

## **A STUDY OF CUSTOMER SATISFACTION OF RESIDENTIAL BUILDINGS IN INDIA**

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(Received 17 June, 2017; accepted 24 November, 2017)

**Key words:** Customer satisfaction, Close ended question, Residential projects

### **ABSTRACT**

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Customer satisfaction has received considerable attention in recent years in residential projects. The research work was carried out to examine customer behavior towards residential projects. A survey has undertaken with close ended questions. An opinion are taken on Likert scale and mail survey with face to face interview was held with 104 sample customers about the home variables provided in home by the developers. Statistical analysis was conducted by statistical package for social science (SPSS) to explore customer satisfaction in residential projects. Mean value indicates that most of customers were not properly satisfied with house service and maintenance of home from developers. The main benefit of this work is to gain high customer satisfaction with remain a customer's potential partner in the future.

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### **INTRODUCTION**

Customer satisfaction is a core part of the construction management department and customer satisfaction is most important challenge facing process in the construction industry (Zeljko and Robert, 2001) because customer has dynamic requirement in the market (Bhola, 2015). Due to increases in urbanization and rapid growing business in developing country, customer satisfaction is provides healthy opportunity for the home building industry. Major task for construction industry is to satisfy customer by meeting their needs and wants. The home buyers chooses product from various offering on the basis of which developers deliver most value of the product (Kotler, 2000). This satisfied customers are backbone of the home building industry (Zeljko and Robert, 2001). Satisfaction of home buyer is affected by the home quality, home design and planning, and home service and maintenance (Rahmani-nejad, *et al.*, 2014) and high market share has been created by proper product quality, and new product introduction in the

market (Namiki, 2011). The objective of the customer satisfaction is gaining market share, customer loyalty towards company, improving house work reputation, and increase margins (Mbachu and Nkado, 2006). This home unit high quality and services provides more profit through customer satisfaction (Anderson and Fornell, 1994). By customer satisfaction the developers should be gaining customer input from the total market share of residential projects and loyalty of customer provides profitability in the home building construction industry. The home building industry needs to know what are the key variables which play a major role while buying home unit by customer (Zeljko and Robert, 2001). Using this variables construction industry maximizes relation between the customer satisfaction and market share (Anderson and Fornell, 1994). This variables also provides help in current projects and future projects to match customer satisfaction. All home buyers wants their homes to become safe, proper functional, comfortable, and cost effective (Hui

and Zheng, 2010). If firm achieve proper customer satisfaction then it can be produce proper economic returns (Kärnä, *et al.*, 2004). This research work was designed to understanding customer satisfaction by adopting complain behavior of the home buyers (Bearden and Teel, 1983). Customer satisfaction is a goal or measurement tool in the development of home building (Piyush, *et al.*, 2016).

**METHODOLOGY**

The primary purpose of developing the attributes to use it in a research work aimed to exploring the influences of various factors (Design and planning, quality, and service) on residential customer satisfaction. Hence this work wished to include a variety of residential customer responses from various geographic area. In this article will show various problems faced by home buyers.

**Research design**

A home buyer satisfaction survey was designed to collect information from various home buyers via a self-complete questionnaire. An invitation letter with an information sheet and overview of the proposed research were mailed to all home buyers of the selected geographic area.

**Sample and procedure**

Selection of the home buyer: To qualify for selection, a respondent had to understand question properly and have lived in the home for more than 1 month. The customers determined the eligibility of each respondent based on location of site and geographic

area. All resident satisfying the criteria were invited to participate in the survey. Questionnaire distributed to male and female of demographic area. If respondents understand question properly then respondents complete the question themselves. If respondent want assistance from surveyor, then surveyor will give help by explaining question without affecting answer. Most of the female respondents want assistance from the surveyor.

**Questionnaire survey**

Questionnaire for customer satisfaction were based on the Home design and planning, quality of work, and service and maintenance by the developers. The questionnaire designed with 6point Likert scale with 1 expressing never and 6 expressing Very frequently. The Likert scale minimized the confusion and provide proper guideline for choosing appropriate statistical method (Subedi, 2016).

**ANALYSIS AND DISCUSSION**

**Reliability test of data**

Cronbach alpha is used for evaluate the reliability or internal consistency of the data. Cronbach alpha coefficient value ranges from 0 to 1. Alpha value between 0.7 to 0.9 is acceptable for the analysis.

