Franchise Affiliation and Brokerage Firm Selection: A Perceptual Investigation

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Abstract. **This study uses direct consumer perceptual information to investigate the broker selection process and the role that national franchise affiliation plays in this process. Multidimensional scaling is used to generate the housing consumers' perceptual space that represents their firm ranking process.**

The two major dimensions of this perceptual space are labeled the high touch and high tech dimensions based on a factor analysis of brokerage firm selection criteria. Of these, the latter is directly related to preference, although the former is generally rated as slightly more important by consumers. Even though the specific criterion "affiliation with a nationally known firm" is not rated as highly important, four of the five top ranked brokerage firms are franchise affiliates.

Introduction

Real estate brokerage is one of the most important, yet least studied, sectors of the American economy. Although there are a number of viable areas of concern, franchise affiliation is of particular interest to the industry. Very little is currently known about consumer perceptions of real estate brokerage firms, the effects of the franchising process, or the customer selection process for these firms. This project examines the effects of such affiliation on consumer perceptions of, and preferences for, real estate brokerage firms. It is designed to take a first, exploratory look, using direct consumer preference information as opposed to firm data, at franchising as it affects the real estate brokerage industry.

What is Franchising?

There are two basic forms of franchising. The first, called product and tradename franchising, is the oldest and is projected to account for an estimated 70% of all franchise sales in the United States during 1988 [20, p. 1]. Automobile and truck dealers, gasoline service stations,

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and soft drink bottlers were among the first participants in this form of franchising and are still dominant.

Real estate franchises are of the second form, called business format franchising. This form of franchising is characterized by an ongoing relationship between franchisor and franchisee that includes not only the basic product, service, and trademark, but also a complete format for doing business including marketing strategy and plans, operating procedures, and quality control [20, p. 3].

Since the late 1950s the rise of business format franchising has been responsible for what is popularly called the franchise "boom". Whittemore [21, p. 20] suggests that this franchise boom has been the result of the convergence of two key trends in American business: (1) the new emphasis on customer service and convenience, and (2) the increased interest in entrepreneurism which is enhanced by business format franchising because this form of franchising allows the achievement of goals with greater speed and less risk.

Franchising in Real Estate Brokerage

During the last decade, the growth of franchise operations in the real estate brokerage industry has been explosive. In fact, Century 21 Real Estate led the way for one of the more recent trends in franchising [21, p. 21]. This form of franchising, called conversion franchising, relies on converting an existing, independent firm into a member of the franchise organization.

Prior to 1975 real estate franchises were virtually nonexistent [20, pp. 35–36]. However, by the end of 1988 an estimated 16,772 independently-owned real estate brokerage establishments are expected to be franchise affiliates [20, p. 64]. Franchises now account for approximately 30% of all real estate brokerage operations [6, p. 15]. Even though there has been a leveling off in the number of real estate franchise affiliates, growth is still expected to be 11.5% between 1987 and 1988 [20, p. 64].

Much of the growth in real estate franchising is attributed to the intensified competitive environment caused by the emergence of national real estate brokerage operations such as Coldwell Banker and Merrill Lynch. It is commonly believed that potential clients feel more comfortable with larger well-known firms [7, p. 50–53; 11, p. 43; 18, p. 4], so franchise affiliation is expected to make the franchisee more competitive by increasing firm name recognition and enhancing reputation. This is to be achieved largely through substantial investments in advertising and innovative training and recruitment programs [5, p. 49; 11; 18, p. 4]. Since "franchises offer the image of bigness and the autonomy of individual ownership" [7, p. 135], the recent influx of franchised real estate brokerage firms is understandable.

Purpose of the Research

The primary issue addressed by this research is the effect (compared to other selection criteria) of national franchise affiliation on preference for residential real estate brokerage firm services. This will be evaluated both indirectly, by measuring the dimensions of firm preference, as well as directly, by asking customers to rate possible criteria used in selecting a real estate brokerage firm.

Thus, consumer perception of both franchised and strictly independent brokerage firms will be examined to gain a better understanding of the firm selection process with particular emphasis on the impact of franchise affiliation. Success in the real estate brokerage industry depends in large measure upon the public image created by the firm. The results of this investigation will be helpful in evaluating the presumed advantages of wider name recognition and national reputation offered by franchise affiliation.

Literature Review

Most studies on the effect that national real estate franchise affiliation has on sales and/or profit levels conclude that franchised operations are indeed more successful than non-franchised firms. An early study by Spoerl [18] noted that 72% of the franchise affiliates sampled reported increased revenue while another 20% felt it was too early to judge. However, only 3% of the non-franchised firms believed that their market share had decreased with the addition of franchised brokerage firms in their respective areas. A more recent study by Frew and Jud [9] found that franchised operations were more successful in general, but that the more experienced agencies who created regional affiliations to combat national franchise organizations were the most successful.

The impact of franchise affiliation has been examined primarily in terms of operational characteristics, not consumer reactions. Consumer preference for nationally known firms is commonly believed to be a major advantage of franchising, particularly where the population is mobile and not familiar with local brokerage firms. As a 1981 Gallup study reported, there is evidence of a link between name recognition and the homeowner's selection of a listing company [2, p. 41]. This presumably gives nationally advertised franchises an advantage over local, independent firms.

While the importance of brokerage firm selection criteria has been examined from a consumer perspective, franchise affiliation has not been one of the criteria considered [4; 16]. In fact, few studies have directly focused on consumer perceptions of franchised real estate brokerage firms as compared to independent firms. Frew and Frew (8) utilized data from a study of homebuyers to examine differences between franchised and non-franchised brokerage firms with regard to home prices, customer income levels, the effect of mass promotion, and the likelihood of repeat business. While they found that customers using a franchised firm were more likely than customers of non-franchised firms to use the same broker again, a study by Blair and Rossi [1] discredited the common assumptions about the importance of franchising by concluding that independent brokers, rather than national affiliates, were generally preferred because of the perceived higher level of personal services they provide. Given the inconsistent conclusions of the limited research in this area, the impact of franchise affiliation on the broker selection process seems to be little understood.

The sparseness of the available literature described in this section causes this project to be largely exploratory in nature. The following section describes the research methodology used to examine the issues of interest to this study.

Research Methodology

This section is divided into four parts. Descriptions of the sample, the questionnaires, and the interview process are followed by a discussion of the analytical procedures used.

The Sample

Recent home buyers and sellers in a mid-sized midwestern city were selected to represent the population of interest. The city, with an approximate SMSA population of 100,944 [19], is home for both a U.S. Air Force base and the main campus of the state university, thus creating a highly mobile population for a town of its size.

