zealand (Kim et al., 1989) Admittedly, these classifications involve some degree of subjectivity, but they do capture between-market heterogeneity. The format of the third matrix was identical to that of the first, except that geographic regions replaced customer segments. From these data, an entropy measure of degree of focus on geographic regions was computed exactly as was the measure for degree of focus on customer segments (Appendix A).
Construct validity of focus measures. Construct validity includes theoretical and observational meaningfulness, internal consistency of operational definitions, and convergent, discriminant, and nomological validity (Bagozzi, 1980). To determine the construct validity of the three measures of degree of focus, I selected a random subsample of 33 firms that permitted me to collect data firsthand from internal firm documents and from interviews with both corporate and business-level executives. The documents examined contained sales and other data for each business of the firm distributed across different customer segments and geographic regions. Interviews with corporate and business-level executives were conducted to ascertain the presence of any resources shared among businesses. Following Gupta and Govindarajan (1986), in these interviews I focused on the presence, extent, and importance of resource sharing between pairs of businesses, the amount of time personnel spent in interactions across businesses, and the relative influence that each business had on the plans and actions of the other businesses in a firm. On the average, interviews and data collection took five hours per firm.

The data collected firsthand from this subsample of firms were compared with the data their CEOs had provided earlier on the questionnaires. These comparisons yielded the following means of correlation coefficients for each firm across the two data sets: business sales, 0.97; customer segment sales, 0.89; and geographic region sales, 0.94, all significant at the .001 level. There was an average 85 percent agreement on resources shared between pairs of businesses of each firm. In addition to these comparisons of disaggregate data for each firm, I also computed the three measures of degree of focus for the subsample firms based on the firsthand data. The correlation coefficients for the three measures across the two data sets were: degree of focus on customer segments, 0.91; degree of focus on internal capabilities, 0.83; and degree of focus on geographic regions, 0.94, all significant at the .001 level. Thus, these data provided support for the construct validity of the focus measures used here.

Control Variables

Firm size was used as a control variable. Largeness offers the potential for economies of scale but can also lead to costs arising from managerial diseconomies. Further, Nathanson and Cassano (1982) found that the relationship of product and market diversity to the performance of the firms in their sample was different for small and large firms. To account for any such relationships, I used the natural logarithm of firm revenues as a measure of firm size.

Firm Performance

ROE adjusted for industry and systematic risk, industry-adjusted market-to-book value of equity, and Jensen's alpha were the performance measures. I adjusted performance measures where necessary to account for the
relationship between risk and return and for differences in firms’ performance owing to their participation in different industries, each of which offers the potential for a different rate of return (Porter, 1980). Appendix B formally defines the performance measures used in this study.

Return on equity (ROE) was the accounting-based measure of firm performance used because return on investment and return on assets present difficulties where investment and asset levels are almost nonexistent, as they are, for example, in consulting, insurance, and banking (Channon, 1976). The need for common measures of performance for a cross-sectional sample dictated the choice of ROE. I used average ROE over the five years 1983–87 to reduce the chance that performance data from an unusually good or bad year might confound the analysis (Amit & Livnat, 1989; Dubofsky & Varadarajan, 1987).

The ratio of the market value of equity to its book value (Amit & Livnat, 1988; Varaiya, Kerin, & Weeks, 1987) is theoretically and empirically equivalent to Tobin’s q (Varaiya et al., 1987). Tobin’s q (Lindenberg & Ross, 1981) incorporates a systematic risk adjustment, imputes equilibrium returns, and mitigates distortions due to tax laws and accounting conventions (Wernерfell & Montgomery, 1988).

The underlying performance of the industries in which a firm participates affects both these measures of firm performance, so I applied Rumelt’s (1982) approach to controlling for performance differences across industries. He defined a profit premium as $P = \text{ROC} - R$, where \text{ROC} is a firm’s return on capital and $R$ is the expected weighted average return for the firm computed as the average return for firms in the industries in which it participates, weighted by the share of the firm’s invested capital in each industry. This method adjusts the actual ROE of each firm by subtracting a weighted average of the industry average ROE for each industry in which the firm participates. Because there are difficulties in identifying assets associated with each industry in a diversified firm, and following previous usage (Montgomery, 1979; Rumelt, 1982), I used the percentage of total revenues in each industry as weights, although capital investment is the correct weight to use (Carter, 1977).

