Research Study of Factors Influencing on Residential and Commercial Real Estate Valuation: A Case Study of Ahmednagar City

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Abstract - Valuation is the process to evaluate the value of a property as on specific date and time. The value usually sought is the property's market value. Valuation of Real estate is the task of appraising the prospective price of a site or building in the case of a sale. Such appraisals are important for investment decisions, for real estate funds and project developments. A main consideration to determine the value of property. Currently a valuer uses the various manual methods for preparation of valuation report. To minimize the time and increase the efficiency of valuation work computing technique can be used. An accurate prediction of real property price is important to prospective owners, developers, investors, appraisers, tax assessors and other real estate market stakeholders. It is thus required to prepare a prediction model which would take into consideration the effect of various changing factors on property value. To cater this need, excel computing techniques may be an optimum choice.

Keyword: Valuation, Excel, Factors, Real estate, Valuer.

I. INTRODUCTION

Housing being one of the basic needs of humans, real property has always observed high demand in developing cities. Real estate values are needed in many activities such as real estate sale, taxation, complex problem where experts carry out their job subject to input information. Without having proper knowledge about the prevailing rate, real estate trend, and cost-benefit analysis, the buyer of the property can land him in a bad deal. Due to the importance of the property valuation information in a number of application areas, it is imperative that improvements must be made to estate valuation process. For a valuation of real estate valuators use traditional method like sales comparison method, rental method, land and building method, profit method etc. are used to predict the property value. An accurate prediction of real property price is important to prospective owners, developers, investors, appraisers, tax assessors and other real estate market stakeholders. It is thus required to prepare a prediction model which would take into consideration the effect of various changing factors on property value. To cater this need, soft computing techniques may be an optimum choice.

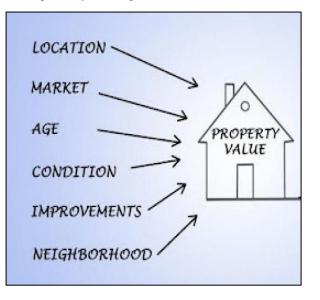


Fig 1 Valuation (Courtesy: Times Property) Valuation can be defined as the process of estimating the market value of real estate properties. Value of the property depends on the circumstances of the case such as structure, age, maintenance, location, etc. Valuation is carried out basically for financial activities in the economy i.e. Investment, buying and selling, loan and mortgage etc.

Valuation is the process of estimating the cost of a property based on its present condition. The properties may be immovable properties like land, buildings, mines trees quarries etc., and movable properties such as coal, oil, steel, cement, sand etc.

A property valuation is usually undertaken by an estate agents or an independent valuer, typically acting on the instructions of the vendor or a lending institution. Buyers may also request a property valuation if they are considering purchasing a property, in addition to structural surveys that assess its physical condition, before providing a mortgage or refinancing, a lending institution (such as a bank) may request a valuation to ensure the loan can be covered by the security value of the property. This is gives them with the confidence to lend the capital, knowing that if the mortgage goes unpaid, they can recover any outstanding amount by reselling the property.

- A. Purposes of Valuation
- Selling and buying of Property

At the time of sale/purchase of a real estate property, before fixing the consideration price between the buyer and seller negotiation takes place based on the base value or present market value which is determine by a practicing valuer. Thus valuation is required both the seller & buyer for selling and buying. It plays a key role in real estate market.

• Property Mortgage and Security of Loan

While taking a loan from financial institutions on the security or mortgage against a property, the financial institution or bank carry out valuation of the property given as security and depending on the value of the property decision for loan is taken.

• Fixation of Rent/lease rent

Standard rent/lease rent of a property is calculated based on the total value of a property for which valuation is required.

• Revenue/Registration fees determination

In case of collection of Govt. Revenue or Registration fee for purchase of property required to value the concerned property on which the Govt. fixed the fees as per norms.

• Assessment of Tax

Valuation of a property determines the actual value of the property for assessment of tax liability.

• Insurance purpose

The people are very much concerned about the security of their property. For the purpose of insurance valuation the people get their property valuation.

Other purposes

Some of the other purposes for which valuation of property is very important requirement are Stamp duty, Dissolution of partnership, auction, housing loan, bank guarantee etc.

II. PROBLEM STATEMENT

Currently a valuer uses the various manual methods for preparation of valuation report. To minimize the time and increase the efficiency of valuation work computing technique can be used. An accurate prediction of real property price is important to prospective owners, developers, investors, appraisers, tax assessors and other real estate market stakeholders. It is thus required to prepare a prediction model which would take into consideration the effect of various changing factors on property value. To cater this need, excel computing techniques may be an optimum choice.

III. METHODOLOGY

Property valuation is the estimation of the worth of an interest in a property, which involves a reflection of the subject property characteristics and the circumstances surrounding the exchange of the interest in the open market, can be conducted by adopting a number of approaches. These approaches include comparable, investment, profit, development and contractor's methods which have been classified as traditional methods, and on the other side, Excel have been categorized as advanced methods of property valuation which can be follow any valuer without having any large investment.