Respondents were selected from the population of home buyers and sellers who had completed, or were in the process of completing, a housing transaction in the area between May 1985 and June 1986. A sample frame of recent market participants was compiled from county courthouse records on deed registrations. Respondents were systematically selected from this sample frame. A convenience sample of current market participants was selected via for-sale signs and contacts at open houses.

The sample of housing consumers consisted of forty-four recent market participants and forty-one current participants, for a total of eighty-five respondents. Of the total, nineteen were home buyers, thirty-six were home sellers, and thirty were both buying and selling a home. The sample size was restricted due to the size restrictions of the analysis procedure and the exploratory nature of the research. Exhibit 1 provides a demographic profile of the respondents, while Exhibit 2 details specific information regarding their home buying and selling activities.

The Questionnaire

A five-part questionnaire, pretested prior to use, was administered to the eighty-five respondents. First, the respondents were asked to rank order the eighteen area real estate brokerage firms, four of which were affiliated with four different franchise organizations, from most preferred to least preferred. Each respondent was randomly assigned one of three sets of eighteen cards containing the names of these firms. The first of these respondent groups ($N = 29$) ranked firms using cards that included local firm names only, while a second group ($N = 27$) used cards that listed only franchise names for the four firms that had a franchise affiliation. The final group ($N = 29$) ranked cards containing both the local and franchise names for the four franchised firms. Thus, for the fourteen independent firms, the same firm name was used in all three sets of cards. Only the franchised firm names were manipulated.

The second part of the questionnaire consisted of twenty-one criteria that respondents were asked to rate in terms of their importance in the evaluation and selection of real estate brokerage firms. The criteria were developed from test instruments used in the National Association of Realtors' *National Homebuying Survey* [14] and the New York Times study, *Real Estate Perspectives* [15].

The third and fourth parts requested specific information regarding the conditions surrounding the purchase and/or sale of the respondents' homes. This information is presented in Exhibit 2. The final section requested demographic information from which Exhibit 1 was developed.

Interview Process

The customer sample data were generated via personal interviews conducted by three trained interviewers. In order to complete the preference rankings required for the first part of the customer questionnaire, respondents were asked to sort, from most preferred to least preferred, eighteen 3×5 cards that contained the names of the eighteen local brokerage firms. The cards were shuffled (in view of the respondents) before being handed to the respondents in an attempt to neutralize any order bias.

Exhibit 1
Profile of Customer Sample

SEX	Number	Percent
Male	44	51.8%
Female	41	48.2%
Total	85	100.0%

AGE	Number	Percent
Under 25	6	7.1%
25 - 34	30	35.7%
35 - 44	22	26.2%
45 - 54	15	17.9%
55 - 64	2	2.4%
65 or more	9	10.7%
Total	84	100.0%

EDUCATION	Number	Percent
High School or less	7	20.7%
Some College	6	19.5%
2-year Degree	17	20.7%
4-year Degree	14	17.1%
Graduate Degree	15	18.3%
Other	3	3.7%
Total	82	100.0%

ANNUAL HOUSEHOLD INCOME FROM ALL SOURCES	Number	Percent
Less than $10,000	3	3.8%
$10,000 - $19,999	6	7.6%
$20,000 - $29,999	10	12.7%
$30,000 - $39,999	31	39.2%
$40,000 - $54,999	22	27.8%
$55,000 - $69,999	2	2.5%
$70,000 - $84,999	0	0.0%
$85,000 or more	5	6.3%
Total	79	100.0%

NUMBER OF PEOPLE IN HOUSEHOLD	Number	Percent
1	5	6.0%
2	30	35.7%
3	21	25.0%
4	16	19.0%
5	11	13.1%
6	1	1.2%
Total	84	100.0%

YEARS LIVED IN AREA	Number	Percent
Less than 2	10	11.9%
2 - 5	15	17.9%
6 - 10	16	19.0%
11 - 20	21	25.0%
More than 20	22	26.2%
Total	84	100.0%

OCCUPATION	Number	Percent
Clerical	9	10.8%
Managerial	15	18.1%
Professional	14	16.9%
Teacher	8	9.6%
Blue Collar	19	22.9%
Housewife	13	15.7%
Retired	5	6.0%
Total	83	100.0%

OTHER CONTRIBUTORS TO HOUSEHOLD INCOME	Number	Percent
Yes	60	72.3%
No	23	27.7%
Total	83	100.0%

OCCUPATION OF 'OTHER' CONTRIBUTOR	Number	Percent
Clerical	11	19.3%
Managerial	15	26.3%
Professional	7	12.3%
Teacher	5	8.8%
Blue Collar	16	28.1%
Housewife	0	0.0%
Retired	3	5.3%
Total	57	100.0%

Exhibit 2
Home-related Characteristics of Customer Sample

TYPE OF MARKET PARTICIPANT

	Number	Percent
Past	44	51.8%
Current	41	48.2%
Total	85	100.0%

USE OF REAL ESTATE FIRM

	Number	Percent
Buy home	19	22.4%
Sell home	36	42.4%
Both	30	35.3%
Total	85	100.0%

PURCHASE PART OF MOVE TO AREA

	Number	Percent
Yes	10	21.3%
No	37	78.7%
Total	47	100.0%

HOME FOR SALE IN AREA

	Number	Percent
Yes	58	90.6%
No	6	9.4%
Total	64	100.0%

FIRM USED FOR PURCHASE

	Number	Percent
None used	5	11.1%
Franchised Firm	24	53.4%
Non-Franchised Firm	15	33.3%
Not in Grand Forks	1	2.2%
Total	45	100.0%

FIRM USED FOR SALE

	Number	Percent
None used	5	7.7%
Franchised Firm	31	47.6%
Non-Franchised Firm	25	38.5%
Not in Grand Forks	4	6.2%
Total	65	100.0%

HOW FIRM FOR PURCHASE WAS SELECTED

	Number	Percent
None used	5	10.6%
Spouse chose	3	6.4%
I chose	9	19.1%
Chose w/ spouse	16	34.0%
Relative chose	3	6.4%
Bus Assoc chose	2	4.3%
Other chose	3	6.4%
Used Listing Agent	6	12.8%
Total	47	100.0%

HOW FIRM FOR SALE WAS SELECTED

	Number	Percent
None used	5	7.7%
Spouse chose	10	15.4%
I chose	12	18.5%
Chose w/ spouse	32	49.2%
Relative chose	4	6.2%
Bus Assoc chose	1	1.5%
Other chose	1	1.5%
Total	65	100.0%

NUMBER OF AREA HOMES PURCHASED

	Number	Percent
1	22	46.8%
2	16	34.0%
3	5	10.6%
4	3	6.4%
9	1	2.1%
Total	47	100.0%

NUMBER OF AREA HOMES SOLD

	Number	Percent
0	3	4.6%
1	48	73.8%
2	10	15.4%
3	2	3.1%
9	2	3.1%
Total	65	100.0%

TOTAL NUMBER OF HOMES PURCHASED

	Number	Percent
1	21	44.7%
2	15	31.9%
3	6	12.8%
4	2	4.3%
5	1	2.1%
6	1	2.1%
9	1	2.1%
Total	47	100.0%

