

Consumer Perception towards Tall Buildings

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ABSTRACT: *The recent trend in Real Estate in most Indian cities is that builders/ developers are constructing tall buildings. However many people are unwilling to stay in tall buildings due to the lack of confidence in evacuation in case of fire and earthquake. Some people are willing to stay in tall buildings as the view is much larger and noise pollution and smoke pollution from vehicles reduces as you go up and people feel that they are at the top of the world. These people also consider the probability of occurrence of fire and earthquake as very low. Also, those who want to stay in tall buildings do so as they prefer to stay in an iconic building.*

Key words: *Consumer perception, Earthquake, Tall Buildings*

I. Introduction:

The tallest building in the world today is Burj Khalifa in Dubai, which is 828 metre in height and has 162 stories. Saudi Arabia has planned a one kilometre tall building called Kingdom Towers to surpass the height of Burj Khalifa. The tallest residential building in the world is Q1 Tower at Gold Coast, Australia which is 322 metre tall. In India, Tall buildings are very common in Mumbai. Lodha Builders have proposed a 442 metre tall 117 storey residential tower named World One, in the 17 acres land of the erstwhile Srinivas Mills in Mumbai. However the Union civil aviation ministry has granted permission for only 285 metre, (85 floors) . In Pune, City Corporation Ltd., the developers of Amanora Park Town, have planned a 150 metre tall building named Gateway Towers 1, which is 150 metre tall building and which will have 45 stories and is expected to become an iconic building.

II. Purpose of research:

The purpose of this research is to find out the perception of home buyers towards tall buildings.

III. Reason for study:

Although a lot of articles are there on technical aspects of tall buildings, very little research has been done on the Consumer behavior in case of tall Buildings.

IV. Design / Methodology of Research:

The paper utilizes secondary data like the newspapers and also primary data. The primary data comprises of interviews with recent buyers and prospective buyers of flats in Pune and a few builders.

V. Background

Till a few years back, the maximum height of buildings in Pune was 36 metre. In November 2007, The Government of Maharashtra allowed construction of tall buildings in other cities also. Based on the approval of the State Government, the Pune Municipal Corporation permitted builders to construct 100 metre tall buildings. It is costlier to make tall buildings because of the design factors: the vertical members like the columns have to be much stronger and as we go up the cost and time of transportation and scaffolding go up. Thus the price of flats becomes more as we go up and in case of 30 floors, the cost of flat would be about 40% more than that on the first floor. Further the Maintenance becomes very costly compared to a conventional low height building. After the 11 September 2001 terrorist attack, more people have developed aversion to staying in tall buildings. The tallest buildings in Pune today are in Amanora Township and 'God's Blessing' project by Swapnali Constructions in Koregaon Park.

VI. Literature review

People who stay in high rise buildings do so because of the view, the breeze and the privacy that they can get [1]. It is easy to socialize in case of a tall building and saving time [2]. The benefits of tall buildings are : a better view from the upper floors, and more open space on ground [3]. There has been a widespread public distrust of tall buildings. [4]. 65 people died in three separate fires in Hong Kong [5]. High rise apartments are most preferred sector of housing presently [6]. After the 11 September 2001 terrorist attack on the World trade Centre at New York, there are significant rental and value losses in some of the truly famous

buildings in New York and Chicago [7]. The terrorist attack of 9/11 has led to heightened concerns over the safety aspects of tall buildings [8]. However none of the authors have tried to find the consumer perception towards tall buildings. Thus a gap exists in the literature.

VII. Analysis:

There are three perspectives to consider in the study:

- 7.1 Why does the Pune Municipal Corporation want tall buildings?
- 7.2 Why do the builders want tall buildings?
- 7.3 Why would dwellers want to stay in the tall buildings

7.1 The reasons why Pune Municipal Corporation proposed to the State Government to give permission to construct high rise buildings could be:

7.1.1 Height of buildings defined the level of development of the city. The common perception of people is that if the buildings are very tall it means that that city is very much developed. Possibly the Pune Municipal Corporation wants to prove that it is indeed a well developed city compared to other cities.

