

Objectives

- Collecting customers social information
- Collecting company social information
- Collecting customers inputs
 - Opinions
 - Purchases
 - Complaints
 - Participation

Requirements

- Real time loads
- Big data system
- NoSQL database
- Natural language processor

Data structure definitions

- Graph OLAP
 - "Collection of network snapshots $W=(W_1,...,W_n)$ having a collection of informational attributes I_k and a graph $G_i=(V_i,E_i)$. Any graph G_i can exist in different snapshots W_n
- Vertex
- Element of the model
- Edge
- Metrics and relationships between two vertices

TAGs

- Two elements of the model have different relationships
- This is not covered by graphs theory
- Each edge will have a collection of tags describing the relations between elements

Two different kind of dimensions

- Informational
 - An informational attribute I_k from the snapshot W_n
- Topological
 - Dimensions created from grouping edges and vertices

Measures

- Two sources of measures
 - Values associated to TAGs in edges
- Aggregation operations
 - Distributive
 - Algebraic
 - Holistic

