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CONSUMER PREFERENCE TOWARDS THE PURCHASE OF APARTMENTS IN CHENNAI CITY

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1. Introduction

Property product is considered as unique product that cannot be compared with other commercial products, because it has two condition which sets up the price of products. The first is the given condition of the product: natural embedded condition of the product, such as location, land shape, physical condition and natural resources that the property owned. The second is the created condition made by property developer to enhance value of the product, such as creation of facilities, security traits, gated or non-gated, and design. From the point of view of the property customer, when purchasing the product they looked upon several key factors form by the property given and created condition, and measures it with the subjected price of the product. Here a process of weighing and decision making takes place. At the end the price will be accepted if the key factors assumption has been accepted by the customer. Sometimes these factors are being affected by outside influence and make biased outcome on fair price measurement. Some examples of these influences include market trend which can leads to speculation for customer that view property product as investment product, friends or family, and property developer promotion. From the point of view of property developer, when setting price for a certain product they usually relies on their past experience when setting up the proper price. They assumed what factors which influences customer when purchasing property product, and from that created additional factors which helps to set the price up. One of the most extreme examples of value creation by property developer can be seen in Chennai city and its extensive geographical growth, Real estate development has transformed itself through value creation to produce successful city like today. This study is intended to analyze the factors contributing these factors that influenced values, in order to optimize the price of a certain property product. Moreover, this study is intended to calculate the price range of a property product when key factors are created and added artificially to a property product by a property developer.

2. Review of Literature

The review of literature is divided into five major sections and provides a context for the study. The sections review essential theories and their development as the basis of the Theoretical framework for this study: Development on Consumer Behavior Theories for Residential Products; References for Developer Perception in Residential Products; Previous and Related Studies on Consumer Preferences; Real Estate Price Modeling; and Speculative Behavior Analysis in Property Industry.

2.1 Consumer Preference of Residential Apartments

Study made by Steggelet. al (2003) shows that there has been some development in consumer behavior theory for residential products. They are able to analyze which theories are prominent in housing research, according to the most cited references. Based on their research, we can assume that there are six theories which influenced the housing studies. These six theories has been cited more frequently in housing studies from 1989-1999. The first theory used is the theory of Housing Adjustment. First mentioned by Morris and Winter (1975) in summary the theory discussed about households behavior when performing their daily activities. They will constantly changing and adjusting their housing situation in order to achieve satisfaction. From this theory, we can see that there are some set of behaviors and preferences which are changing to meet the standard that the household seeks. The second theory is the Person-Environment Congruence Theory. This theory in summary discussed about the relationship between human behavior and their environment. Human life is defined with sets of goals, and in order to fulfill those goals, human must interacts and adjust themselves with the condition of their environment (Ittelson, Proshansky and Rivlin, 1970).

2.2 Diffusion of Innovation Theory

This theory mentioned about the innovation which happened around human life and how it is communicated and introduced to their daily activities, and based on their benefits and purpose whether it will be diffused or not (Rogers, 2003). There are four elements which are affecting the diffusion process: the innovation; communication channels; social systems; and time. The fourth theory is the Symbolic Interaction Theory. The theory itself is adopted and used based on physiological and sociologist theories, which then adapted to housing research by Erman (1996). In this context, housing selection and preference is made base on symbolic meaning which are considered common in the society. The fifth theory is the Social Exchange Theory. This theory tried to explain the relationship between social interactions and relationships and resources. It stated that social interactions and relationships is conducted in the society based on rewards and costs balance (Thibaut and Kelly, 1959; Blau, 1964; and Homans, 1961). The last theory is Causal Model of Barriers and Incentives to Affordable Housing. This theory deals with the interaction and connection between community and households based on the interacting variables (McCray et. al., 1994).

3. Objective Of The Study

- To study consumer preference factors that influence residential flat buyers.
- To find the relationship between demographic variables of consumers and their purchase preference**.**

4. Research Methodology

The Study is conducted with the help of primary and secondary Data. The primary data is collected from the different consumers of flats in Chennai city. They are requested to express their choice of preference during the purchase of flats from the promoters. The secondary data is collected from books, journals and web sites etc. The researcher circulated a well defined questionnaire which consists of optional type and likert's five point scale statement questions.

Sample Size: The respondents are selected from the geographical area of Chennai city. Since the population of flat buyers is unknown the researcher used convenient sampling method to collect the responses. The researcher circulated500 questionnaires in all the 12 zones of Chennai city and able to receive only 234 filled in questionnaires. Out of the 234, 15 responses are found to be incomplete and cannot be used for Research. The remaining 219 are completely filled and used for the Research. Hence the sample size of the Research is 219. Care is taken while selecting the respondents to see that the selected sample represents the universe.

