

## Post floods consumer preference towards household purchase - A review through attribute preference method.

Justin Arokiaraj J<sup>1</sup>, Dr.Naga Venkata Raghuram.J<sup>2</sup>,

<sup>1</sup>MBA II year, VIT Business School

<sup>2</sup>Associate Professor, VIT University

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**Abstract:** Any natural disaster or disruption in the day to day lives of consumers has a huge impact on the buying behaviour of customers. Economic impacts, political impacts and social impact does affect the market directly by changes in demand. Apart from these there is another aspect to which slowly yet increasingly have started influencing the way customers today – Environmental aspects. Climate change is one of the most influencing factors that have started to become a part of any risk assessment in business. Real estate industry which has always been one of the stable industries was badly hit due to the Chennai floods. The names of big players in the housing industry have taken a hit due to poor planning, construction methods and corruption. This paper aims in analysing the safety/regulatory attributes and how they influence the buying behaviour of customers using the attribute preference method.

**Keywords:** Disaster, Safety attributes, Buying behavior, preference method, Perceptual mapping

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### I. Introduction

#### The 2015 Floods

The 2015 Floods in the city of Chennai was because of heavy rain fall due to the north-East monsoon 2015. It affected a lot of areas in the Coromandel Coast from Tamil Nadu to the Andhra Pradesh. The city of Chennai had a very hard time with more than 400 people dead and over 1.8 million people displaced. The damages have been estimated to an excess of more than \$15 billion.

Though initial analysis raised this issue to be a natural disaster and global warming the in depth analysis shows that this is more due to the improper design of cities, drainage and unplanned urban development. Chennai city is one of the largest cities in South Asia with a very high density of urban population that steadily increasing.

According to a 2013 survey Chennai is one of the top 25 real estate destinations in Asia Pacific region however it had more than 1240 slums with around 9 Lakh people. Due to this raising population that walking into the city every day new apartments are built on location at the outskirts of the city which were severely hit due to the 2015 floods.

The normal preference of people looking for houses would be set of external factor such as Culture, Subculture, Reference groups, Family, Social class, Demography and internal factors such as Involvement, Feelings, Experience, Knowledge, Motivation, Personality, Life. When purchasing a house in general consumers will have high involvement and consumers also become emotionally charged and thus look for prefabricated house and durability and long term commitments on budget. (Gronhaug, Kleppe, and Haukedal1987,242). However consumer always will have some anticipations on perceived financial risks and obligations. (Gibler and Nelson2003; Mitchell1999; Gronhaug, Kleppe, and Haukedal1987; Beatty and Smith1987). In such a way of decision making involved in purchasing of a house in normal course of time will do vary from the scenarios when there are natural disasters or calamities. The decision making elements or the attribute will definitely change as per the need of the situations. This indicates that even high involvement decisions also will have changing attributes as per the requirement. This indicates or makes a need to emphasis on the changes happening in the consumers minds from rational to psychological or from psychological to rational while taking a decision for a high involvement purchase.

This study aims at how the new knowledge of natural calamities, environment and safety has influenced the choice of commercial housing in the mind of the future home owners.

#### Attribute preference model

Attribute preference model is one of the perceptual mapping technique which is used to assess the perception of customers by diagrammatically displaying the perception in terms of a map. This technique is normally used to develop a market positioning strategy for firms. These maps are based on the perception of the buyers and hence they are called perceptual mapping.

Under the perceptual mapping there are two technique that are followed

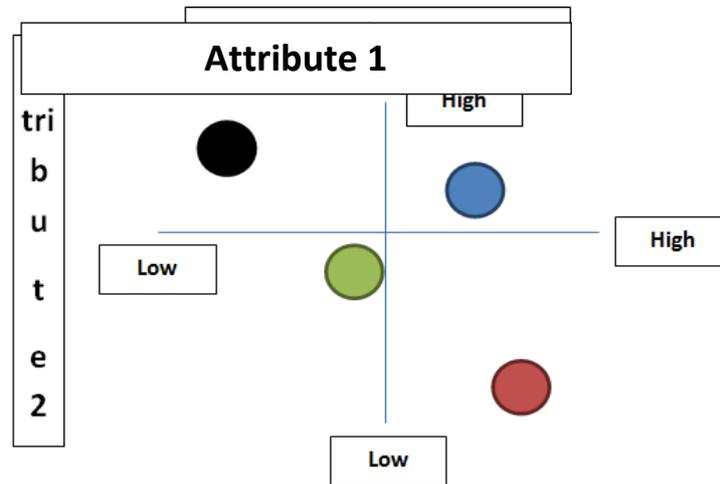
1. Similarity based methods

2. Attribute based methods

**Attributes**

Individuals have various utilitarian and egoistic aspects when it comes to the choices that they make, here these aspects are mapped to the attribute and which side of the attribute a customer favours is tested using this attribute preference method

**Diagrammatic representation**



In the perception modelling 3 set of attributes can be tested

- Attribute 1 = X axis
- Attribute 2 = Y axis
- Attribute 3 = Bubble size
- Each bubble represents a segment of customer

**Theoretical and Conceptual view into Home buyers’ behaviour**

The home buying behaviour of customers is an extension of the extended life self-concept. According to the cognitive processing model the consumer decision-making process is a goal-directed, problem-solving process. Under this conceptual model the home buying behaviour can be influenced by two factor

Internal factors	External Factors
Involvement	Culture
Feeling	Subculture
Knowledge	Reference groups
Motivation	Family
Experience	Social class
Personality	Demography

Even though these external factors have played a major role in home building a new set of factors known as safety factors also have started to emerge as an important attribute that needs to be also tested to understand

**Internal/ External factors**

1. Interior Aesthetics
2. External Grandeur
3. Religious sentiments
4. Neighbours

**Safety factors - Y axis**

1. Government approval
2. Engineering Plan
3. Safety
4. Facilities like drainage, roads, water supply etc

**Financial Factors – Bubble size**

1. Budget
2. Loan
3. Savings
4. Own land

**Income levels – Segments**

1. up to 3 Lakhs
2. 3 to 5 Lakhs
3. 5 to 10 Lakhs
4. More than 10 Lakhs

Using the above given factors a questionnaire was prepared as per the appendix A

**II. Findings**

**Tables 1**

Income	Govt Regulations	Interior Aesthetics	Budget
up to 3 Lakhs	9	7	9
3 to 5 Lakhs	8	8	8
5 to 10 Lakhs	8	7	9
More than 10 Lakhs	7	9	8

**Table 2**

Income	External Grandeur	Engineering Plan	Loan
up to 3 Lakhs	7	9	7
3 to 5 Lakhs	7	8	7
5 to 10 Lakhs	7	9	8
More than 10 Lakhs	9	9	9

**Table 3**

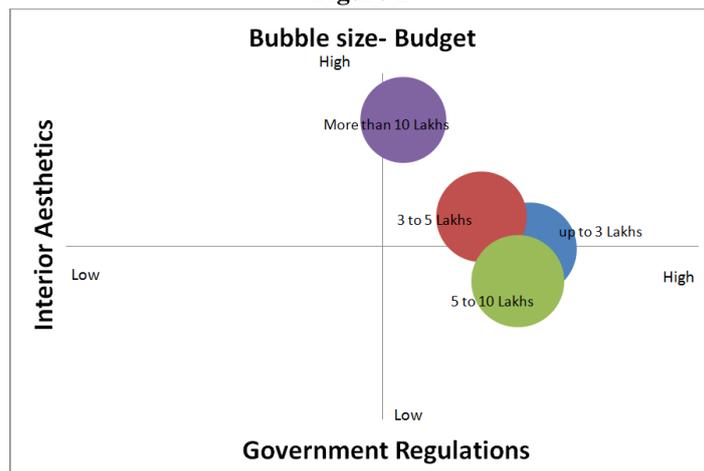
Income	Religious sentiments	Safety	Savings
3 to 5 Lakhs	5	9	8
up to 3 Lakhs	6	8	9
5 to 10 Lakhs	7	8	8
More than 10 Lakhs	8	9	9