TOTAL NUMBER OF HOMES SOLD

	Number	Percent
1	45	69.2%
2	15	23.1%
3	1	1.5%
4	1	1.5%
5	1	1.5%
9	2	3.1%
Total	65	100.0%

Exhibit 2
Continued

TYPE OF RESIDENCE PURCHASED

	Number	Percent
Single-family	36	76.6%
Condo/Townhouse	8	17.0%
3 or 4 families	0	0.0%
Duplex	3	6.4%
Total	47	100.0%

TYPE OF RESIDENCE SOLD

	Number	Percent
Single-family	50	76.9%
Condo/Townhouse	9	13.8%
3 or 4 families	1	1.5%
Duplex	5	7.7%
Total	65	100.0%

PURCHASE PRICE OF HOME

	Number	Percent
Less than $20,000	0	0.0%
$20,000 - $29,000	0	0.0%
$30,000 - $39,999	3	6.5%
$40,000 - $49,999	7	15.2%
$50,000 - $59,999	10	21.7%
$60,000 - $69,999	4	8.7%
$70,000 - $84,999	14	30.4%
$85,000 - $99,999	3	6.5%
$100,000 - $114,999	4	8.7%
$115,000 - $129,999	1	2.2%
$130,000 - $149,999	0	0.0%
$150,000 or more	0	0.0%
Total	46	100.0%

SELLING PRICE OF HOME

	Number	Percent
Less than $20,000	3	4.6%
$20,000 - $29,000	2	3.1%
$30,000 - $39,999	11	16.9%
$40,000 - $49,999	8	12.3%
$50,000 - $59,999	17	26.2%
$60,000 - $69,999	3	4.6%
$70,000 - $84,999	14	21.5%
$85,000 - $99,999	7	10.8%
$100,000 - $114,999	0	0.0%
$115,000 - $129,999	0	0.0%
$130,000 - $149,999	0	0.0%
$150,000 or more	0	0.0%
Total	65	100.0%

At the interviewer's suggestion, respondents first divided the cards into two piles, one of firms that were "most preferred" and the other of firms that were "least preferred". This procedure was repeated until the piles of cards were small enough to facilitate ranking firms one at a time from most preferred to least preferred. Upon completion of this process, the respondent put a rubber band around the cards and placed them in an envelope.

The remainder of the questionnaire was composed of structured questions. Thus, it was simply completed by the respondent and placed in the envelope with the rank ordered cards.

Analytical Procedures

The consumer preference rankings of the eighteen real estate brokerage firms were analyzed in two ways. The first involved a comparison of the mean preference rankings of each firm as well as a comparison via analysis of variance (ANOVA) of the mean rankings for the franchised firms based on the type of reference made to the firm. As previously stated, the reference could have been by local name only, franchise name only, or a combination of both names depending upon the cards randomly assigned to the respondent.

The second approach to analyzing customer preferences utilized a multidimensional scaling (MDS) technique developed by Carroll and Chang at the Bell Telephone Laboratories [3]. Specifically, their "MDPREF: Multidimensional Preference Scaling" program [17, pp. 1-1 – 1-16] was used to develop the multidimensional space that represents the real estate firm ranking process of the housing consumers. This multidimensional analysis allows for visual evaluation of the relative positions of the brokerage firms in the space which represents the consumers' perceptions of the firms. Each dimension in the perceptual space represents an evaluative construct, or set of criteria. This procedure allows the researcher to both define groups of perceptually "similar" firms and to reveal the criteria actually used (consciously or unconsciously) by consumers in making judgments about the firms.

MDS is based on the assumption that a respondent is familiar with all items, in this case brokerage firms, being evaluated. Unfortunately, a number of the respondents were unfamiliar with about half of the eighteen firms in the study. Therefore, only the firms familiar to a respondent were ranked by that respondent.

The perceptual space for the "average" consumer was developed for each of the three consumer respondent groups (determined by the type of reference made to the franchised firms) as well as a subset of the total sample.[1] The importance ratings of criteria used when selecting a brokerage firm were used both in the interpretation of the dimensions revealed by the MDS analysis and in evaluating the customers' directly stated opinions of the importance of franchise affiliation.

Results

This section contains the results of the various analyses conducted on the data collected. First, the customer preference rankings of the firms in the study are evaluated. Second, the perceptual maps resulting from the MDS analysis are presented. Finally, the importance ratings of the various firm selection criteria are examined.

Firm Preference Rankings

Before examining the perceptual space "maps" resulting from the MDPREF analysis, an examination of the mean preference rankings of the firms in the study group is helpful. Exhibit 3 contains the mean rank for each of the eighteen firms under two conditions. First, the firms are listed in order from the firm with the best overall preference ranking to the firm with the worst overall preference ranking.The letter assigned to each firm is based on the distribution of mean preference rankings. Therefore, Firm A received the highest overall mean ranking while Firm R received the lowest.[2]

Both the mean ranking and the absolute rank based on these means are presented. However, since some of the firms were more heavily used than others by the customer sample, it is possible that an over-representation of the current customers of some firms may bias the overall rankings. Therefore, the mean rankings for each firm with the current customers of that firm excluded from the calculation, as well as the absolute ranks associated with these means, are presented in the middle columns. The last column simply indicates how many customers in the total sample of eighty-five did not feel familiar enough with each firm to rank it. These were not included in either of the calculations of the mean rankings.

By comparing the 95% confidence intervals computed for each of the mean rankings, five general groups of firms can be identified. Within each of these groups there is very little evidence of statistically significant differences in the mean rankings. The five groups of similarly ranked firms are blocked off in Exhibit 3 for easy identification. Upon examination of the five groups of firms, it can be seen that the shifts in rank occurring when the customers for each firm are eliminated from the calculations do not indicate significant changes in rank.

