

# Strategic Orientation and Marketing Strategy: An Analysis of Residential Real Estate Brokerage Firms

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**Abstract.** This article analyzes marketing strategy concepts as they apply to real estate brokerage firms and reports an empirical investigation of marketing strategies of firms in a local market. Firms followed one of three strategic orientations with respect to revenue generation, depending on the extent to which they emphasized obtaining listings versus making sales. The effectiveness of marketing mix strategy variables such as service level and advertising in achieving market share was also investigated. Analysis indicated that the effectiveness of these strategy variables varied, depending on the strategic orientation adopted by the firm.

## Introduction

Although research has examined the characteristics and performance of real estate firms [10, 20], knowledge of the underlying marketing strategies used and the relationship of these strategies to market share is limited [8]. Marketing strategy serves two purposes: (1) it helps determine the nature of business the firm should engage in now and in the future, and (2) it provides a plan to allocate resources to compete successfully in chosen markets. Achieving these goals provides a firm's mission and a standard by which business alternatives are evaluated, both needed for improving market performance. This article reports an empirical investigation identifying distinct marketing strategies and their linkage to actual market performance for residential real estate brokerage firms.

An integral stage in marketing strategy development is determination of the firm's strategic orientation. Generally, potential customers are grouped according to similarity, and management determines which group will be the target of its marketing efforts. The choice of target markets, or strategic orientation, determines the firm's sources of revenue. While no single method or criterion for segmenting markets prevails, even within an industry, two distinct perspectives exist. The first focuses on customer attributes and divides potential customers based on any number of characteristics (e.g., commercial versus residential, geographic area, housing value, or single versus multifamily). The alternative perspective utilizes revenue sources. A real estate firm generates revenue by obtaining listings that are sold by other firms, by selling properties listed by other firms, and by selling properties

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listed by the firm itself. The revenue approach reflects actual operational controls closely monitored by firms, such as the number of houses listed and sold, the dollar amount of commissions and the number of commissions split or entirely retained. This perspective more closely parallels those decisions that give rise to a strategic orientation and is the method chosen for defining strategic orientation in this research.

The next stage of strategy development is specification of the four marketing mix elements: product, price, promotion and distribution. While the effectiveness of each element is expected to vary for different strategic orientations, a core set of considerations is common to all firms.

Marketing writers have recommended that firms fit their strategic orientations to their particular resource bases [2]. In doing so, a link is established between strategic orientations and characteristics of the firms themselves. Distinct strategic orientations then give rise to differing marketing strategies. This study investigates the following questions in the single-family component of the real estate brokerage industry:

- Can distinct strategic orientations concerning supply and demand be identified among firms? If so, are these orientations tied to firm characteristics?
- Can marketing mix elements that impact market share be identified and the relative effectiveness of these elements ascertained? Once their effectiveness in capturing supply and demand is assessed, are variations in effectiveness seen between strategic orientations?

## Methodology and Data

### *Market Definition*

The study utilizes data for the residential real estate market in Baton Rouge, Louisiana. The city and its suburban areas had a population of about 375,000 in 1985 and cover an area greater than 500 square miles. Information for sales of single-family dwellings was obtained through the Multiple Listing Service (MLS) database. For each transaction, the following data were collected: property address and MLS-defined geographic area, year of construction, original listing price, selling price specified in the contract, date of the purchase contract, listing and selling agencies, and commission structure. For the calendar year 1985, the period covered in this study, 2,373 usable transactions were identified.<sup>1</sup>

MLS divides the market into nine broad geographic areas and further subdivides these into twenty-three subareas. The market covers part or all of several parishes (counties), and includes some isolated geographic submarkets: outlying subareas that are served almost exclusively by a few real estate firms whose business is confined within these subareas. Outlying subareas and their associated transactions were eliminated from the database if they met both of the following criteria: (1) a high proportion (75% or greater) of the subarea's sales were transacted by real estate firms located within the subarea and (2) these firms transacted at least 75% of their sales in the subarea. This procedure is similar to those employed in other market-based analyses [12], and has the objective of identifying those firms and areas truly constituting an economic market responding to supply and demand forces. Seven outlying submarkets and 158 associated transactions (6.7% of the total) were eliminated.