Risk is also an important consideration in the formulation of strategy (Andrews, 1980; Bettis, 1982). Since investors do not reward firms for reducing total risk, it is generally accepted that economic returns to firms are related to the systematic risk attached to them. Hence, to obtain an industry- and risk-adjusted performance measure for each firm, I divided both firm and industry five-year average ROE over the period 1983–87 by an accounting-based measure of systematic risk suggested by Hill and Stone (1980). This measure of systematic risk is defined as the ratio of the covariance of a firm’s return on equity with the return on equity obtained on a broad market portfolio of stocks to the variance of the return on equity of the market portfolio. This measure is an accounting equivalent to the stock-market-based measure of systematic risk derived from the capital asset pricing
model. Next, following previous usage (Rumelt, 1982), I computed a risk-adjusted, weighted average industry ROE using a firm's 1987 proportion of revenues from its activities in each industry. Finally, I subtracted this computed value from the risk-adjusted firm ROE. The market-to-book value of equity was similarly adjusted for industry participation differences. As noted earlier, this measure needs no risk adjustment.

Stock-market-based measures of firm performance do not suffer from the measurement problems caused by multiindustry participation. Such measures also reflect risk-adjusted performance (Jensen, 1969). I used Jensen's alpha, a measure of operating performance based on the market model, obtained as the estimate of the intercept in a regression of firm returns on market returns, both computed in excess of the risk-free rate (Jensen, 1969). Jensen's alpha compares the performance of a firm (or a managed portfolio of stocks) to that of firms in an unmanaged portfolio with similar market risk. This use of Jensen's alpha is consistent with many recent studies of corporate diversification (Buhner, 1987; Dubofsky & Varadarajan, 1987; Galbraith, Samuelson, Stiles, & Merrill, 1986; Lubatkin & Rogers, 1989; Michel & Shaked, 1984).

Data on accounting performance were collected from the COMPSTAT tapes. Data on stock market performance were obtained from tapes maintained by the Center for Research in Security Prices (CRSP) at the University of Chicago. Firm and industry financial performance data were collected for a period of 20 years (1968–87) for the computation of systematic risk based on ROE. Stationarity of the risk measures over such a long period was a concern, but no satisfactory approach to estimating risk measures after allowing for such instability is available (McDonald, 1985). I computed the average market-to-book value of equity during 1987 from data obtained from the COMPSTAT tapes and computed Jensen's alpha using daily firm and stock-market returns obtained from the CRSP tapes for 1987 and the 12-month treasury bond rate for each month of 1987 to obtain the risk-free rate.

RESULTS

Table 3 presents sample means, standard deviations, and the full correlation matrix.

Regression analysis was used to test the two hypotheses and the research question. I computed separate equations for the three performance measures; Table 4 gives results. Since high values of the degree of focus variables indicate low focus, I expected the coefficients of the customer segments and internal capabilities variables to be negative. No predictions were made with respect to the sign of the coefficient of the geographic

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1 Ruefli (1990) cautioned against the use of the mean-variance approach to risk-return relationships, showing that it is inherently flawed. The accounting-based measure of systematic risk used in this study, however, is not based on a mean-variance approach. Further, unlike Ruefli's analysis, which addressed total risk only, this study used systematic risk.
TABLE 3
Means, Standard Deviations, and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer segments</td>
<td>0.443</td>
<td>0.176</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal capabilities</td>
<td>0.837</td>
<td>0.136</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.20*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic regions</td>
<td>1.468</td>
<td>0.577</td>
<td>-.10</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Firm size</td>
<td>7.450</td>
<td>0.950</td>
<td>-.18*</td>
<td>.17*</td>
<td>.21*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Adjusted ROE</td>
<td>25.672</td>
<td>9.7218</td>
<td>-.09</td>
<td>.34*</td>
<td>.25*</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adjusted market-to-book value of equity</td>
<td>1.113</td>
<td>0.754</td>
<td>-.36*</td>
<td>.35*</td>
<td>.32*</td>
<td>.10</td>
<td>.22*</td>
<td></td>
</tr>
<tr>
<td>7. Jensen’s alpha</td>
<td>-0.019</td>
<td>0.021</td>
<td>-.29*</td>
<td>.30*</td>
<td>.37*</td>
<td>.11</td>
<td>.19*</td>
<td>.30*</td>
</tr>
</tbody>
</table>

* p < .01

regions variable, although a negative coefficient would be consistent with the focus or falter argument.

As Hypothesis 1 predicts, the coefficient of focus on customer segments was significant and negative for all three performance measures. The coefficient of focus on internal capabilities, however, was significant and positive for all three performance measures, contrary to Hypothesis 2. The coefficient for focus on geographic regions was also significant and positive for all three performance measures, contrary to the focus or falter argument.