The four local franchise organizations are affiliated with,in alphabetical order, Better Homes

Exhibit 3
Mean Preference Rankings

	ID	MEAN RANKING*	ABSOLUTE RANK	MEAN RANKING**	ABSOLUTE RANK	NO. OF RESPONDENTS NOT RANKING FIRM
	A	**3.975**	**1**	**4.420**	**1**	**4**
	B	**4.646**	**2**	**5.364**	**2**	**6**
I	**C**	**5.190**	**3**	**6.311**	**4**	**6**
	D	5.243	4	5.727	3	11
	E	**6.237**	**5**	**6.629**	**5**	**9**
	F	7.478	6	8.414	6	18
	G	8.180	7	8.424	7	24
II	H	8.677	8	9.016	8	20
	I	8.739	9	9.077	9	16
	J	9.149	10	9.453	11	18
	K	9.175	11	9.443	10	22
	L	10.661	12	10.836	16	29
	M	10.771	13	10.774	12	32
III	N	10.782	14	10.782	13	30
	O	10.807	15	10.807	14	28
	P	10.818	16	10.818	15	30
IV	Q	12.340	17	12.340	17	38
V	R	14.133	18	14.133	18	40

*Mean is computed using rankings of all respondents.
**Mean is computed after eliminating the rankings of the respondents who were customers of the firm being ranked.

and Gardens, Century 21, Gallery of Homes, and Realty World. These are listed as Firms A, B, C, and E (shown in bold type in Exhibit 3),[3] accounting for four of the top five most preferred firms found in Group I. The non-franchise affiliate is one of the, if not the, largest of the local, independent firms.

Groups II and III are composed of six and five firms respectively, while Groups IV and V each consist of only one firm. It is interesting to note that not only are the mean rankings within each group quite similar, but also the number of respondents not ranking each firm is quite similar. The lower ranked groups are composed of firms with higher numbers of respondents not ranking them at all. Apparently, preference and familiarity are highly correlated for respondents in this study. Thus, firm name recognition, to the extent it is augmented by franchise affiliation, is of major concern.

To further examine the relationship between preference and firm name recognition, and the role that franchise affiliation plays, the mean rankings of the franchise firms were computed in each of the three subsamples defined by the type of reference made to the franchise firms: local name only, franchise name only, and both names together. An analysis of variance (ANOVA) was performed to test the premise that firm name recognition, and thus consumer preference is enhanced when a firm is affiliated with a national franchise organization. Exhibit 4 summarizes the results of this analysis.

Firm A appears to enjoy the most consistent level of preference among respondents, regardless of the type of reference made to it. There is only slight evidence ($p = .089$) that its rank is higher when referred to by its local name only instead of its franchise name only. This firm

Exhibit 4
Mean Preference Rankings by Name Category (Franchise Firms Only)

Name Category	Franchise Firm A	B	C	E
Local Firm Name Only	3.333	6.720	6.500	6.926
Franchise Name Only	4.486	3.346	5.308	4.783
Both Names	3.786	4.000	3.815	6.808
ANOVA Results				
F-Statistic	1.541	4.255	2.592	2.460
Significance Level	.219	.017	.080	.091
T-Test Between Group Means (values of *p* for two-tailed test when $p \leq .100$)				
Local - Franchise	.089	.008		.048
Local - Both Names		.027	.026	
Franchise - Both				.064

seems to enjoy a strong local reputation, is often referred to in the community by its local name only, and was well established prior to becoming a franchise affiliate. However, it also appears to have associated itself with a well-respected franchise.

Firm B presents a quite different picture. The rank of Firm B varies dramatically depending on the type of reference made to it. When the franchise name is used, either alone or in tandem with the local name, the rank is significantly higher than when the local name is used alone (p = .008 and .027 respectively). This evidence suggests that either customers do not readily recognize the firm without its franchise name listed or the national image created by this franchise dramatically improves the reputation associated with the local firm. In either case, the implication is for this firm to always display the franchise name.

For Firm C the use of both names appears to generate a higher preference ranking, at least when compared to use of the local name only (p = .026). This firm is generally referred to by both the local name and the franchise name as one name, so respondents may have been more likely to recognize it when both names were used.

Firm E provides weak evidence that use of its franchise name alone results in a higher preference ranking than either the local name alone (p = .048) or both names together (p = .064). In this instance, perhaps retention of the local name is superfluous.

MDS Analysis

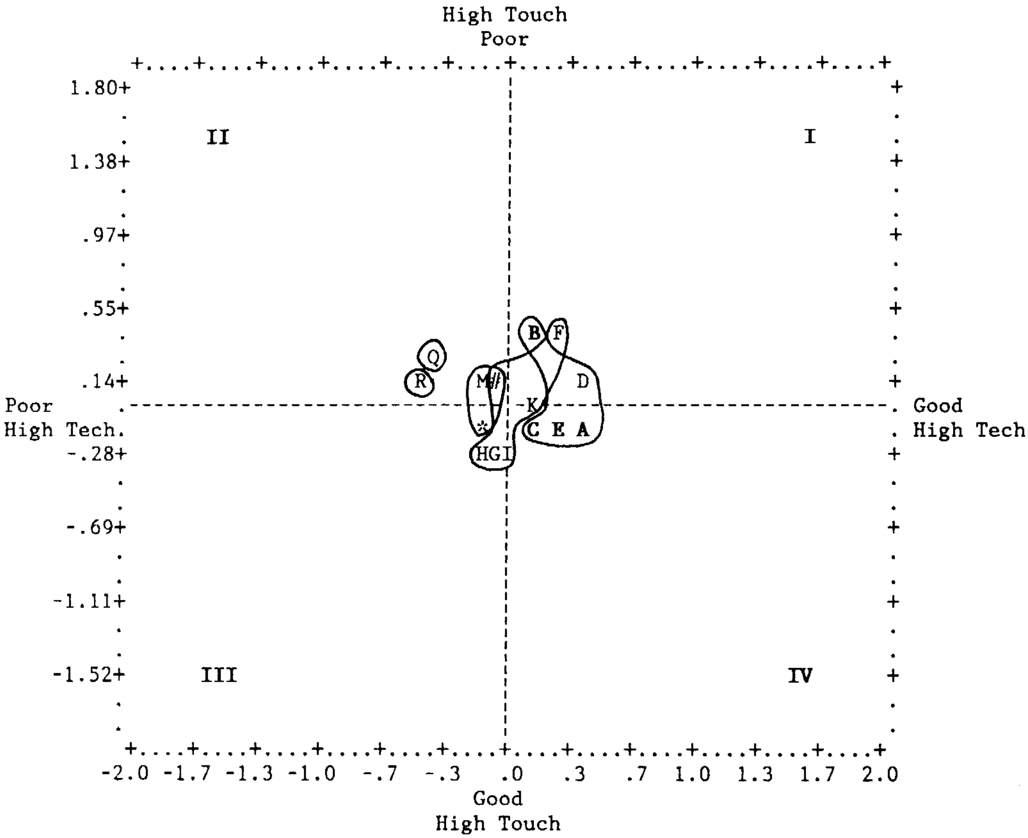
MDS perceptual maps are presented as a further examination of customer perceptions of local real estate brokerage firms. MDPREF, the procedure used to develop the perceptual maps shown in Exhibits 6 through 9, is a metric model based on a principal component analysis (Eckart-Young decomposition). In this analysis, a data matrix (S^*) of **i** subjects by **j** stimuli is decomposed into two smaller matrices. Each cell of the S^* matrix contains a numerical entry (**i,j**) that represents the ith subject's preference for the jth brokerage firm (or stimulus).