### *Firm Delimitation*

Use of the MLS database necessitated that only agencies listed in the Multiple Listing Service be included in this study. While it is impossible to determine the exact number of firms excluded, several approaches indicated their impact on the residential market was quite weak.<sup>2</sup> The MLS roster showed 176 member firms in 1985. Not all these firms were included for analysis, however. Firms that averaged less than one sale per month during 1985 and those in operation for only part of the period covered were excluded, leaving 36 firms which accounted for 1,874 real estate transactions, or 85% of the total transactions within the geographic boundaries used in the study.

### *Variable Definitions*

To examine marketing strategies across the spectrum of firms selected, multiple measures of each marketing mix element were defined.

*Product.* Brokers offer as the primary component of their product strategy their ability to bring together buyers and sellers in facilitating an exchange. Both the level and form of this service must be determined. Level of service may be represented by number of agents [10]. To control for firm size, however, service level was calculated for each firm by dividing the average number of agents employed during the year by sales transactions for the year.

The form of service is represented by the inventory of houses offered for sale, expressed in several measures: listings of housing developments as well as other properties, age of housing stock listed, the average selling price of properties listed, and the average selling price of properties actually sold (regardless of listing agent). Additionally, a transaction-specific measure of the correspondence of a property value to the firm's average was derived. This measure of value matching was calculated as the ratio of the selling price of the property to the average price of all properties sold by the firm.

*Price.* In most markets commission rates do not vary across agencies [10], and that is true in the Baton Rouge market. In 1985, 64% of the sales transactions involved commission rates of 6.0%; the second most prevalent rate was 5.0%. While little variance exists in the commission pricing structure, variance is found between the listed and negotiated selling prices (price dealing). Calculated as the ratio of selling price of the property to its listing price, this was the principal measure of pricing strategy used. The average ratio for all transactions in the year was calculated for each agency.

*Distribution.* For service industries, distribution decisions are limited primarily to hours of operation and location choice. Agency hours of operation are agent-dependent (rather than firm-dependent) and unmeasurable. Location choice, however, can be measured and has two primary effects in the marketplace. The first effect is geographic proximity to specific properties. Information field theory [17, 28] would suggest that agents will be more familiar with and better able to take advantage of marketing opportunities in closer geographic proximity. Thus, geographic proximity of each sales transaction was measured as the Euclidean (straight-line) distance from agency office to property location.

Market presence is another location effect and is represented by three variables. The first two are dispersion indices calculated separately for firm's listings and firm's sales.<sup>3</sup> These measures indicate whether the firm spreads its marketing efforts across many of the sixteen geographic subareas or concentrates on a few. The third measure of market presence represents

the firm's market visibility to consumers as indicated by the number of listings in each geographic subarea. This measure includes effects of firm size.

*Communication.* The predominant form of real estate advertising is in newspapers. To assess advertising levels of specific firms, both classified and display advertising in the two largest daily newspapers in the market were analyzed during the first full week of each quarter of 1985. Four measures were derived: column inches of classified advertising, square inches of display advertising, total number of properties specified in advertisements, and number of open houses advertised. Measures were taken for the entire market as well as for the nine broad market areas.<sup>4</sup>

*Operational Characteristics.* Five characteristics of the firm itself were measured: average number of agents affiliated with the firm, number of sales in 1985 by the firm, number of properties listed by the firm that sold during the year, the number of years the firm had been in operation, and whether the firm was affiliated with a nationwide organization, typically through a franchise arrangement. These data were obtained from the local Board of Realtors and the state licensing board.

## Analysis of Strategic Orientations

The first research objective is to determine whether distinct strategic orientations can be identified among firms in the residential real estate market with respect to revenue generation from supply (sellers' listings) and demand (buyers) sources. Two criteria must be met to establish the existence of differing strategic orientations. First, groups of firms pursuing similar patterns of supply and demand must be identified. Second, it must be shown that these groups use marketing mix components differently.

