

“Influence of Gender, Education and Occupation on Stipulate of Demand for Residential Property”

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ABSTRACT

Towindo Tichaona (2013) through his research found that the real state and property management are playing important role in the economic growth and development of the country. It is going to the third largest construction market in coming years. Tremendous demand surge has grabbed the attention of international players too. Real Estate Regulatory Authority has played major role in the formalizing activities, introducing and maintaining transparency and better governance practices. The construction industry in India is expected to steadily recording a CAGR of 9.9% during 2023-2027. The construction output in the country is expected to reach INR 66,954.8 billion by 2027. Furthermore, the demand for residential units is also driving the residential construction market in India. Despite the surge in construction costs and rate hikes announced by the Reserve Bank of India, the growing residential sales volume has led to a recovery in the real estate market. The growth has been led by mid-range, premium, and luxury segments in 2024. Researcher has studied the influence of demographics on stipulation of demand for residential property using logistic regression considering 150 residents from Bangalore. Statistical inferences have been drawn based on the analysis.

Key Words: Real estate, Construction, Residential Property, Demand, Demographics and Logistic Regression

1. Introduction

Naik, D.D. (1981) explains "housing is an essential element of life for most human beings. The innovative approach to modernization of residential property doesn't limit the idea of residence as merely housing. *Porter, Michael E. (1998)* explained the complex nature of real estate considering it not as a product or a service, falling under the category of complex business activity. Indian real estate has been growth engine providing enormous amount of employment and tremendous resilience. *Towindo Tichaona (2013)* through his research found that the real state and property management are playing important role in the economic growth and development of the country. It is going to the third largest construction market in coming years. Tremendous demand surge has grabbed the attention of international players too. Real Estate Regulatory Authority has played major role in the formalizing activities, introducing and maintaining transparency and better governance practices. The construction industry in India is expected to steadily recording a CAGR of 9.9% during 2023-2027. The construction output in the country is expected to reach INR 66,954.8 billion by 2027. Furthermore, the demand for residential units is also driving the residential construction market in India. Despite the surge in construction costs and rate hikes announced by the Reserve Bank of India, the growing residential sales volume has led to a recovery in the real estate market. The growth has been led by mid-range, premium, and luxury segments in 2024.

Quality and dependability, as well as quantity, are important factors in infrastructure investment's capacity to meet the needs of end-users (responding to "effective demand"). Supply and demand must be properly aligned. Finally, the effectiveness with which infrastructure services are supplied is what determines how much potential profit may be generated. Quality and dependability, as well as quantity, are important factors in infrastructure investment's capacity to meet the needs of end-users (responding to "effective demand"). Supply and demand must be properly aligned. Finally, the effectiveness with which infrastructure services are supplied is what determines how much potential profit may be generated.

2. Literature Review

It has been observed from the industry reports that there has been stipulate in demand for residential property as government is also facilitating the growth aspects and hence developers have popped up in numerous to take over the market. Post Covid, people have realized the importance of independent, own residential property and open spaces.

Jin and Zeng (2003) carried out research investigating relationship between business cycle and residential investment as well as cost escalations. They developed a equilibrium model aiming at identifying influence. The outcome of their research revealed that monetary policy and interest rates affect real estate prices. Besides, a strong correlation between house prices and GDP was revealed. There is direct proportion between population increase and demand for residential property. To fulfill the demand, construction activities have been increased by both government bodies and private sector companies.

A project has a clear beginning and clear end because it is temporary. In other words, although there is a time constraint, it does not necessarily equate to a small period of time; rather, the length of a project depends on its nature. Each project is distinct and has some defining characteristics if it is unique. Because it has a different owner, design location, and facilities, the project is nonetheless unique even though it has repeating features (Kerzner, H. 2006). A project must be developed gradually, which calls for ongoing, constant labor and expansion. The commonly accepted definition of management states that it is "The Art of getting things done through people. "The concept of management is the fundamental understanding of PM; management requires a team to work together with the necessary skills to accomplish a certain objective; this is the key to successful management across all themes (Folleett, M.P. 1980).

Kerzner (2006) defined PM as "Project management is the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives. Furthermore, project management utilizes the systems approach to management by having functional personnel (the vertical hierarchy assigned to a specific project (The horizontal hierarchy)". It involves utilizing the resources of the organization on a specific activity within time, cost, and performance restrictions. Project management is intended to govern the essential factors that provide practical information for efficiently attaining project objectives. Customer interactions are a fourth essential factor. Project management has numerous definitions, but according to the Project Management Body of Knowledge, it is "the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project" (Walker, 2010).

3. Need for the Study

India's growth in terms of infrastructure is gathering the attention of investors which indicates the competitiveness of Indian construction market and efficiency of construction project management, owing to both domestic and international players. The market provides enormous opportunities during forecast period. International players too are competing for their share in the market.

Irrespective of the challenges faced, industry's growth is appreciable. The growth of the any industry depends on the increasing demand which in turn depends on preferences of clients, income, occupation, life style many more factors. Dual career couple, increased employment and income due to IT and ITES firms, desire to own property are few factors influencing the demand for the residential property irrespective of cost escalations. The promotional strategies along with services rendered by the project developers are another important factor contributing to the demand for the residential properties. There is a necessity to conduct research to know whether there is a influence of demographics on the demand for residential property. With this perspective, researcher aims analyzing the influence of demographics on stipulation of demand for residential property.