The first of the two resulting matrices in called a "principal component score" [PCS], or factor score, matrix of size (**i** × **r**), where **r** is the number of principal components. The second matrix is called the "principal component loading" [PCL], or factor loading, matrix and is of size (**r** × **j**). MDPREF is valued as an analytical procedure because the values in the PCS and PCL matrices project the stimuli onto subject vectors within the multidimensional

Exhibit 5
Factor Analyses of Consumer Importance Ratings (Factor Loadings)

Item	Local Name Factor No. 1	Local Name Factor No. 2	Franchise Name Factor No. 1	Franchise Name Factor No. 2	Both Names Factor No. 1	Both Names Factor No. 2	Composite Factor No. 1	Composite Factor No. 2
Affiliation with Nat. Known Firm	**.775**	.202	**.744**	−.330	**.083**	−.010	**.731**	.013
Size of Firm Prefer Large Firm	**.777**	.096	**.790**	−.328	**.212**	−.220	**.708**	.066
Availability of Listings	**.726**	.183	**.785**	−.203	**.533**	.466	**.819**	.029
"For Sale" Signs	**.625**	.350	**.612**	−.347	**.730**	.123	**.779**	.075
Yellow Pages	**.440**	.226	**.455**	−.337	**.655**	−.142	**.680**	.097
Direct Contact by Agent or Firm	**.498**	−.075	**.456**	−.027	**.030**	.194	**.657**	.377
Avail. of Full Service Package	**.479**	−.135	**.557**	−.318	**.263**	−.119	**.532**	−.428
Met Agent at Open House	**.111**	−.103	**.666**	−.009	**.550**	.101	**.334**	.296
Personal Acquaint. with Agent	.014	**−.746**	.724	**.108**	.304	**−.734**	.157	**−.548**
Used Same Agent Before	−.025	**−.775**	.593	**−.348**	.418	**−.637**	−.066	**−.683**
General Reputation of Agent	.022	**−.688**	.071	**−.755**	.201	**.342**	−.074	**−.401**
General Reputation of Firm	−.154	**−.454**	.122	**−.819**	.299	**.374**	−.183	**−.511**
Referral by a Friend	.091	**−.440**	.035	**−.619**	.121	**−.783**	−.154	**−.541**
Size of Firm Prefer Small Firm	.143	**−.596**	.357	**−.481**	−.011	**−.684**	.058	**−.516**
Used Same Local Firm Before	.020	−.692	.908	−.084	.653	−.226	.180	−.335
Used Same National Firm Before	.371	−.379	.878	−.067	.290	−.589	.383	−.353
Recent Activity by Firm in Neigh.	.559	−.425	.035	−.578	.336	−.043	.496	−.320
Quality of Adv.	.695	−.229	.165	−.831	.684	−.066	.308	−.687
Freq. of Adv.	.705	−.264	.496	−.650	.800	.160	.640	−.402
"Aggressiveness" on Client's Behalf	.462	−.165	.353	−.713	.145	−.195	.286	−.128
Commission or Fee Charged	.373	−.285	.266	−.533	−.314	−.446	.027	−.433
% of Variance Explained	22.109	17.675	30.594	23.022	18.722	15.768	22.433	15.991

Exhibit 6
Plot of Firms in Perceptual Space — Local Names Only

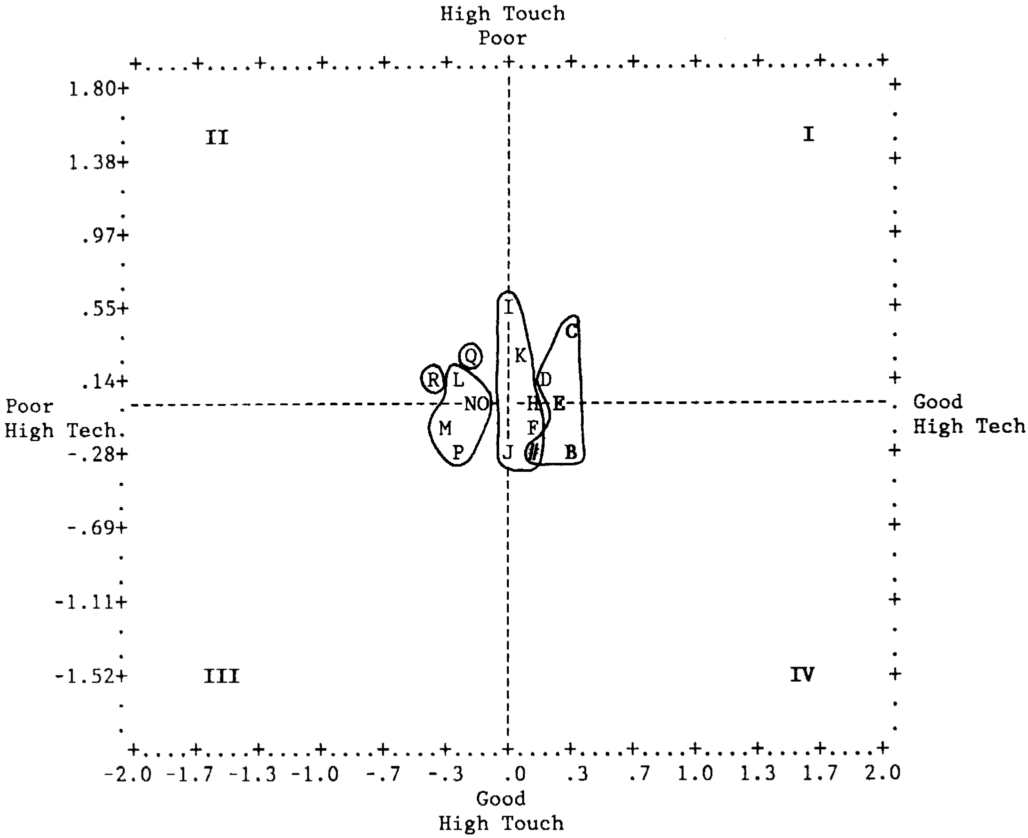


#Indicates that two firms (J and O) occupy the same position.
*Indicates that three firms (L, N, and P) occupy the same position.

stimuli attribute space. This multidimensional space allows for visual evaluation of the stimuli in r dimensional space [17, pp. 1–2 & 1–3]. The maps shown in Exhibits 6 through 9 depict the brokerage firms in the customers' perceptual space, limited here to two dimensions for ease of interpretation, derived from the preference rankings of the respondents.