7.1.2 In many cities in the world, example in London, etc., due to the scarcity of land, the old buildings are being demolished and taller buildings are being made in the same location. The buildings are being demolished because there is no provision to add further floors to them as the Columns and foundations were not designed for higher floors. But if a tall building is made now, then, in future if there is a scarcity of land in the city, the tall building need not be demolished: the vacant land remaining due to the tall building can be then used for new building. Explanation: Consider a plot of land of 60,000 square feet. Consider two options Option (i) : Five buildings of 6 stories height , each floor of 2000 square feet , thus requiring 2000 square feet of land for each building and since 5 buildings are there the total land utilized would be 12000 square feet for constructing 60,000 square feet of built up area for utilizing FSI of 1.

Option (ii): One tall building of 30 stories , each floor of 2000 square feet, total built up area would be again 60,000 square feet to utilize FSI of 1, and land required would be 2000 square feet only, since it is equivalent to stacking 5 buildings of 6 stories height on top of each other , so in this case 10,000 square feet of land is available extra vis-à-vis option (i), with same built-up area. This excess land can be utilized for further construction later on in future if there is a scarcity of land.

7.2 The reasons why the builders would be interested in the construction of tall buildings could be :

7.2.1 To prove to him-self and to the world that he is capable of constructing a tall building, as the construction of a high rise is challenging and those builders who have achievement motivation will want to make the tall buildings.

7.2.2 The profit that he would hope to get would be more than in the conventional buildings, even after considering the opportunity cost of time which will be required more vis-à-vis short building of equal built-up area, assuming that the buyers would pay high rates.

7.3 Analysis of potential dwellers

Many buyers are unwilling to stay in tall buildings as they are unsure about the effectiveness of fire-fighting measures. Some are also afraid about evacuation in case of earthquake.

Pune citizens remember that the 8th floor of Mutha Apartments on Senapati Bapat Road, Pune got completely burnt off because the fire tenders could not reach in time. Similarly people recall the incident of fire in June 2012, in the top four stories of the eight storey Mantralaya Building, in Mumbai which is the seat of power, in which 3 persons were killed Some people would not want to stay because they do not have full trust in the power supply and the lifts and the effectiveness of fire-fighting as they do not trust the builders because of past experiences. Those with small kids prefer not to stay because of fear of kids falling off and dying. Those with handicapped or elderly people at home would not want to stay because in case of an unlikely event of evacuation due to earthquake or fire or bomb, the evacuation would be very difficult. In case of earthquake or fire , it is advisable not to take the lift and it would be very difficult for people living on top floors top evacuate through stairs. Those with heart problems also would not want to stay in tall buildings because of mistrust of fear of lifts not working, all which they have learnt from the recent bad experiences in the existing low height buildings.

A lot of time goes in elevators in tall buildings especially for those who stay in the top floors. In a high rise building the elevators have to move very fast. While coming down, a feeling of weightlessness occurs and while going up a feeling of heaviness in weight occurs because of gravity. Due to which some people prefer not to go in a lift and hence would not prefer to stay on the top floors in a high rise building.

Some people do not trust the builders technical ability to build strong tall buildings because it has not been demonstrated by the builder: that is to say that the builders in Pune do not have an experience in construction of tall buildings and just like in case of jobs where companies do not prefer inexperienced candidates, similarly many people would not prefer to stay in a tall building which may be the first such project by the builder. As it is, the people do not trust most of the builders: a few years back, one reputed builder in Pune told the author that people respect builders as much as they respect the smugglers. This is because there is no professionalism or credibility or dependability displayed by most of the builders.

Some people who have the fear of heights or vertigo would definitely not prefer to stay on the top floors of tall buildings.

Some people would not want to stay even on the lower floors of tall buildings, because they are afraid that in case the building collapses, due to earthquake or due to some defect, then all the floors will fall on them.

Some people feel that it is not worth paying more for the top floors considering that the risks involved in staying are very high so according to some the cost of top floors should be lower than that of the lower floors, which is technically not correct because for transportation of material and labourers, it takes a lot of time and money. Some people who would want to stay in lower floors still would not prefer to stay in lower floors of tall buildings because the maintenance costs would be very high vis-à-vis a short building.

Some people feel that tall buildings are a soft target for the terrorists, especially after the 9/11 incident.

Some people feel that the tall buildings are likely to be motivators of suicide, so they would prefer not to stay there.

Since Pune does not have tall buildings which have been tested by time, in the initial stage it may be difficult for the pioneer builders to get many customers. Many people would prefer to wait and watch. So it may be just like the development of fashion: first some 'snobs' would be required followed later by the others due to the 'bandwagon effect'. But in Pune, whether it will be a fashion or a fad? One failure would wipe away whatever confidence people may have, something akin to Tata Nano cars, catching fire. Who would have expected that from a Company like Tata, especially when no other car of any other brand has been reported to have caught fire?

Some people do not trust the Municipal Corporation's competence in evaluating the technical competence of the builders for permitting the high rise buildings.

Some, who are willing to stay in tall buildings are those who discard the fear of fire and earthquake as the probability of occurrence of such events is very low and they feel that if they are destined to die then they can die in their sleep also.

Those who buy in the top floors of the high rise buildings may do so because the extent of view of the city from the windows becomes bigger and bigger as you go up and noise and smoke pollution from traffic goes on reducing. Further, the sunlight, the breeze are also much better and they get the feeling of being on top of the world as the 45 Nirvana Hills of Kumar Builders puts it: "You deserve to be here ". Let us just say, you've arrived, reached that point in your life, when there's little else to prove, till the tallest residential towers in Pune come along. Till you get a chance to live amongst those you always desired. Till you say, "I made it in life. I deserve to be here. It is time to rise above the rest." Those who belong to the group of 'achievers' (according to VALS lifestyle classification), might want to stay there because they want to show to their colleagues, peers and relatives that they have achieved something in life.

Some people might like to stay in a tall building just to be able to tell their peers that he is staying in the tallest building in the city. Some people would be able to get attention of their peers by claiming to be living in the clouds. Some people may want to buy just because the flats on the top floors would be very costly : something similar to buying a Mercedes car : if Mercedes car costs Rs. 1 million, then less will buy it compared to the number of people buying the Mercedes cars at current rate, because it no more remains a status symbol. People run after status symbols and the top floor in a tall building are definitely status symbols comparable to the likes of Mercedes cars or Rolex watches: to be able to boast to your peers that you are staying in the tallest building in the city.

Some people might purchase flat in a tall building because their children can get bigger playgrounds or gardens (as explained earlier in ' why Municipal Corporation wants tall buildings').

Prospective buyers in tall building claim that they would get peace and calmness in the top floors of tall buildings and claim that when one is at the top of the world, his thinking further becomes more bigger. They also trust that if the Municipal Corporation has given the builders the permission, to make tall buildings, the Municipal Corporation must have diligently studied the technical capability of the builders. Those willing to buy in tall buildings go with the preparation that the maintenance cost, fire and NOC charges would be definitely higher : something similar to buying a Mercedes car ; the buyer knows that the maintenance cost would be higher than a conventional car. Some say that if they aspire for quality they are prepared to pay for it. Regarding evacuation in case of fire, the prospective buyers also have thought about parachutes and paragliding suits.

Some people would prefer to stay in tall buildings because it is 'something different'. Overall it is about 'ego'

VIII. CONCLUSION

Many buyers (95%) are unwilling to stay in tall buildings as they are unsure about the effectiveness of fire-fighting measures. Some are also afraid about evacuation in case of earthquake. Very few people (about 5%) , who are willing to stay in tall buildings are those who discard the fear of fire and earthquake as the probability of occurrence of such events is very low and they buy because the extent of view of the city from the windows becomes bigger and bigger as you go up and noise and smoke pollution from traffic goes on reducing.

The reason why many people stay in tall buildings in Mumbai and those in Pune do not prefer to is possibly due to the fact that in Pune most people are service class and they prefer security, whereas in Mumbai relatively more people are entrepreneurs who like to experiment with new things. Maybe the absence of a long-standing tall building in Pune could be another cause for aversion to staying in tall buildings in Pune.

Before making tall buildings, the builders should convince the prospective buyers by confirming and comparing with tall buildings in Mumbai about the foolproof arrangements for fire-fighting and should convince the prospective buyers that the building is earth-quake resistant. The Builder can possibly convince the prospective buyers by promising that he himself would stay in the building after the completion of the building might allay the fear of the prospective buyers. Builders of Pune should form Joint Ventures with Mumbai Builders who have already constructed tall buildings, to be able to convince people.

Limitations of the Research: The study has been conducted in Pune only and sampling is convenience sampling.

Scope for further work: A comparison can be made by interviewing people of Mumbai, where tall buildings are very common.

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