### *Identifying Strategic Orientations*

A real estate firm may generate revenue in three ways: (1) by obtaining listings that are sold by other firms (supply only), (2) by selling properties listed by other firms (demand only), and (3) by selling properties listed by the firm itself (supply and demand). To determine whether groups of firms pursuing similar patterns of supply and demand could be identified, the percentages of each firm's total transactions in each of these three categories were used in cluster analysis of the thirty-six firms included in the study.<sup>5</sup>

A two-step cluster procedure recommended by Milligan and Sokal [25] was used wherein data are first submitted to Ward's hierarchical clustering algorithm to determine the appropriate number of clusters, then subjected to *k*-means clustering for final group assignments. Inspection of amalgamation coefficients and subjective interpretation of cluster composition suggested that three clusters were appropriate.

The number of clusters needed to describe the data determines the different strategic orientations in the market. The largest cluster of firms (nineteen firms) follows a **BALANCED** strategy. These firms place nearly equal emphasis on the three categories of revenue generation, averaging 41% from listings sold by other firms, 31% from selling properties listed by other firms and 28% from properties listed by the firm itself. In contrast, the ten firms in group 2 pursue an **AUTONOMOUS** strategy in which they have little dependence on other firms but instead rely on self-generated listings. For nearly 60% of the sales transactions involving these firms, the firm was both the listing and the selling agency. The smallest group (seven

firms) follows a **SELLING** strategy, placing considerably less emphasis on obtaining property listings. In only 14% of their transactions were they the listing (but not the selling) agency; 57% of their transactions involved sales of properties listed by another agency.

### *Use of Marketing Mix Elements*

Cluster analysis identified groups of firms pursuing similar patterns of revenue generation, meeting the requirement of demonstrating that distinct strategic orientations exist. The following analysis tests the second requirement by examining whether firms in the three strategic orientation groups use marketing mix elements differently in pursuit of their marketing objectives.

Firm characteristics and marketing variables for the three groups of firms are shown in Exhibit 1. Discriminant analysis was used to examine the ability of the marketing variables (product, price, distribution, and communication) to simultaneously distinguish strategic orientation.<sup>6</sup> Since advertising expenditures are strongly related to firm size, the communication variables were divided by number of agents to control for this. The discriminant analysis yielded two significant discriminant functions that together accounted for 73% of the variance in firm type and correctly classified 83% of the firms in classification analysis.

Discriminant function loadings and group centroids are shown in Exhibit 2. The first function separated group 1 firms from those in groups 2 and 3, primarily along the dimension of housing value. The second function discriminated across all three groups and reflects their differing geographic orientations.

Four conclusions emerge from the descriptive analysis shown in Exhibits 1 and 2.

1. *A balanced strategic orientation requires greater marketing efforts in both absolute and relative terms than specialized orientations (autonomous or selling).*

Perhaps most obvious in the results of Exhibit 1 is the substantially higher levels of marketing activity associated with firms following a balanced strategy compared to either of the other groups. On average, they have twice as many agents, sell more than twice as many properties, and have more than three times the number of listings as firms in the other two strategy groups. Consistent with this larger size, these firms use more advertising than other firms and hold more open houses. Moreover, they also exceed the other groups on each of the communication variables when defined in effort per agent. Thus, even when considered in relative terms, a balanced strategy requires more marketing effort. It is important to note, however, that more than 25% of group 1 had fewer than fifteen agents, demonstrating that even small firms can employ a balanced strategy.

2. *Balanced strategies achieve higher relative measures of market performance.*

Along with the higher levels of marketing activity and larger absolute numbers of sales and listings, balanced strategy firms achieve the highest sales and listings per agent of the three strategy groups.

3. *Balanced strategies attract significantly higher-valued properties.*

The average value of the properties listed and/or sold by balanced strategy firms is almost 30% higher than properties for other firms. Such differences are not easily explained by the larger size of group 1 firms, but may lie with consumers themselves. Sellers and buyers of more expensive homes may be more sophisticated about real estate transactions, no doubt possessing higher education levels and possibly having been involved in real estate transactions previously. These individuals may place greater value on the advantages offered by larger firms (e.g., a larger pool of potential buyers and sellers at their disposal) than those offered