Data analysis

Since the study deals with multivariate analysis, the researcher used t-test, factor analysis by principal component method and linear multiple regression analysis to analyze both independent and dependent variables**.**

Analysis and Discussion

In this section the researcher investigates the processing of data thorough univariate and multivariate statistical techniques, in order to identify the predominant factor of consumer preferences towards the promoters and the purchase of apartments. The researcher uses factor analysis by principal component method on variables of preferences and the following results are obtained.

Table 1,KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.377
Bartlett's Test of Sphericity	Approx. Chi-Square	548.334
	df	45
	Sig.	.000

From the above it is found that the KMO measure of sampling adequacy is 0.377, BARTLETT test of sphericity with approximate chi square value is 548.334 are statistically significant at 5% level. Therefore it can be concluded that all the ten variables of preferences can be converted into predominant factors with normal distribution. The initial variances for all the co-variances can be ascertained thorough the following communalities table.

Table 2,Communalities

	Initial	Extraction
KMP1	1.000	.495
KMP2	1.000	.524
KMP3	1.000	.579
KMP4	1.000	.566
KMP5	1.000	.418
KMP6	1.000	.509
KMP7	1.000	.398
KMP8	1.000	.513
KMP9	1.000	.480
KMP10	1.000	.502
Extraction Method: Principal Component Analysis.		

From the above table it is found that the co-variances have the variances ranging from 0.418 to 0.579. This implies all the co-variables have appropriate individual variances and suitable for data reduction process, as shown in the following total variance table:

Table 3

Component		Initial Eigenvalues			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension	1	2.571	25.708	25.708	1.438	14.377	14.377
	2	1.301	13.013	38.721	1.415	14.146	28.523
	3	1.112	11.125	49.845	1.389	13.888	42.411
	4	.878	8.781	58.626	1.366	13.663	56.074
	5	.809	8.093	66.719	1.065	10.645	66.719
	6	.796	7.959	74.678			
	7	.721	7.211	81.889			
	8	.667	6.670	88.560			
	9	.605	6.051	94.610			
	10	.539	5.390	100.000			

From the above it is found that all the co-variances of preferences have cumulative variances 49.199. They also have individual variances 14.377%, 14.146%, 13.888%, 13.663% and 10.645% respectively. The variables loading on the five factors indicates and named as intrinsic attributes extrinsic attributes, environment attributes, location facility and services and service quality. It further implies that consumes of apartments in Chennai city predominantly prefer these five factors.
The influence of demographic profile on the consumer preferences factors are ascertained thorough one-way analysis of variances as shown in the following table below:

Table 4

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SURVIVAL STRATEGIES	Between Groups	5.520	4	5.130	5.112	.006
	Within Groups	150.737	495	.305		
	Total	155.257	499			
Pre requisites	Between Groups	1.655	4	.414	15.638	.000
	Within Groups	158.083	495	.319		
	Total	159.738	499			
Career Development	Between Groups	3.880	4	.970	12.765	.000
	Within Groups	188.529	495	.381		
	Total	192.409	499			
Financial facilitators	Between Groups	4.307	4	1.077	6.347	.002
	Within Groups	119.457	495	.241		
	Total	123.764	499			
Resource utilization	Between Groups	1.707	4	.427	3.293	.038
	Within Groups	192.861	495	.390		
	Total	194.568	499			

From the above table it is found that the intrinsic attributes (F=5.112, P=0.006), extrinsic attributes, (F=15.638, P=0.000), environment attributes (F=12.765, P=0.000), location facility and services attributes (F=6.347, P=0.002), and service quality attributes (F=3.293, P=0.038) are statistically significant at 5% level.It implies gender of consumers, age, marital status, educational qualification, occupation, and income are found influencing consumer preference factors significantly. In particular, male consumers prefer extrinsic attributes(m=4.12), the consumer in the age group 25-34 simply agree for the service quality(m=4.45), married consumers prefer intrinsic attributes (m=4.30). The consumers with business occupations strongly agree for the environmental attributes. (m=4.16) and the consumer in the income range above Rs. 90,000/- strongly

agree for the location facilities and services (m=4.25). This forces to conclude that the demographic variables are very important to identify consumers' preferences towards purchases of flats in Chennai city.

5. Findings and Conclusions

- The researcher researched that consumer preferences towards purchase of apartments depends upon the intrinsic and extrinsicattributes. It is followed by service quality dimension, environment attributes and location facilities. In particular, the consumers prefer promised services and readiness to respond to the request. The promoters relationship to the consumer mainly leans upon the intrinsic and extrinsic attributes exist in the apartments.
- In the present polluted environment and ecological imbalance the consumers are very meticulous in quality, free from noise pollution, congestion plus traffic, appropriate drainage system and vegetation around their apartments.

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