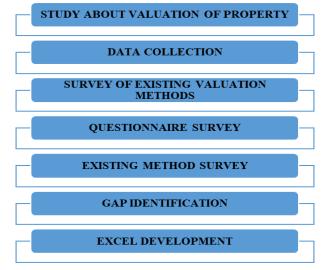
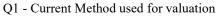


Fig 2 Research Flow

IV. QUESTIONNAIRE SURVEY



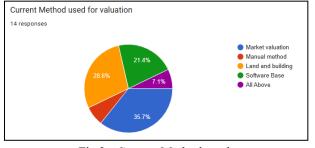
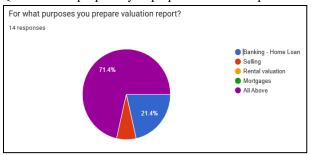
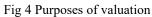


Fig 3 - Current Method used

Above graph represents the current method used for valuation which is maximum for 'Market Valuation' with 35.7%. For 'Land and Building' it is 28.6% and for 'Software Base' it is 21.4%, these are the two which comes next in line. These results are based on 14 responses.

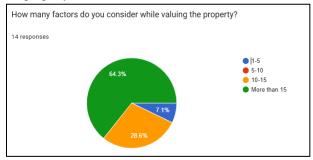
Q2- For what purposes you prepare valuation report?





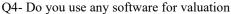
Above graph represents the purpose for creating the valuation report. The maximum weightage is for all the points which includes Banking – Home Loan, Selling, Rental Valuation, Mortgages.

Q3- How many factors do you consider while valuing the property?





Above graph represents the number of factors considered while valuing the property. The factors usually play a very vital role for property valuation. According to our 14 responses, 64.3% considers more that 15 factors and 28.6% considers 10-15 factors while valuing the property.



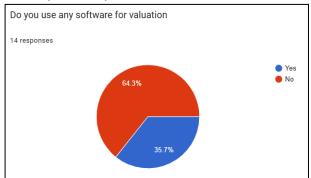
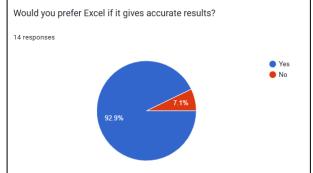
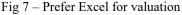


Fig 6 – use any software for valuation

Above graph represents whether any software is used for valuation. Here the options are either Yes Software is used or No Software is not used. High responses are received for No software is not used for valuation.

Q9 - Would you prefer Excel if it gives accurate results?





Above graph represents about the preference for the use of Excel to give accurate results. As per for 14 responses, maximum responses are for Yes Excel will be preferred if results are accurate. Results are 92.9% responses for Yes Excel will be preferred and 7.1% responses for No Excel will not be preferred.

V. EXCEL PREPARATION

Excel for Property Valuation Business is robust and meticulously designed to save your time at every step. It is revealed in our mobile and web applications which are used to collect property details from the site by the field engineer and report preparation (Maker & Checker) in your office by the operator & reviewer/approver.

A. Factors Consider for Excel

- Locality
- Condition of approach road

- Physical status of property
- View from property
- Amenities available
- Water Availability
- Electricity Breakdown
- Sewerage/ sanitation
- Exterior
- Interior
- Door
- Window
- Maintenance level
- Development of surrounding area
- Flooring
- Electrical fitting
- Plumbing
- Bathroom/Toilet fittings
- Kitchen Platform
- Parking
- Architectural and aesthetic quality
- Compound wall
- Painting
- according to duration
- according to quality
- School/College
- Hospital
- Market
- Bank
- Playground
- Cinema Theatre
- Sports complex
- Rikshaw stand
- Parks/Gardens
- Bus stand
- Railway station
- Airport
- Highway
- Width of approach road
- Lift (If yes)
- Lift (if no)
- Govt Offices
- Industrial zone/ MIDC
- Hazardous chemicals/Nuisance/Air pollution
- IT hub
- classification of the area
- Size and Shape of the Land
- Type of construction

- Planning (Ease of movement)
- Any negatives (Please Specify)
- Any favourable consideration (Please specify)
- Type of property

B. Valuation by using Excel

Table 1 Market Value According to Our Excel

Value of the property = [(Ready-reckoner rate X Area) X multiplying factor] X Age factor
Value of the property = $[(11000 \times 1096) \times 1.3] \times 1.3$
0.75 = 1,17,54,600 /-

- Market Value According to Valuer as given in Appendix A is Rs 1, 12, 40,000/-
- Market Value According to Our Excel Rs 1,17,54,600 /-

VI. CONCLUSION

Discrepancies in Valuation Reports: The study has identified several factors contributing to discrepancies between actual property values and those stated in valuation reports. Key factors include inconsistent data sources, subjective judgment of valuers, lack of standardization in valuation methods, and variations in demand-supply dynamics across property types and locations. These discrepancies underscore the need for a more structured and transparent approach in the valuation process.

Market Value in Different Zones of Nagar City: The analysis of properties across urban, semi-urban, and rural areas of Nagar city reveals that market values vary significantly due to differences in infrastructure, accessibility, economic activity, and population density. Urban areas such as Savedi command higher values due to better amenities and connectivity, whereas semi-urban and rural regions show gradual appreciation influenced by emerging infrastructure and housing demand. These insights are crucial for financial institutions in accurately assessing collateral value for bank financing.

Development of Excel-Based Valuation Tool: An Excelbased template has been developed as part of this study to standardize and enhance the accuracy of valuation reports. This tool integrates key variables such as location, property type, comparable sales data, and market trends, enabling valuers to produce more consistent and data-backed assessments. Adoption of such tools can significantly reduce human error and improve confidence in valuation outcomes for stakeholders including banks, buyers, and developers

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