**Exhibit 1**  
**Variations in Marketing Mix Variables by Strategic Orientation Groups**

Characteristic	Strategic Groups			eta <sup>2</sup>
	1 Balanced (n=19)	2 Autonomous (n=10)	3 Selling (n=7)	
<b>Firm variables</b>				
Number of agents	31.1	15.2	16.2	.15 <sup>a</sup>
Number of sales by firm's agents	74.5	29.5	28.4	.11
Number of listings	89.1	29.8	9.7	.15
Number of sales & listings per agent	4.5	4.0	4.0	.12
Number of listings per agent	2.9	2.0	.6	
Years in operation <sup>b</sup>	10.8	9.8	11.3	.01
% that are franchises	36.8	30.0	42.9	.01
<b>Product variables</b>				
Service level—employees/sale	.7	.7	.6	.01
% of firms with developments	31.6	20.0	0.0	.08
Age of housing stock sold	11.1	10.3	10.8	.01
Selling price of listed property (000)	82.2	60.1	67.5	.33
Selling price of property sold (000)	85.4	64.0	69.1	.35
<b>Price</b>				
Average price dealing	95.5	96.6	97.3	.10
<b>Distribution</b>				
Geographic dispersion—sales	.26	.41	.18	.17
Geographic dispersion—listings	.23	.45	.24	.22
<b>Communication</b>				
Square inches of display ads	35.2	5.2	2.7	.11
Column inches of classified ads	11.0	7.6	7.4	.05
Number of properties advertised	41.3	10.8	10.7	.11
Number of open houses advertised	5.3	.6	1.7	.08
Display ad square inches/agent	.79	.28	.09	.11
Classified ad inches/agent	.55	.40	.86	.05
Properties advertised/agent	1.22	.63	1.29	.05
Open houses/agent	.14	.03	.09	.19

<sup>a</sup>eta<sup>2</sup>, also referred to as the correlation ratio, indicates amount of variance accounted for by group membership and is calculated by the ratio (SS between groups)/(SS total).

<sup>b</sup>Excludes as an outlier one agency in operation since 1917.

by smaller firms (e.g., more personalized service). Thus, in buying and selling property they may be more likely to seek out larger firms.

4. *Market specialization allows for geographic concentration of marketing efforts.*

Balanced strategy and selling strategy firms both spread their efforts widely over the local market. Balanced strategy firms are larger and serve a broader range of revenue sources, more easily covering the larger market necessary to sustain these levels of activity. Selling strategy agencies, however, are much smaller. Nonetheless, their marketing activities are very dispersed geographically. These firms spend most of their resources generating sales rather than listings and apparently are somewhat opportunistic in their efforts, attempting to find properties for potential buyers in whatever areas of the city they may be available.

**Exhibit 2**  
**Function Loadings to Discriminate Strategy Variable Usage**  
**across Strategic Orientation Groups**

Variable	Function <sup>a</sup>	
	1	2
<b>Product</b>		
Service level	.02	-.09
Developments	.19	-.24
Age of housing stock	-.06	-.05
Listing price	.56	.17
Selling price	.59	.10
<b>Price</b>		
Price dealing	-.25	.17
<b>Distribution</b>		
Dispersion—sales	-.15	-.53
Dispersion—listings	-.32	-.46
<b>Communication<sup>b</sup></b>		
Display ads	.27	-.13
Classified ads	-.01	.29
Properties advertised	.12	.23
Open houses	.36	.24
<b>Centroids</b>		
Group 1 (balanced)	1.11	-.05
Group 2 (autonomous)	-1.34	-.86
Group 3 (selling)	-1.10	1.36

<sup>a</sup>Loadings represent the extent to which a variable separates groups of firms along a discriminating function. Centroids are the group means on the function.

<sup>b</sup>These variables divided by number of agents.

Firms pursuing an autonomous strategy concentrate on fewer areas, apparently attempting to establish a recognized presence within those areas.

These findings indicate that firms with different strategic orientations place differing emphasis on the available marketing tools in pursuit of their marketing objectives. Thus, the second requirement for demonstrating that different strategic orientation groups exist also has been met.

### Estimation of Marketing Mix Variable Effectiveness

The second research objective was to ascertain the relative impact of marketing strategy variables on market share. The following analysis examined not only the overall effectiveness of strategy variables, but the differences in effectiveness that result from the three strategic orientations identified above.

#### *Strategy Variables*

Twelve strategy variables were selected to represent the marketing mix and agency characteristics (see Exhibit 3). Positive relationships with marketing performance are expected

**Exhibit 3**  
**Assessment of Overall Impact of Strategy Variables on Market Share**

Strategy Variables	Coefficient	t-value	Aggregate Elasticity <sup>a</sup>
<b>Firm</b>			
Years in operation	- .014	- 1.01	NC <sup>b</sup>
Franchise affiliation	.360	5.84*	.152
<b>Product</b>			
Service level	-1.360	- 7.66*	- .442
Developments	.079	.81	NC
Value matching	- .019	- 9.97*	-1.010
<b>Price</b>			
Price dealing	.001	.08	NC
<b>Distribution</b>			
Distance	- .030	-16.27*	- .854
Market presence	.038	12.47*	.344
<b>Communication</b>			
Display advertising	.003	7.86*	.098
Classified advertising	.014	5.21*	.126
Properties advertised	- .001	- .87	NC
Open houses	.010	.82	NC

<sup>a</sup>Elasticity represents the effect of a strategy variable on a firm's market performance. The higher the number, the higher the impact.

<sup>b</sup>Not calculated due to lack of significance.

\*Significant at .01 level.

for those variables that when increased directly affect marketing performance (i.e., service level, advertising variables, market presence, and the listing of developments). Years in operation and franchise affiliation are indicants of reputation and credibility and are also hypothesized to exhibit positive relationships. The only negative effect is for distance as both the level and quality of market information is expected to diminish as distance increases, resulting in a reduced ability to take advantage of marketing opportunities.

Hypothesized relations are unspecified for two variables (price dealing and property value matching). For the price-dealing measure, limited support can be found for a negative relationship. A lower ratio represents greater savings to the buyer and suggests an inverse relationship with probability of making a sale. For value matching, a significant relationship, either positive or negative, indicates the effect of extending selling efforts either above or below the firm's average housing value. A negative coefficient might be more likely, as it is easier to serve consumers with property valued below a firm's average than above. However, since there is no strong support for directionality for either variable, empirical investigation will determine the appropriate interpretation.

#### *Definition of Competitive Context*

The accurate assessment of strategy effectiveness requires a precise specification of not only a firm's strategy, but also its efforts relative to the market environment it faces. To this end, the competitive context is defined with respect to the market forces specific to



each transaction. Porter [27] describes seven factors defining the competitive context: substitute products, suppliers, buyers, potential entrants, and industry competitors. Given the short time period of this study, the nature of real estate transactions, and the reasonably stable nature of the market, the competitive context for this research is defined solely in terms of relevant competitors.

While many approaches are applicable (estimation of cross-elasticities, perceptual maps, etc.), geographic factors alone delimit a firm's market quite well [5, 28]. Based on the method of Black [5], the Euclidean distance from an agency's office to the most distant property sold by that agency was used as the spatial limit (threshold distance) defining the area in which the firm competes. The competitive context for each transaction is then defined as consisting of all firms that contain the property within their threshold distance. Thus, if the most distant property sold by a firm is 7.4 miles from the agency's office, that firm would be included in the competitive context for all transactions within this radius. For properties outside this distance, the firm would not be included. Threshold distances for firms in the market ranged from 4.5 to 18.6 miles; mean distance was 11.3 miles. Without competitive context definition, analyses would rest on the assumption that all thirty-six firms compete directly for each transaction. Such an assumption has little validity in light of the differences among firms and the areal extent of the market.

Competitive contexts ranged in size from five to all thirty-six firms. Application of the threshold distances also resulted in varying frequencies of inclusion for each firm. The firm included least frequently was deemed a potential competitor in only 334 of the 1,874 transactions, while one firm was a potential competitor in all but one transaction.

#### *Estimates of Strategy Variable Effectiveness*

Having defined the competitive context for each transaction, the next step is assessment of the relationship between marketing strategy variables and market performance. For purposes of this research, market performance is represented by a firm's probability of being the selling agent for any particular property in the MLS transaction base within the firm's spatial limit. This probability is analogous to transaction-specific market shares. To obtain a firm's overall market share prediction, the probabilities for the firm are summed across all transactions within its spatial limit.

The most accurate prediction of market performance from a marketing strategy in a competitive market is specified by the market share theorem [3, 4, 16, 26; for model applications see 6, 18, 23]. While many model estimation techniques are available, the multinomial logit (MNL) model has substantial theoretical and empirical support [15, 24] and is most commonly used. In mathematical terms:

$$P_{ik} = \frac{\exp \{Z_{in} \theta\}}{\sum_{j=1}^J \exp \{Z_{jn} \theta\}}$$

where

$Z_{in}$  = vector of  $n$  attributes for firm  $i$ ,

$\theta$  = vector of estimated coefficients reflecting consumer response (purchase probability) to firm attributes, and

$P_{ik}$  = probability of utility maximizing individual  $k$  selecting alternative  $i$ .

The unknown coefficients  $\theta$  are estimated by a maximum likelihood procedure in which the estimator is that value of the coefficients maximizing the log likelihood function, giving consistent and asymptotically normal estimates under rather general assumptions [24]. The estimated coefficients represent the effects of each strategy variable on a firm's market performance. One advantage of the MNL model is its formulation as a discrete choice model, which requires only specification of choice (i.e., agency selling a property) in predicting purchase probabilities for each transaction and overall market share.

*Aggregate Model.* The MNL model was used to assess the aggregate effectiveness of twelve strategy variables. Variables in three marketing mix elements (communication, distribution, and product) were significant, as was franchise affiliation (see Exhibit 3). All statistically significant coefficients were of the expected sign except for service level, which is discussed in the following section.

Absence of significant price-related effects may result from two factors. First, the objective price charged by the firm is reflected in the commission it charges to sellers. Thus, if included it would be expected to have its primary effect on obtaining a listing, not considered here, rather than on making a sale. Second, the price variable of this study was tendency of price dealing. This function may be controlled by sellers rather than real estate firms.

*Group-Specific Model.* The overall analysis demonstrated that marketing strategy elements have significant relationships with market performance at a general level. However, the usefulness of marketing strategy elements is expected to vary among firms with differing strategic orientations. For this reason, the effectiveness of strategy variables was assessed separately for the three strategic orientation groups. Only the seven variables significant in the overall analysis were used.

The first step was to define variables as either generic or group-specific. A generic variable is constrained to having equal coefficients (importance) for all groups, reflecting the invariance of effectiveness. It was assumed that distance would have the same effect on the probability of making a sale regardless of a firm's strategic orientation; distance effects are an interactive relationship of selling agents, listing agents, and consumers and as such should be out of the control of the selling firm. It was also assumed that the effect of franchise affiliation would not vary across strategic orientations. The remaining variables were defined as group-specific and separate coefficients estimated for each strategic group.

Before examining the group-specific model results, it is first necessary to establish model validity by assessing the improvement in model fit, in this case through comparison with the aggregate-effects model described earlier. The log-likelihood test for differences [14] showed significant gains in model fit by estimating group-specific coefficients.<sup>7</sup> In addition, the predictive ability of the aggregate and group-specific models was examined by comparing actual market shares with aggregate sales probabilities for each firm, the measure of expected market share. This test showed that both the overall and group-specific models predict substantially better than chance and that the group-specific models are superior to the aggregate model.<sup>8</sup>

The importance of significant variables is assessed most appropriately with elasticity values. These values reflect the increase in market performance per unit of marketing effort on each variable. Their advantage is comparability across variables, which is not possible when comparing significance levels. Examination of the elasticity values in Exhibits 3 and 4 reveals several conclusions that can be drawn from the aggregate and group-specific analyses described above.

1. *Firms should locate their offices near the areas in which they would like to sell property.*

Observed elasticities (-.85 overall and -1.02 for the group-specific models) indicate that the

**Exhibit 4**  
**Assessment of Strategy Variables' Impact on Market Share**  
**for Each Strategic Orientation Group**

Strategy Variables	Generic		Group 1 (Balanced)		Group 2 (Autonomous)		Group 3 (Selling)	
	Coef.	Elas.	Coef.	Elas.	Coef.	Elas.	Coef.	Elas.
<b>Firm</b>								
Franchise affiliation	.42 <sup>a</sup>	.18						
<b>Product</b>								
Service level			-2.59 <sup>a</sup>	-.76	-.98 <sup>b</sup>	-.34	-.95 <sup>b</sup>	-.36
Value matching			-.02 <sup>a</sup>	-1.59	-.02 <sup>b</sup>	-2.21	-.02 <sup>b</sup>	-2.08
<b>Distribution</b>								
Distance	-.04 <sup>a</sup>	-1.02						
Market presence			.03 <sup>a</sup>	.43	.05 <sup>b</sup>	.23	.09 <sup>b</sup>	.16
<b>Communication</b>								
Display advertising			.01 <sup>a</sup>	.26	-.01	NC	.00	NC <sup>c</sup>
Classified advertising			.02 <sup>a</sup>	.16	.04 <sup>a</sup>	.27	-.01	NC <sup>c</sup>

<sup>a</sup>Significant at .01 level

<sup>b</sup>Significant at .05 level

<sup>c</sup>Not calculated due to lack of significance

effect for distance is quite strong and show that firms have a higher probability of making a sale when distance from the office is small.

2. *The more properties a firm has sold in an area, the greater the probability of making subsequent sales in that area.*

The significant positive effect for the market presence variable for all three strategic orientation groups indicates that a firm may develop a reputation in certain neighborhoods by increased marketing activity; potential buyers who desire to purchase property in the neighborhood then may contact the known firm, resulting in an enhanced capacity for the firm to sell property.

3. *It is easier for a brokerage to sell less expensive properties (relative to the average value of properties sold by the firm) than more expensive properties.*

An agency's chances of being the selling agent decline as the price of a property exceeds the firm's average; the chances increase when the price of the property is below the firm average. Matching of property value to the firm average had the strongest individual effect on market performance for all three groups of firms (elasticities ranged from -1.59 to -2.21). One interpretation is that agencies at any time have pools of buyers to which they show properties. Firms attracting buyers for higher valued properties will have more buyers in their pools that can afford the property in question than firms normally selling less expensive property.

4. *Service level is negatively related to sales.*

Service level was measured as number of agents divided by number of properties sold by the agency in the year, consistent with Crockett [10]. He hypothesized that increasing the number of agents at a brokerage would increase the brokerage's sales. The negative elasticities

for the service variable (-.34 to -.76) show this is not true and may even imply that increasing the number of agents would cause a decrease in sales. However, an alternative explanation exists. The inverse of the service level, transactions/agent, may be considered an efficiency ratio. Looking at the variable this way, results suggest that firms with more efficient agents have higher probabilities of making a sale. It is likely that these more efficient agents are better trained and more experienced, leading also to greater effectiveness and higher sales.

5. *The value of advertising to a firm depends on its strategic orientation.*

Firms following a balanced strategic orientation benefited from display and to a lesser extent classified advertising (elasticities = .26 and .16, respectively). For selling strategy firms neither display nor classified advertising had a significant relationship with market performance. This is consistent with these firms' strategic emphasis on selling properties listed by other firms, reducing their need for advertising. Firms following an autonomous orientation benefited from classified advertising (elasticity = .27) but not display advertising. Their display ads were on the average much smaller than those used by balanced strategy firms and perhaps were not large enough to be effective.

6. *Franchise affiliation has a positive effect on market performance.*

For any particular transaction, franchise agencies have a higher probability of being the selling firm than non-franchise agencies (elasticity = .18).

## Discussion

The findings of this study answer both research questions affirmatively, as well as providing a basis for comparing traditional (consumer or industrial) markets with the service sector. The first finding was that firm groups with different strategic orientations exist. While such groups have been found in tangible goods markets, prior evidence in the service sector has been limited. Along with the definition of strategic orientation groups, it was found that the groups could be differentiated and firms classified by the relative amount of marketing effort they expended on the various marketing mix elements.

The second research objective was to identify those strategy variables that impact making a sale. Employing variables from each of the four marketing mix areas, it was demonstrated that the effectiveness of marketing strategy tools differed for firms with different strategic orientations. Thus, a firm needs to monitor the market and its competition in choosing a strategic orientation that fits both its resources and the marketing environment. Once an orientation is chosen, an individual brokerage can identify a marketing program to suit its particular strategic orientation. Without consideration of its unique market positioning, a firm may choose a marketing strategy ill suited to its requirements. Results also suggest that for maximum market performance firms must make efforts across the range of marketing mix components and not concentrate on a limited set of activities.

