

Tutorial 04 : Multidimensional Design

Analyse d'un phénomène par rapport aux axes d'analyses.

Les axes d'analyses : Les dimensions

Le Phénomène : La mesure, Le fait

Example:

Analyser le taux de réussite (La mesure) par section, enseignant et Module (Les dimensions) pour ensuite prendre une décision.

Exercice 01:

1- The fact to observe in this company:

Sales activity.

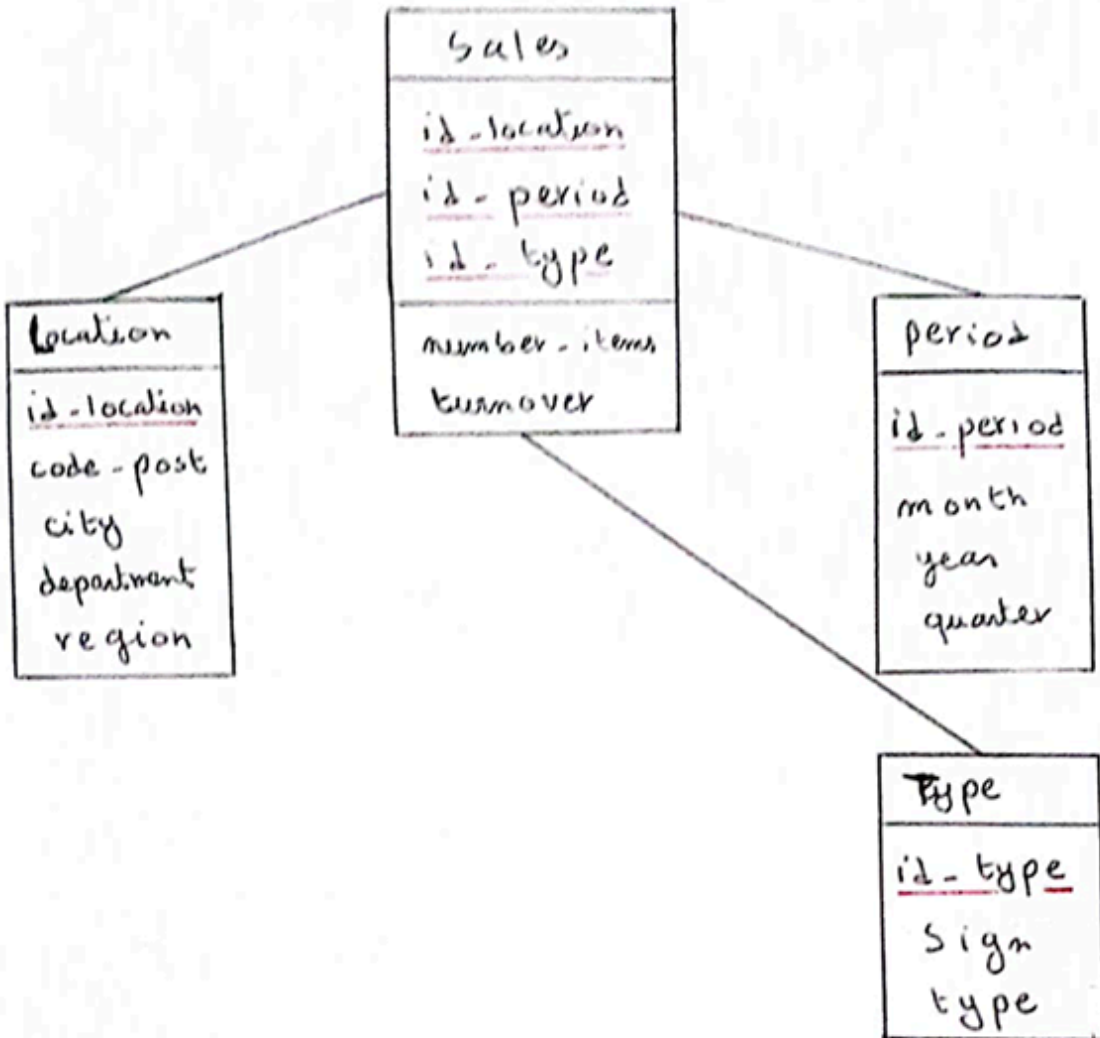
2-The axes of analysis and the measures:

We first determine the measures to analyze, then we determine the axes of analysis.