The coefficient for firm size was significant and positive when adjusted ROE was used but was insignificant and positive for the other two performance measures. This lack of a systematic relationship between firm size and firm performance across the three performance measures might have occurred because the second two measures are market-based and the first is accounting-based. The market-based measures may already include an ex ante adjustment for the effects of firm size that the accounting-based measure does not.

DISCUSSION AND CONCLUSIONS

The aim of this study was to examine the performance effects of three different foci for service firms. Service firms may focus on customer segments, internal capabilities, or geographic regions, or on any combination of those elements. Although several normative statements about the merits of focus for a service firm have been made (Carman & Langeard, 1980; Davidow & Uttal, 1989; Heskett, 1986; Normann, 1984), prior to this study there was no systematic evidence on the performance effects of the different foci that service firms might adopt. In brief, in this sample of service firms (1) a focus on few customer segments was associated with higher performance, (2) a focus on internal capabilities was associated with lower performance, and (3) a focus on few geographic regions was associated with lower performance.
TABLE 4
Estimates of Standardized Regression Coefficients

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Industry- and-Risk-Adjusted ROE</th>
<th>Industry-Adjusted Market-to-Book Value of Equity</th>
<th>Jensen's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer segments</td>
<td></td>
<td>-.155*</td>
<td>-.421*</td>
<td>-.336*</td>
</tr>
<tr>
<td>Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal capabilities</td>
<td></td>
<td>.346*</td>
<td>.403*</td>
<td>.333*</td>
</tr>
<tr>
<td>Degree of focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic regions</td>
<td></td>
<td>.195*</td>
<td>.234*</td>
<td>.301*</td>
</tr>
<tr>
<td>Firm size</td>
<td></td>
<td>.074*</td>
<td>.057</td>
<td>.052</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>.193</td>
<td>.370</td>
<td>.315</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>11.575</td>
<td>28.370</td>
<td>22.189</td>
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<tr>
<td>p</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* p < .05

First, the finding for customer segments is consistent with the view that service firms benefit from understanding and intensively serving the needs of one or a few customer segments (Carman & Langeard, 1980; Davidow & Uttal, 1989; Heskett, 1986; Nayyar, 1990; Normann, 1984). Although it may be tempting to try to sell a service to multiple customer segments, our results suggest that such an approach is likely to lead to inferior performance because a firm cannot meet the needs of any segment closely while trying to meet the diverse needs of many. Other, more focused, competitors can more closely serve the needs of their chosen customer segments and therefore experience superior performance. This finding does not imply, however, that service firms that focus on customer segments must not offer multiple services.

Second, the finding that a focus on internal capabilities is associated with lower performance is contrary to the hypothesis that service firms benefit from applying their internal capabilities across multiple services to obtain economies of scope (Heskett, 1986). In contrast, this finding suggests that firms that have attempted to benefit from economies of scope have been unable to capture those benefits. One reason may be that implementation difficulties arising from the need to share resources among different businesses raise coordination costs, so that the net effect of sharing is negative. Achieving the benefits of economies of scope requires establishing operating relationships among business units in diversified firms (Buono & Bowditch, 1989; Kanter, 1989; Porter, 1985; Ramanujam & Varadarajan, 1989; Reed & Luffman, 1986). Such relationships are problematic and costly (Carman & Langeard, 1980; Hoskisson & Hitt, 1986; Jones & Hill, 1988; Kanter, 1989; Porter, 1985). Reed and Luffman (1986) and Kanter (1989) suggested that
firms might forego potential benefits when they are likely to incur substantial costs in implementing such strategies. In this vein, it might be useful for firms to consider internal transaction costs explicitly in comparison to the costs of transactions in the market when determining the magnitude of likely benefits from economies of scope (Williamson, 1975; Williamson & Ouchi, 1981).

Diversified firms incur costs when they attempt to achieve potential benefits by integrating new businesses into their portfolios. They integrate by forging new organizational relationships, changing existing ones, and creating mechanisms to ensure cooperation among businesses (Ansoff, 1965; Biggadike, 1976; Buono & Bowditch, 1989; Chandler, 1962; Normann, 1984; Salter & Weinhold, 1979). Firms attempting to exploit information asymmetries or economies of scope may encounter several organizational barriers, or obstacles that get in the way of obtaining cooperation within organizations. These obstacles arise for several reasons: lack of sufficient communication about intentions to exploit relationships among businesses (Kanter, 1989); lack of a detailed action plan for implementing strategies (Kanter, 1989); perceived or real loss of independence and autonomy from sharing (Bastien, 1987; Buono & Bowditch, 1989; Gupta & Govindarajan, 1986; Mirvis, 1985; Napier, 1989; Porter, 1985); organizational learning difficulties (Ghoshal, 1987; Kazanjian & Drazin, 1987); difficulties in technology transfer (Adler, 1989; Gruber & Marquis, 1969; Tornatzky et al., 1983); and differences in accounting conventions (Dearden, 1978).

In sum, my finding is consistent with research suggesting that attaining the benefits of economies of scope is difficult. Although a focus on distinctive internal capabilities might be attractive because it appears to apply existing resources across multiple services, implementing this strategy seems to be difficult.

Third, my finding that a focus on geographic regions is associated with lower performance supports the view that participation in multiple geographic regions of the world that are sufficiently different that their economies are not perfectly correlated permits service firms to reduce the risks of participation in only one geographic region. It appears that the service firms studied overcame the risks and costs thought to be associated with an increase in geographic scope (Carman & Langeard, 1980). In addition, it appears that the benefits of a narrow geographic focus are either not as great as the benefits of a wide geographic focus or that appropriately tailoring services and their delivery systems to the requirements of each region can overcome disadvantages of a wide focus.

Many successful U.S. service firms have been unable, however, to duplicate their success abroad. For example, a recent Wall Street Journal article reported that Federal Express sustained a nine-month loss of $200 million from its overseas operations and that United Parcel Service has also experienced losses from its overseas operations (Pearl, 1991). The article suggested several reasons for these failures abroad. First, these companies attempted to enter markets dominated by strong competitors who have estab-
lished good reputations and relationships with their customers. Second, regulators overseas might not have been interested in helping foreign competitors. Third, worldwide internal policies designed to streamline service operations in the United States, such as “last pickup at 5 P.M.,” were inconsistent with local needs in countries in which people worked as late as 8 P.M. Other recent Wall Street Journal articles have chronicled the woes that global expansion has caused for banks (Sesit, Forman, Roth, & Brauchli, 1991) and discussed the difficulties that Europe’s insurers are facing as they try to enter foreign markets (Hagerty, 1991). These adverse results might be explained, however, as a temporary phenomenon that reflects the difficulties associated with entering foreign markets, such as high initial investments in learning about foreign practices and in building reputation and obtaining regulatory approvals (Carman & Langeard, 1980).

Fourth, since this study suggests that each focus in service firms affects performance differently, foci should be considered in studies of the performance of service firms. Their exclusion may cause included variables to acquire a misplaced significance. Also, the study of within-category performance differences among related-diversified firms might benefit from an analysis of the underlying foci those firms adopt.

Future research could extend or modify this study in several ways. One area that clearly needs a better theoretical basis and operational definition is the identification of geographic regions. The methods I used relied on previous definitions of unique geographic regions of the world. To the best of my knowledge, there has been no attempt to verify whether these regions are truly unique in important ways. Similarly, within-country differences and their impact on business practices and performance have seldom been examined. Political entities like states and counties and areas defined for statistical reasons are unlikely to reflect significant underlying differences that are important for business purposes. Yet both academic research and business practice use these boundaries.

Second, heterogeneity within the service sector could be examined. How do differences in the characteristics of services affect the benefits that firms might obtain from different foci? Is it more likely that certain types of services benefit from adopting a particular focus?

Third, future research could incorporate organizational variables that are relevant in implementing focus strategies. For example, effective resource sharing among businesses requires the use of administrative mechanisms that both maximize opportunities to share and provide incentives to do so. Further, such research could also examine whether differences in foci call for different implementation approaches.

Fourth, this study focused on service firms only. Many goods-producing firms, however, also offer services, either with their manufactured goods or independently. It would be interesting to extend the analysis of this study to such firms, given that there have been recent calls for a “customer service orientation” among manufacturing firms (Bowen, Siehl, & Schneider, 1989; Chase & Garvin, 1989; Quinn, Doorley, & Paquette, 1990). It is possible, for
example, that significant difficulties associated with sharing resources among different goods-producing businesses might impede providing good customer service. In contrast, differences across geographic regions may need to be considered when goods-producing firms that operate worldwide devise customer service strategies.

