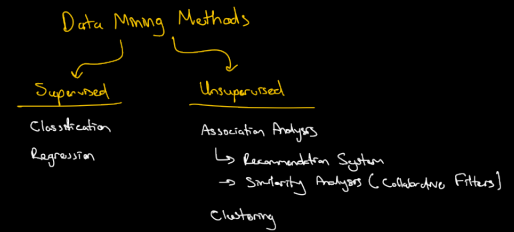


Data Mining and Applications

Project : %20 → Implementation of algorithms without using library and/or framework.

Resources :

- Ktime : Low Code Platform
- Dr. Saed Sayed : Mind Map about Data Science
- Orange : Low Code Platform
- Kaggle : Dataset and Competition Platform
- Colab : Google's Cloud Solution for Jupyter



Data Warehouse : Designed for decision support applications and technical infrastructure for decision systems.

Data warehouses are:

- I) To The Point → Focused to the goals
- II) Integrated → Integration about consensus about coding, physical...
- III) Have Time Dimension → Data of inside warehouse have a time T.
- IV) Read-Only → Data can't be remove or update.

Data Mining : Process of creating a meaningful results from corporation's data named as "Data Mining". This process separate meaningful info from big data cumulatives.

Scope of Applications

I) Marketing

- Determining customer's purchasing habits
- Revealing the connections between customer's demographic characteristic
- Retaining exist, gaining new customers
- Market basket analysis
- Customer relationship management
- Customer evaluation
- Sales forecast

→ "REVIEW PROCESS → CLUSTERING
EVALUATION → REGRESSION"

II) Banking

- Revealing hidden relationships between indicators
- Detection of Fraud
- Determination of Customer Groups
- Evaluation of credit requests

III) E-Commerce

- Resolving attacks
- Management e-CRM
- Visit analysis

Data Mining Processes

- I) Meet with Data : Type (Quantitative or qualitative), Quality (Missing, Inconsistent, Duplicate), Analyse Data (in Terms of Its Relationship)
- II) Data Cleaning : Elimination of false informations and missing data. (Avg replacement, removing, regression ...)
- III) Data Integration
- IV) Data Reduction
- V) Data Conversion
- VI) Applying Mining Algorithm
- VII) Presentation of Results