In this research work Design and planning section, quality of home, and service and maintenance sections alpha values 0.701, 0.817, and 0.739 respectively. Overall Cronbach alpha value of the data was 0.892. This Cronbach alpha value indicates that research data is valid for the further analysis.

**Table 1.** Mean rank analysis for customer satisfaction

Questions	Mean	Standard Deviation	Rank
<b>House design and planning related questions</b>			
Elevator placing in the building	2.16	0.97	R <sub>7</sub>
Fire safety planning of the building	2.20	1.10	R <sub>6</sub>
Drainage design and planning of the building	1.78	0.97	R <sub>14</sub>
Brightness or light in your house during the day time	2.00	1.06	R <sub>11</sub>
Poor ventilation in the house	2.26	1.28	R <sub>5</sub>
<b>House quality related questions</b>			
Dampness in the house	1.98	1.35	R <sub>12</sub>
Doors and windows operation	2.04	1.10	R <sub>9</sub>
Architectural finishing work in building (like plastering,painting,cladding etc.)	2.02	1.18	R <sub>10</sub>
Poor energy efficient features in the house	2.52	1.01	R <sub>2</sub>
Roof working condition during monsoon (like leakage and cracking in roof)	1.94	1.26	R <sub>13</sub>
<b>House Service &amp; maintenance related questions</b>			
Poor communication with builder personnel	2.42	1.22	R <sub>3</sub>
Problem during documentation of buying of building with step by step process	2.20	1.13	R <sub>6</sub>
Maintenance time non availability of builder's personnel	2.64	1.25	R <sub>1</sub>
Builder's attitude about customer service (i.e. after move in)	2.36	1.34	R <sub>4</sub>
Proper reliability of the home builder personnel (ability to perform accurate service)	2.08	0.87	R <sub>8</sub>

## Customer Complacency

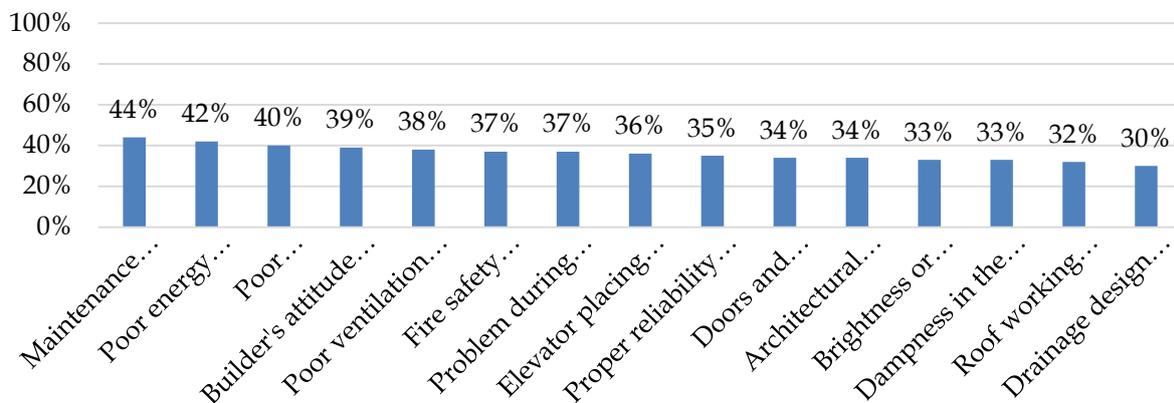


Fig. 1 Pareto chart.

### Mean rank

Above Table 1 indicates that customers have frequently problem from Non-availability of maintenance employees, Poor energy efficient features in home, not proper communication between customer and builder's employee, Builder's attitude after move in home and poor ventilation in the home. These all factors are related to home service and maintenance, which expressing that Builder's require to more concentration on the management of service and maintenance department.

### Pareto chart of customer complacency factors

Above (Fig. 1) provides information about the percentage of relative importance of each OSF the 15 factors. In above figure higher value indicates that this problem more effect create on customer satisfaction. Service and maintenance related questions affect more on customer satisfaction because this questions response rate more from the customer.

### CONCLUSION

This research work presented in the article has concentrated on the analysis of the factor affecting the customer satisfaction of residential projects in India. Mean analysis is used to carry out the ranking most critical factors of customer satisfaction. Most critical factors were non-availability of maintenance employees, Poor energy efficient features in home, not proper communication between customer and builder's employee, Builder's attitude after move in home and poor ventilation in the home. Mean value of the all factor is between the 2 and 3, this value expressing that all respondent give answer between the scale 2 and 3. In this research work 2 indicates very rarely and 3 indicated rarely.

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