A major problem with MDS techniques, like any form of factor analysis,[4] is in identifying and interpreting the dimensions depicted in the perceptual maps. Therefore, the two dimensions in the perceptual maps are compared to the first two factors derived from a factor analysis of the twenty-one broker selection criteria that respondents rated in terms of importance. The criteria that consistently load most heavily on each dimension are used to provide a general interpretation of the two dimensions. Because the interpretation of these two dimensions helps clarify what the maps portray, the discussion of this analysis precedes the presentation of the perceptual maps.

Exhibit 7
Plot of Firms in Perceptual Space — Franchise Names Only



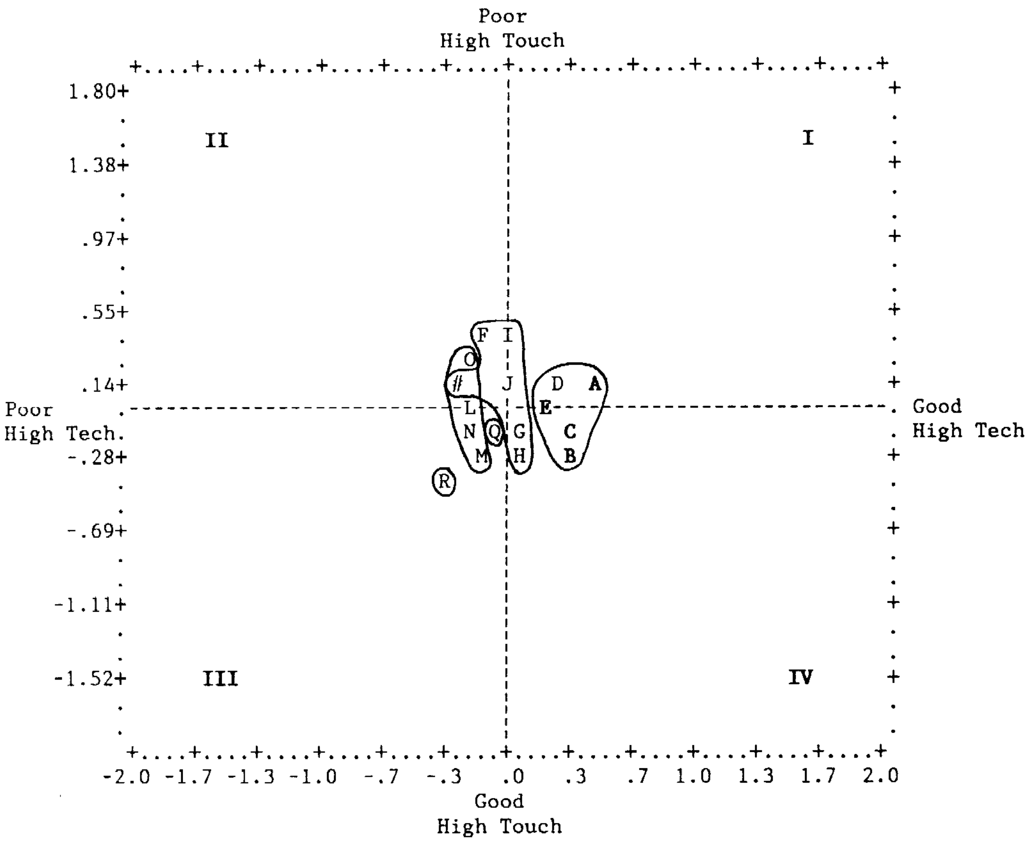
*Indicates that two firms (A and G) occupy the same position.

Labeling the Dimensions

In the questionnaire, housing consumers were asked to rate twenty-one items on a scale from 1 to 7, where 1 indicated that the criterion was "Not Important" in selecting a real estate brokerage firm, and 7 indicated that the criterion was "Extremely Important". The consumer responses to these items were factor analyzed for each of the three subsamples of respondents (which resulted from the three different types of references made to the franchised firms) as well as a composite sample which was selected from each of the three subgroups.[5]

Exhibit 5 presents the factor loadings of the criteria from all four analyses. The total variance explained in the customer ratings by these two factors ranges from a low of 34.49% in the sample exposed to the combined local and franchise names, to a high of 53.616% in the sample exposed to the franchise names only. This somewhat low level of explained variance suggests the presence of other factors. However, as mentioned earlier, the number of factors was restricted to two so as to correspond to the perceptual dimensions created by MDPREF.

Exhibit 8
Plot of Firms in Perceptual Space — Both Names



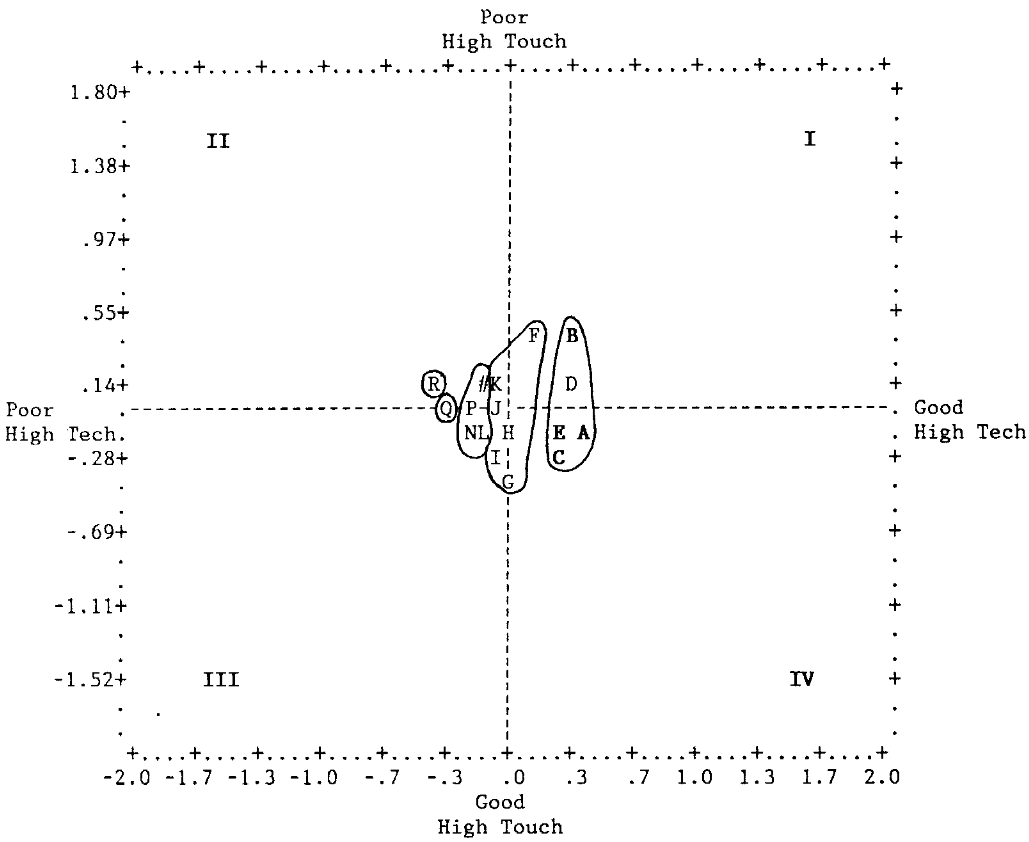
#Indicates that two firms (K and P) occupy the same position.