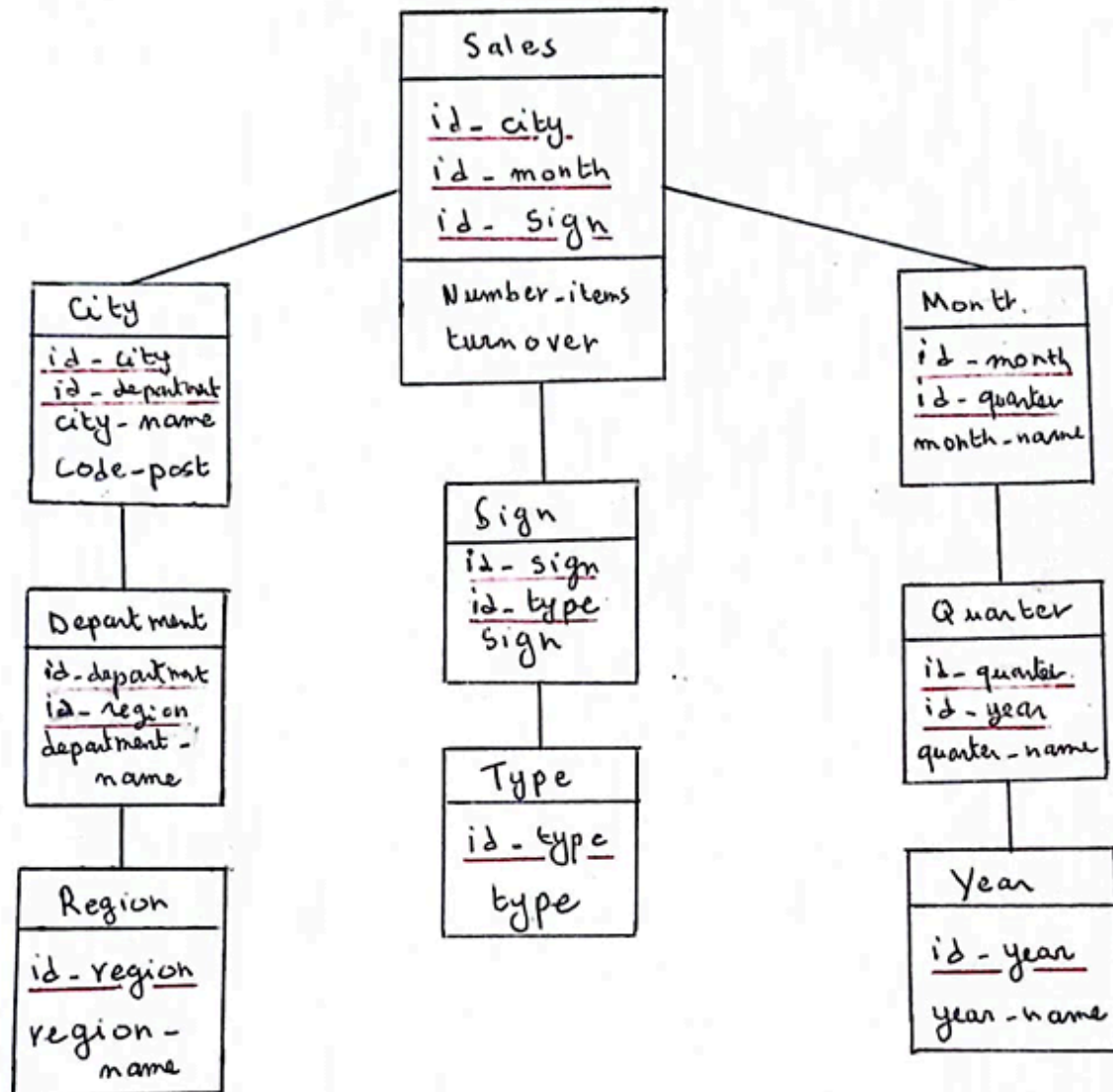
The Measures: The number of items according to type, Turnover.

The axes of analysis: Location, Period and item Type.

3- The star model of this data mart:



4- The snowflake model of this data mart (additional):



Exercise 02:

The fact to observe:

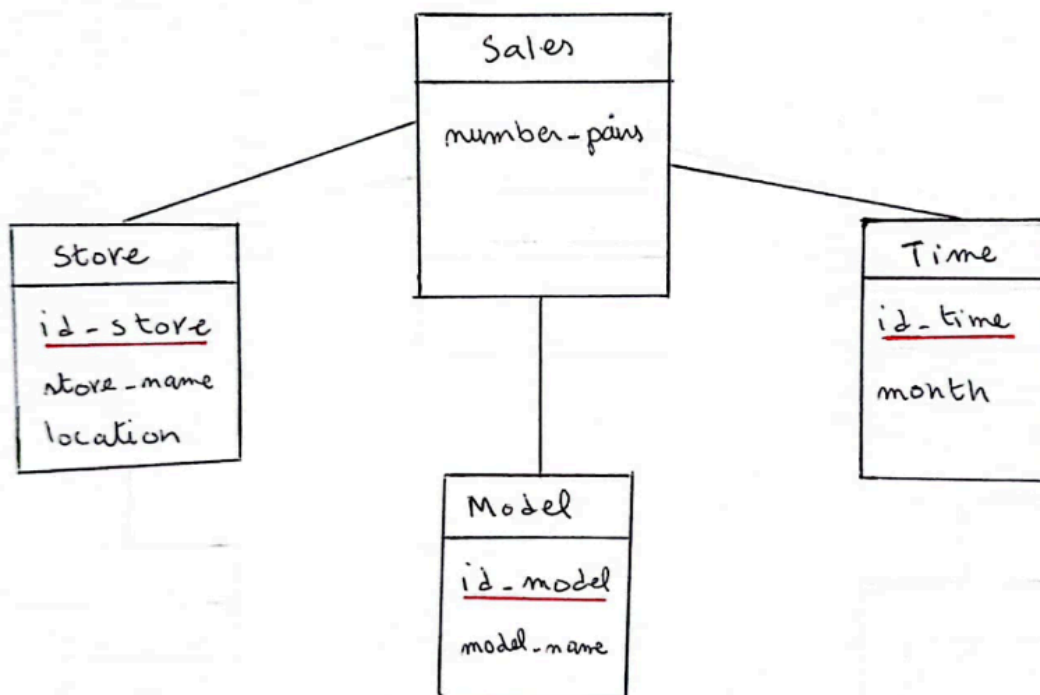
Sales.

The axes of analysis and the measures:

The Measure: Total number of pairs of shoes sold.

The axes of analysis: Time, Store and Model.

1- Proposing a conceptual model of the DW_Shoes:



2- Proposing the corresponding logical model for this data warehouse:

Sales (id_model*, id_time*, id_store*, number_pairs)

Model (id_model, model_name)

Store (id_store, store_name, location)

Time (id_time, month)

Exercise 03:

The fact to observe:

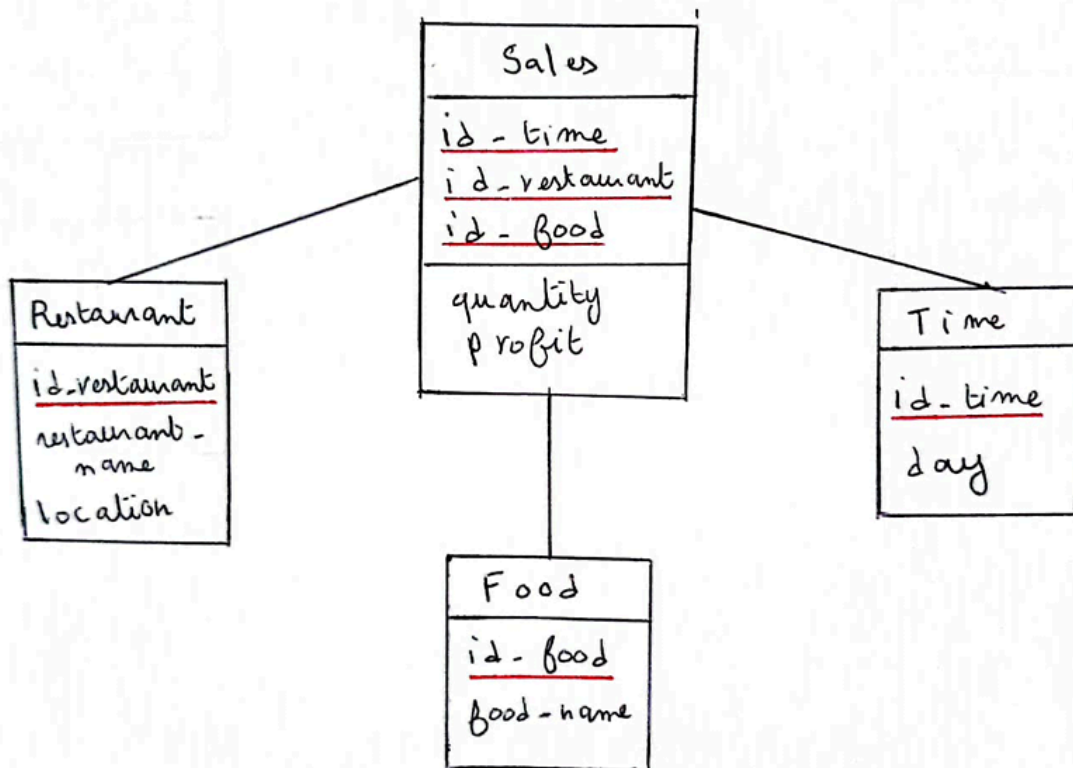
Sales.

The axes of analysis and the measures:

The Measures: Quantity sold, profit.

The axes of analysis: Time, Restaurant and Food.

1- The star model of this data mart:



2- The snowflake model of this data mart:

