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Valuation Profession - New Initiatives to Way Forward

Data Analysis

The process of analysing large database to find the patterns that is valid, logical, useful and understable .

Source of Data & Information

Heap of old data's and information – Land documents, Building Costing Components. Market Research on daily basis.

Public domain dataPublished by Central or state government organisation like CPWD publications, Whole Price Index etc.

Private research reports:

Industry study reports from any credible MNC's orresearch firm.

Knowledge discovery is an iterative process. We are living in the era of evolution of AI- We are drowning in data, but starving for Knowledge. Every industry is inclined towards digitisation, artificial intelligence integration and new technologies.

We as Valuer Professional need to identify the critical integration of Artificial Integration and Data models to bring more precision in estimation of values.

In our competitive industry of valuation, Quality is a vital element. Our product is value – which is estimated through various approaches and methods, that requires market research and knowledge.



To validate the our basis of valuation from certain mathematical model and reasoning, Knowledge conversion from data is very important. When our end product is VALUE, then we should have logical and factually correct working to estimate the value. The primary workflow of Data Science & AI in Valuation Profession can be categorised into two parts:

DATA COLLECTION, SEGREGATION & CLUSTERING

As we know, Data is another Oil, but the quality of data matters. The correct process of collection of Real Estate data from the market is an art. We need to understand the basics of Construction, Real Estate and Dynamics of Marketing and Negotiation. There can be N number of factors which constitutes the value of properties.

The primary steps involved in Data Analysis are:

Data Collection: We can collect data from sources from primary and secondary sources.

Subset data: Sampling of data

Feature selection: Principal component, Secondary components

Pre-processing: Cleaning - Name/address cleaning, different nomenclature, different units, duplicate removal, supplying missing values.

Segregation & Filtering: Segregate the different data type into one or more similar group.

Clustering: Classified data can be clustered into various breakdown structure or small group which make a meaningful information.

Transformation:

- Transformation of data into a pattern.
- Deriving various pattern and then selection of meaningful and interesting pattern which could be used in improving the quality of our valuation working basis.
- Deviation detection and pattern formulation can be done by statistical formula or other fundamental approach.
- Standardising all parameter into Time series and Pricing Factor.

Visualisation or Presentation:

- Data Trend Visualisation – The derived trend or pattern can be present on X-Y Axis or X-Y-Z Axis Graph, Bar Chart, Simple tabular or Pie chart.
- It can be very concise or descriptive.
- It can be specific to location, property type and features.
- It can be in words, numbers or pictorial form