A commonly accepted rule of thumb for examining the factor matrix is that factor loadings greater than ± .3 are considered significant and loadings greater than ± .5 are considered very significant.[6] Even though inconsistencies exist in the results of the four versions of the analysis, an examination of the factors reveals a definite pattern regarding several of the criteria used. Therefore, the criteria are presented in three groupings. The first group of eight criteria loads most heavily on Factor 1, the second group of six loads most heavily of Factor 2, and the third group of seven does not appear to consistently relate to either factor.

As shown in Exhibit 5, the first factor is one in which the following criteria are important in the brokerage selection process:

Affiliation with a nationally known firm
Preference for a large firm
Availability of listings

Exhibit 9
Plot of Firms in Perceptual Space — Composite



*Indicates that two firms (M and O) occupy the same position.

"For Sale" signs
Yellow Pages
Direct contact by agent or firm
Availability of full service package
Meeting agent at an open house

Therefore, this factor seems to reflect a preference for large, nationally known firms that effectively perform formalized brokerage activities.

On the other hand, the second factor is more qualitative in nature. In this instance, the following criteria are important in the selection of a broker:

Personal acquaintance with the agent
Use of the same agent before
General reputation of the agent

General reputation of the firm
Referral by a friend
Preference for a small firm

Thus, this factor reveals concern with personal knowledge of (including the general reputation) and contact with the firm and/or agent. These appear to be associated with a preference for smaller firms.

The two factors that emerge from this analysis bear a remarkable similarity to the "high tech/high touch" distinction developed by Naisbitt to describe the general response to technological change [13, p. 39]. According to Naisbitt, institutions should add a high touch, or personalized, component to the introduction of new technology or risk rejection of the technological innovation. Factor 1 seems to reflect the importance of more formalized or technology-based criteria, while Factor 2 shows the importance of the personalized high touch criteria. Therefore, in an attempt to provide short, easily understood labels to identify the two dimensions in the following perceptual maps, the horizontal dimension will be called the high tech dimension and the vertical dimension will be called the high touch dimension.

Perceptual Maps

The first of the four two-dimensional perceptual maps, shown as Exhibit 6, is derived from the preference rankings of the twenty-nine housing consumers who were given eighteen cards that listed only the local names for the four franchised firms (along with the fourteen independent firms). The second map, Exhibit 7, is based on rankings by the twenty-seven consumers whose cards listed only the franchise names for the four franchise firms. Exhibit 8 depicts the perceptual space for the twenty-nine consumers whose cards included both the local names of the firms and, when present, the franchise name. One final map, Exhibit 9, is a composite map developed from a sample of respondents from each of these three groups.[7]

The letters used to represent the eighteen brokerage firms in each of the four maps are those derived from the mean preference rankings described in an earlier section. As before, the letter A represents the firm with the highest average preference rank, while the letter R represents the firm with the lowest average preference rank. The franchise firms (shown in bold type) are A, B, C, and E. The five groups of firms with similar preference rankings have been circled to facilitate interpretation of the results.

The two factors derived from the importance of selection criteria are consistent with the two dimensions on the perceptual maps. The horizontal dimension on the perceptual maps appears to represent Factor 1. Thus, this dimension reflects a preference for large, nationally known firms that effectively perform formal brokerage activities. The vertical dimension, although more complex, appears to be consistent with Factor 2. This dimension seems to reflect concern with personal knowledge of and contact with the firm and/or agent.

Due to the positive factor loadings for Factor 1 as shown in Exhibit 5, the better, more favorable perceptions on the horizontal dimension are plotted to the right of the intersection with the vertical dimension on the positive side of the axis. However, the negative loadings for Factor 2 mean that the better, more favorable perceptions on the vertical dimension are found at the negative end of the axis below the intersection.

With relatively minor fluctuations from map to map, the horizontal dimension differentiates those firms that are most preferred from those which are least preferred. With notable regularity, the firms that are a part of the top rated Group I are plotted to the right of the second through fifth rated groups.

The vertical dimension is somewhat less clear in its implications for firm preference because the top ranked firms are located both above and below its intersection with the horizontal axis. Thus, the vertical axis appears to be an important, but not crucial, selection factor.

Preference Shifts Related to Use of Franchise Name

While some fluctuation in an individual firm's placement on the perceptual maps is due to sampling error and can be discounted, major shifts, as least for the franchise firms which were ranked by respondents exposed to different references to these firms, are noteworthy. For example, Firm B moves from a highly unfavorable position on Dimension 2 when it is referred to by only its local name (Exhibit 6, quadrant I) to a very favorable position on this dimension when referred to by either its franchise name only (Exhibit 7, IV) or both local and franchise names together (Exhibit 8, IV). This suggests that the franchise name improves the high touch perception of this firm and, ultimately, the preference for this firm since an earlier discussion revealed significantly higher preference rankings when the latter two references were made.

On the other hand, Firm C is perceived unfavorably on the high touch dimension only when the franchise name is used alone (Exhibit 7, quadrant I). Apparently, this national franchise has not successfully created a personalized image and Firm C is advised to prominently display its local name in conjunction with its franchise name, particularly since this combination resulted in its highest preference ranking.

Generally speaking, firms should strive to be perceived in quadrant IV of this mapping scheme because it implies a favorable consumer perception on both the high tech and the high touch dimensions. However, the issue of the importance of the various selection criteria used in the interpretation of the two dimensions presented in the perceptual maps has not been addressed directly. The following discussion examines these importance ratings.

The Importance of Selection Criteria

The final phase of this analysis deals with the consumer importance ratings of the twenty-one selection criteria. As described earlier, the criteria were rated on a scale from 1 to 7, where 1 indicated that the criterion was "Not Important" and 7 indicated that the criterion was "Extremely Important". Exhibit 10 provides information on the mean importance rating and rank for each of the items by the eighty-five housing consumers.

The criteria are listed in descending order from most important to least important. In order to visualize the differences in importance of the two factors used in the MDS analysis, the high touch criteria have been underlined, while the high tech criteria are presented in bold type.

A comparison of the consumer importance ratings to the two factors used in the interpretation of the dimensions in the MDS analysis reveals that the high touch factor is composed of the number one and number three ranked criteria, General Reputation of the Firm and General Reputation of the Agent respectively. The other four criteria loading on this factor rank between 11 and 20 in importance. On the other hand, the highest ranked criterion on the high tech dimension is number four, Availability of Listings. The remaining seven criteria range in rank from 6 to 21.

Exhibit 10
Importance Ratings for Selection Criteria

Item	Mean Rating	Rank
General Reputation of Firm	6.294	1
"Aggressiveness" on Client's Behalf	6.024	2
General Reputation of Agent	5.977	3
Availability of Listings	5.788	4
Commission or Fee Charged	5.518	5
Direct Contact by Agent or Firm	5.247	6
Quality of Advertising	5.212	7
Availability of Full Service Package	5.165	8
Frequency of Advertising	4.977	9
"For Sale" Signs	4.624	10
Referral by a Friend	4.565	11
Personal Acquaintance with Agent	4.271	12
Used Same Local Firm Before	4.179	13
Used Same Agent Before	4.129	14
Recent Activity by Firm in Neighborhood	4.000	15
Size of Firm - Prefer Large Firm	3.800	16
Affiliation with Nat. Known Firm	3.560	17
Yellow Pages	3.345	18
Used Same National Firm Before	3.228	19
Size of Firm - Prefer Small Firm	3.122	20
Met Agent at Open House	3.072	21

High Touch Criteria **High Tech** Criteria

With the exception of the top ranked criteria, the distribution of importance for the criteria comprising the two factors is quite similar. Nevertheless, this difference in top ranked criteria indicates that the high touch dimension may be perceived to be slightly more important overall than the high tech dimension.

Conclusions

Consumers stated preferences for real estate brokerage firms resulted in the four franchise affiliates being among the top five firms, with the fifth being a large independent firm. Further analysis revealed that the presence of a nationally known franchise name significantly altered consumer preferences for some of the local franchised firms. For one of the franchised firms with either an unestablished or relatively poor local reputation, the addition of a well known national franchise affiliation shifted the firm image significantly in a positive direction. In fact, for three of the four franchised firms, the use of the franchise name, either alone or in conjunction with the local name, improved the preference ranking of the firm. Only the top ranked firm did not appear to benefit significantly from the addition of its franchise affiliation.

Thus, for relatively large firms with very good local reputations, a long history of activities in an area, and effective administration of formalized brokerage activities, franchise affiliation may not significantly alter consumer perceptions of the firm. Generally speaking, however, the degree of preference for franchised firms lends credence to the conclusion that national franchise affiliation is indeed beneficial.

The perceptual maps appear to reflect two general dimensions identified through a factor analysis of the twenty-one firm selection criteria rated by the customer sample. The first was labeled the high tech dimension because size, effectiveness, and impersonal recognition of the firm played major roles in defining this factor. The second was labeled the high touch dimension because it was dependent on more personalized selection criteria.

The high tech dimension differentiated the most preferred firms from the least preferred with the most preferred group of five firms consistently rating the highest on this dimension. Perhaps customers perceived no major differences in the performance of high touch activities on the part of franchise and non-franchise affiliates, thus the high tech criteria became determining factors in the preference for a real estate firm.

The Blair and Rossi study described in the literature review reported a consumer preference for local brokers and concluded that respondents believed local brokers would be more likely to supply high touch services [1, p. 84]. However, our study suggests that consumers feel franchise affiliates are just as capable of providing adequate high touch services as independent firms. Therefore, high tech characteristics provide the means of discriminating between most preferred and least preferred firms.

This interpretation is consistent with the notion of determinant attributes as described by Myers and Alpert [12]. Determinant attributes are those selection criteria that have the highest combination of importance to the customer and discriminating power between alternatives. This concept implies that if brokerage firms are believed to be similar on certain attributes, even very important attributes, then perhaps a less important attribute will become the basis for firm selection because the alternatives are perceived to provide different levels of the attribute.

When asked directly to rate the importance of an "Affiliation with a nationally known firm" during the broker selection process, consumers indicated that it was of minor importance. Yet when asked to rank firms in order of preference, the presence or absence of the franchise name significantly altered the preference ranking of the franchise firms by housing consumers. Apparently, the preference ranking process (and thus the broker selection process) is affected by the use of nationally recognized franchise names in ways that consumers either are not consciously aware of, or they do not wish to acknowledge.[8]

Implications for Future Research

MDS techniques are most useful when investigating factors that people are applying in an unconscious manner. The effect of franchise name recognition on brokerage firm preference seems, based on the results of this study, to be such a factor. Thus, the methodology employed in this study appears to have been particularly appropriate.

This study was conducted in a relatively small urban area with a limited number of firms present in the market. This made the data-gathering process easier since most housing consumers were familiar with many, if not most, of the real estate brokerage firms in the area. Even though consumer familiarity would tend to blunt the effect of national firm name recognition, franchise affiliates fared very well in this environment. The impact of firm name recognition through franchise affiliation would presumably be greater in larger markets characterized by less consumer familiarity than that seen in this study area. Further research to confirm this hypothesis is warranted.

Upon reflection, it seems possible that successful brokerage firms are the ones more likely to initiate or be accepted into franchise agreements in the first place. While, theoretically, franchising provides young, inexperienced brokers with a competitive edge [8, p. 441], success may be more of a prerequisite for franchise affiliation than its effect. Thus, franchise agreements provide a means of fine tuning what is already done well. A longitudinal study of customer perceptions of firms both prior to and following franchise affiliation would more appropriately address this issue.

This study suggests that well established, large firms benefit the least from franchise affiliation. In at least one instance, however, the franchise affiliation apparently helped to create a "halo" effect enhancing consumer perceptions of the firm's high touch characteristics as well as its overall preference ranking. More information on the specific features that create a favorable setting for franchise affiliation is needed.

Notes

[1]The entire customer sample could not be examined in one analysis due to the forty-case maximum size restriction of the computer program.

[2]Actual firm names are not presented to preserve confidentiality.

[3]Remember, the letters were assigned according to mean preference rank. Thus, the firms may only be identified as franchise firms and no attempt to label specific firms should be made.

[4]For a more complete discussion of these techniques, see, for example, Hair, Anderson and Tatham [10, chs. 6 and 8].

[5]The MDPREF program is limited to forty total preference rankings. Thus a sample from the total of eighty-five consumers was used both in the development of the perceptual maps as well as in the interpretation of the factors described here.

[6]While this approach may sound simplistic, it is "quite rigorous and acceptable" when compared to other criteria [10, p. 249].

[7]As previously noted, the MDPREF program is limited to forty total preference rankings.

[8]This type of "unconscious" salient attribute is common in the consumer preference modeling literature.

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