4. Objectives

The basic purpose of the research is to study the influence of demographics, especially age, occupation and income of stipulation of demand for the residential property in Bangalore. The objectives of the study constitute-

- a) To analyze the influence of Gender classification on Stipulation of demand for residential property.

- b) To analyze the influence of Occupation on Stipulation of demand for residential property.
- c) To study the influence of Education on Stipulation of demand for residential property.

5. Scope of the Research

Scope of the research aims at studying the influence of demographics on stipulation of demand, the current study is limited to-

- i. Study the influence of demographics particularly Gender, Occupation and education on Stipulation of demand
- ii. The study aims to measure the opinions of the residents who have bought the property through developers.
- iii. Residents considered belong to Bangalore city only.

6. Methodology

For the current study, researcher has chosen a survey method where a scientifically tested questionnaire has been administered as Google form to 150 residents working for various industries including businessmen. Data gathered has been analyzed adopting Ordinal Logistic Regression Model (OLRM) using SPSS where the relationship between demographics on stipulation of demand for residential property is studied.

Researcher has considered 150 residents who are spread across Bangalore. Residents are chosen randomly adopting simple random sampling technique. . For the current study sample size is 150 employees as researcher could receive all 150 questionnaires completely answered. Therefore, the sample size considered for the statistics is 150.

7. OLRM Descriptions

All the categorical values in each column are converted to numerical values. The factors gender (Male and Female), education (Graduation, Post-graduation and Professional Courses), and Occupation(Working Professional, Businessmen and Others) are scaled nominal as they represent categorical and the relationship variable; Stipulation of Demand is measured on the 5 point rating Likert Scale from Strongly disagree to Strongly agree which is ordinal.

The variables under the study constitute dependent variable; Stipulation of demand, factors; gender, education & Occupation as covariate; experience of the employees and link function used is Logit Link function. Goodness –of-fit is assessed by Pearson Chi-square test which gives results as to how many predicted cell frequencies differ from observed. R- square reveals how much variance is explained by the independent variable However, variance is split into categories. For the current estimations, McFadden’s pseudo-R² statistics is used to explain variance.

Table-1: Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	100.041			
Final	95.085	4.956	6	.000
Link function: Logit.				

Table-2: Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	91.559	102	.761

Deviance	76.221	102	.974
Link function: Logit.			

Table-3: Pseudo R-Square	
Cox and Snell	.096
Nagelkerke	.104
McFadden	.139
Link function: Logit.	

Table-4: Parameter Estimates								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[SDR = 1.00]	4.155	1.342	9.588	1	.002	-6.785	-1.525
	[SRD= 2.00]	2.196	.997	4.849	1	.028	-4.151	-.241
	[SDR = 3.00]	.528	.934	.319	1	.572	-2.359	1.303
	[SDR = 4.00]	1.970	.987	3.987	1	.046	.036	3.904
Location	Experience	-.103	.298	.119	1	.730	-.686	.481
	[Education=1.00]	-.068	.685	.010	1	.922	-1.411	1.276
	[Education=2.00]	-1.216	.782	2.420	1	.120	-2.749	.316
	[Education=3.00]	0 ^a	.	.	0	.	.	.
	[Gender=1.00]	.806	.642	1.576	1	.209	-.452	2.065
	[Gender=2.00]	0 ^a	.	.	0	.	.	.
	[Occupation=1.00]	-.090	.813	.012	1	.912	-1.684	1.503
	[Occupation=2.00]	-.308	.601	.262	1	.609	-1.486	.871
	Occupation=3.00]	0 ^a	.	.	0	.	.	.
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

Source: SPSS output

8. Results and Discussion

Table-1 represents the model fit information where it is significant (0.000) with chi-square value 4.956 indicating acceptable; significant improvement fit as compared to null model fit for further estimations and adequately describes the data. Goodness of fit statistic indicates a poor fit if significant value less than the 0.05, in this case the significant value 0.761 (Table-2) is more than 0.05 ($p > 0.05$) indicating adequacy and good fit; no significant differences between assumed and fitted model. McFadden R-square explains the 13.5% (Table-3) of improvement in the prediction of outcome in comparison of null model.

Table-4 presents Parameter Estimations of the current regression model where education has a negative relationship with dependent variable indicating that education doesn't influence resident's intention to buy residential property. Precisely, residents who have done their graduation and post-graduation don't agree on stipulation of demand. Residents who have done professional courses have the higher chances of buying more property. Similarly, gender estimates indicate that irrespective of people belonging to female/male category, have positive influence. Estimates indicate that males have higher chances of buying new residential property compared to females. Estimates for the Occupation; higher level, middle level and entry level elucidate that employees working at higher level and middle level positions doesn't agree on

investing more on residential property. It is opposite in case of entry level employees who have higher levels of agreement & the effects of predictors are the same across dependent variable.

9. Conclusion

Demographics does have key role to play in stipulation of demand. It has been observed from several studies is that there is a significant relationship between demographics and demand of value created. Researcher aimed at understanding to what extent and how demographics particularly gender, education and occupation influence demand for the residential property. Project developers must work on demand especially with regard to people who have post-graduation and for individuals working at entry level to whom stipulation of demand is the concern.

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