In assessing any conclusions, a number of study limitations must be noted and their impact assessed. First, the study included only transactions within the calendar year 1985. Findings may reflect market conditions not generalizable to other years, even in the same market. A similar limitation concerns the application of results in other markets. Findings may vary for markets with different types of competitors or market characteristics. Results must be viewed as exploratory until the models are validated in additional years and markets.

A further limitation concerns the firms excluded from the analyses reported here. Firms that were not MLS members and very small MLS member firms were not included. Although these firms represent a very minor proportion of sales within the market, they may possess

a strategic orientation not identified and use marketing mix elements differently than the firms studied.

Real estate strategies have been discussed in general terms in many forums, yet specific assessments of their effectiveness is still lacking. This research provides an initial examination of the range of strategies found in a selected component of the real estate market, providing the basis for continued validation and extension of its results. One logical extension is to incorporate the strategies for listing as well as for selling properties. Marketing variables' effects might be expected to differ markedly in the listing phase. For example, where advertising was rated lower in effectiveness in achieving sales, it may play a pivotal role, as would market presence, in obtaining a listing.

## Notes

<sup>1</sup>Of the initial set of 2,417 transactions, 44 transactions were excluded because of missing data on one or more variables used in the study.

<sup>2</sup>The 1985 Baton Rouge telephone directory listed sixty-three real estate firms not on the MLS roster. Directory advertisements for several firms contained information indicating they did not engage primarily in residential real estate sales. In addition, nearly one-quarter of the non-MLS firms were not listed in subsequent telephone directories. A second check of non-MLS firms was made by examining newspaper advertising for real estate during one week in each quarter in 1985. Only 2% of total display advertising square inches and 12% of total classified column inches (excluding advertisements placed by owners or builders) were placed by non-MLS firms. These findings suggest that the exclusion of non-MLS firms is not an important issue in assessing the validity of study findings.

<sup>3</sup>The dispersion index is described by the following formula, which is analogous to the Herfindahl concentration measure used in industrial organization economics [11, 21]:

$$\text{dispersion} = \sum_{i=1}^N (p_i^2), \text{ where}$$

$N$  = number of geographic subareas

$p_i$  = percentage of sales (or listings) in each subarea for firm  $i$ .

A value close to 1.0 indicates that a firm has a large percentage of its sales concentrated within one or a few geographic subareas. A value approaching the lower limit of 0 indicates that a firm's sales are widely dispersed.

<sup>4</sup>Data were collected in the earliest portion of each quarter rather than the midpoint or end to best accommodate the natural lag effect in communication variables. Analysis of the differences between contiguous quarters showed no evidence of dramatic increases or decreases that would necessitate measurement of these variables on a more frequent basis. The nine broad areas defined by MLS were used for geographic definition as further geographic detail was not possible for individual classified or display advertisements.

<sup>5</sup>Cluster analysis organizes entities, in this case real estate brokerages, into highly similar groups, or clusters. The procedure calculates a similarity measure between all the data points, then groups the data points into clusters so as to maximize similarity among observations within a cluster and minimize similarity between different clusters. (For a more detailed description of cluster analysis, see [22].)

<sup>6</sup>Discriminant analysis examines all variables and estimates the underlying dimensions having the greatest ability to discern group membership of any observation; in this case, firms in the three strategic orientations.

<sup>7</sup>The value of 110.16 (-2 times the difference in log likelihood values) with 5 degrees of freedom is significant at  $p < .01$ .

<sup>8</sup>For maximum interpretation, constant terms were not estimated. This highlights variables' effects but somewhat diminishes predictive accuracy. The aggregate model parameters had an average percentage error of  $\pm 26\%$ , rather good given the large number of competing firms possible and the use of only seven significant strategy variables. The error level decreased to 21% with the group-specific model. A comparison standard for these error levels is a naive model predicting equal market shares for each firm, which results in an error level (85%) that is four times greater than either model.

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