Finally, several methodological improvements to this study are possible and needed. More objective measurements of focus, especially of focus on internal capabilities, would be useful. A longitudinal analysis to discern lagged effects and, possibly, causality would also be useful. Finally, examining generic industry differences instead of controlling for them through adjusted performance measures would be useful.

REFERENCES


**APPENDIX A**

**Definitions of Entropy Measures of Degree of Focus**

1. Degree of focus on customer segments was computed in two steps as follows:

   Entropy owing to multiple customer segments served by each business (ECSt) is given by
\[ ECS_i = \sum_{n} P_i \ln(1/P_n) \]

where \( P_n \) is the revenue share of customer segment \( i \) served by business \( j \) in the total revenues of business \( j \).

Degree of focus on customer segments is then

\[ DFCS = \sum_{j=1}^{N} ECS_i P_j \]

where \( P_j \) is the share of the \( j \)th business in the total revenues of a firm and \( N \) is the total number of businesses in the firm.

(2) Degree of focus on geographic regions was similarly computed except that it was based on the distribution of business revenues among geographic regions.

(3) Degree of focus on internal capabilities was computed as

\[ DFIC = \sum_{k=1}^{M} P_k \ln(1/P_k) \]

where \( P_k \) is the revenue share of the \( k \)th group of businesses that share resources in the total revenues of the firm and \( M \) is the total number of such groups of businesses in the firm.

**APPENDIX B**

**Definitions of Performance Measures**

(1) Industry- and risk-adjusted return on equity was computed as

\[ B_{f, ROE}^{*, \text{adj}} = \text{ROE-based systematic risk for firm } f, \text{ given by} \]

\[ \frac{\text{Covariance (ROE}_f \text{, ROE}_m)^{1983-87}}{\text{Variance (ROE}_m)^{1983-87}} \]

\[ B_{j, ROE} = \text{ROE-based systematic risk for industry } j, \text{ given by} \]

\[ \frac{\text{Covariance (ROE}_j \text{, ROE}_m)^{1983-87}}{\text{Variance (ROE}_m)^{1983-87}} \]

and

\[ \text{ADJROE}_f = \frac{\text{ROE}_f^{1983-87}}{B_{f, ROE}^{*, \text{adj}}} - \sum P_j \times \frac{\text{ROE}_j^{1983-87}}{B_{j, ROE}} \]

where

- \( \text{ROE}_f \) = average ROE for firm \( f \) over the period indicated,
- \( \text{ROE}_j \) = average ROE for industry \( j \) over the period indicated, with an industry defined as including all firms in the COMPSTAT data base with primary SIC codes in that industry,
- \( \text{ROE}_m \) = return on equity for a market portfolio comprising all firms in the COMPSTAT data base,

and

\[ P_j = \text{proportion of revenues from industry } j \text{ in the total revenues of a firm.} \]
(2) Industry-adjusted market-to-book value of equity was computed as

$$\text{ADJMBVE}_j = \frac{\text{AMV}_j^{1987}}{\text{ABV}_j^{1987}} - \sum \frac{\text{AMV}_j^{1987}}{\text{ABV}_j^{1987}}$$

where

- $\text{AMV}_j^{1987}$ = Average market value of equity for firm $j$ in 1987 computed as the mean of the opening and closing values for the year,
- $\text{ABV}_j^{1987}$ = Average book value of equity for firm $f$ in 1987 computed as the mean of the opening and closing values for the year,
- $\text{AMV}_j^{1987}$ = Average market value of equity for industry $j$ in 1987 computed as the mean of the opening and closing values for all firms in industry $j$ for the year.

And

- $\text{ABV}_j^{1987}$ = Average book value of equity for industry $j$ in 1987 computed as the mean of the opening and closing values for all firms in industry $j$ for the year.

(3) Jensen’s alpha was computed as the intercept term in the following regression equation estimated using daily stock returns for 1987:

$$\{R_{it} - R_m\} = \beta_f \{R_{mt} - R_m\}$$

where

- $R_{it}$ = stock return on day $t$ for firm $f$,
- $R_{m}$ = stock return on day $t$ for a market portfolio,
- $R_{mt}$ = risk-free rate of return computed as the daily return on a 12-month treasury bond for each month,
- $\beta_f$ = systematic risk for firm $f$.

And

- $\beta_f$ = Jensen’s alpha for firm $f$.

**Praveen Nayyar** received his Ph.D. degree in business administration from the University of Michigan in 1986. He is an assistant professor of management in the Leonard N. Stern School of Business at New York University. His primary research interests center on corporate and business strategy in service businesses and technology strategy.