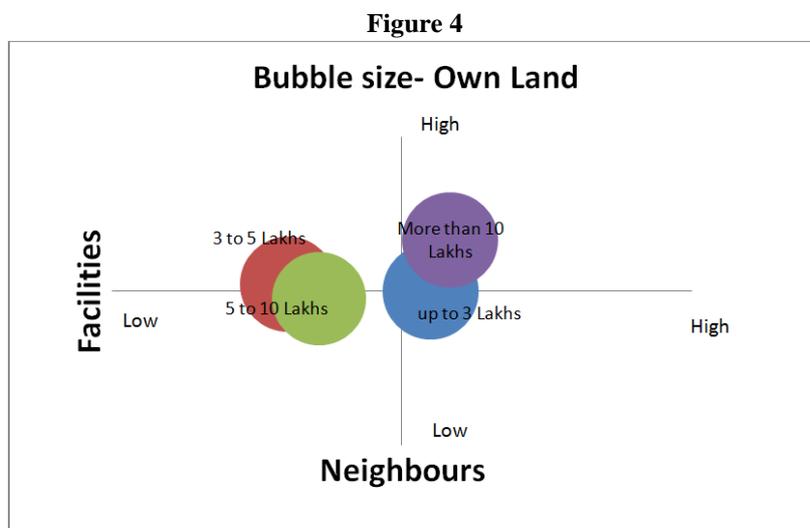
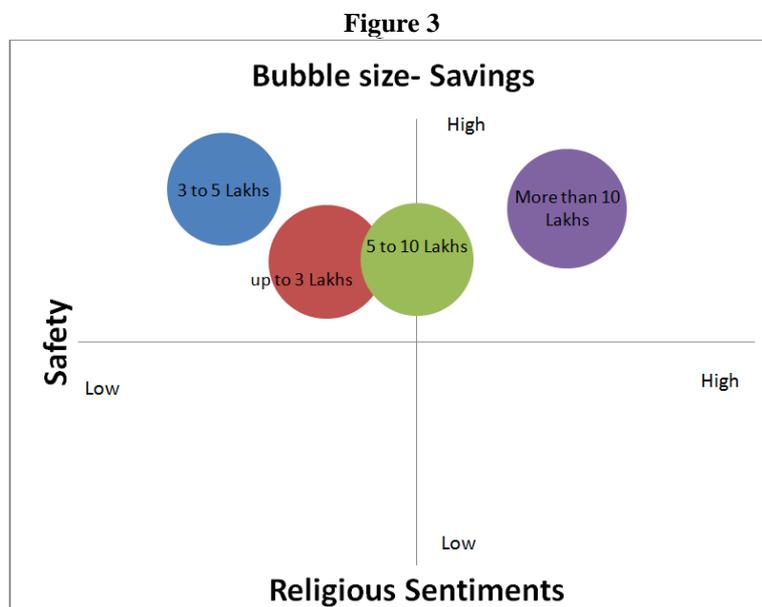
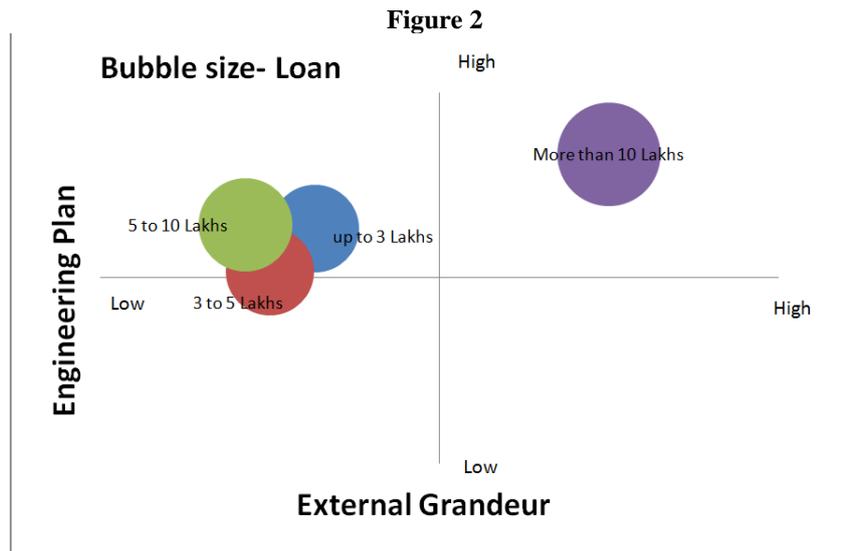
**Table 4**

Income	External Grandeur	Engineering Plan	Loan
up to 3 Lakhs	7	9	7
3 to 5 Lakhs	7	8	7
5 to 10 Lakhs	7	9	8
More than 10 Lakhs	9	9	9

**Attribute Preference Mappings**

**Figure 1**





## Findings

- **The bubble size** – financial attribute is similar to all the segments of customers in all the 3 attribute maps

### Figure 1

- The interior aesthetics plays a very important role in the preference of the above 10 lakhs income level customers, the importance that they give to that of the government regulation is also very less compared to the other income categories.
- Customers with the lowest income level up to 3 lakhs consider that government regulations more important compared to all the other categories

### Figure 2

- Customers who fall under the above 10 Lakhs income group consider importance to both external grandeur and engineering plan.
- All the other groups are clustered around low level of importance to the engineering plan however moderately higher level response to the external grandeur

### Figure 3

- Customers who fall under the above 10 Lakhs income group once again give more importance to both safety and religious sentiments
- Customers who fall under the below 5 Lakhs segment give low importance to safety and more importance to Religious sentiments

### Figure 4

- This type of map involves the formation of two clusters 3 Lakhs and the above 3 lakhs segment of customers give more preference to the facilities compared to the 3 to 10 lakh customer group
- All the category of customers give moderate importance to the neighbours
- Except the higher income group preferring Neighbours as an important criteria when it comes to a dream home

## III. Conclusion

- Under the current market scenario we can say that the customers have started to give moderate to higher level of importance to the safety aspects of a dream house construction
- All the segment of customer give a very higher preference towards the financial aspects of owning a home such as budget, loan, saving and owning the land.
- It is known that the highest income segment under this study 10 Lakhs finds that the internal/external attribute such as aesthetics and emotional attributes more important compared to the safety attributes
- We can conclude that income levels play a very important role in the preference of customers, customers with more income do not directly agree to safety aspects such as government regulations however lower income level people tend to have a moderate consideration towards the safety aspects of owning a home

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