ENGINEERING
INGEGNERIA
INFORMATICA

SpagoBI
/* the Business Intelligence Free Platform */

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Laboratorio SpagoBI
Case Study e Inventory

Testimonianza di:
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Questions to start

Who my customer is?

- What is his business?
- How is he organized?
- What his technological level is?
- What are his critical points?

Who are my potential users?

- Business roles
- What they manage
- What analysis habits they have
- Inefficiencies and troubles

Needs

- General and particular needs
- Urgencies and positive or negative effects

Data management

- What are the areas with better or worst data organization?

Don’t start immediatly developing reports !

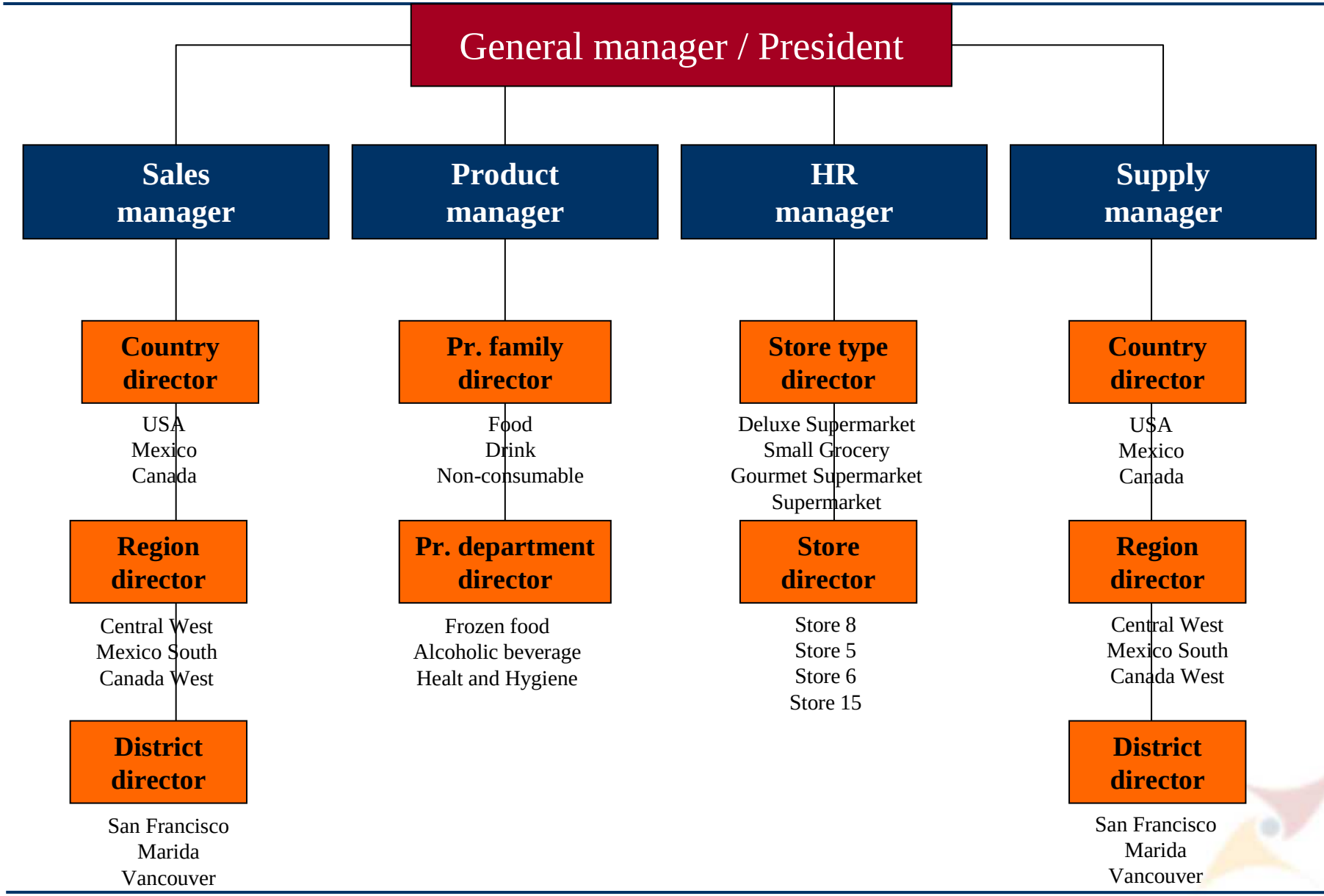
Don’t start to satisfy all areas in one shot !

Identify your first customer in customer

Don’t start from area with the worst data

Evolutive plan

Case study


General manager / President
Sales manager
Product manager
HR manager
Supply manager
Country director
USA
Mexico
Canada
Region director
Central West
Mexico South
Canada West
District director
San Francisco
Marida
Vancouver
Pr. family director
Food
Drink
Non-consumable
Pr. department director
Frozen food
Alcoholic beverage
Healt and Hygiene
Store type director
Deluxe Supermarket
Small Grocery
Gourmet Supermarket
Supermarket
Store director
Store 8
Store 5
Store 6
Store 15
Country director
USA
Mexico
Canada
Region director
Central West
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Canada West
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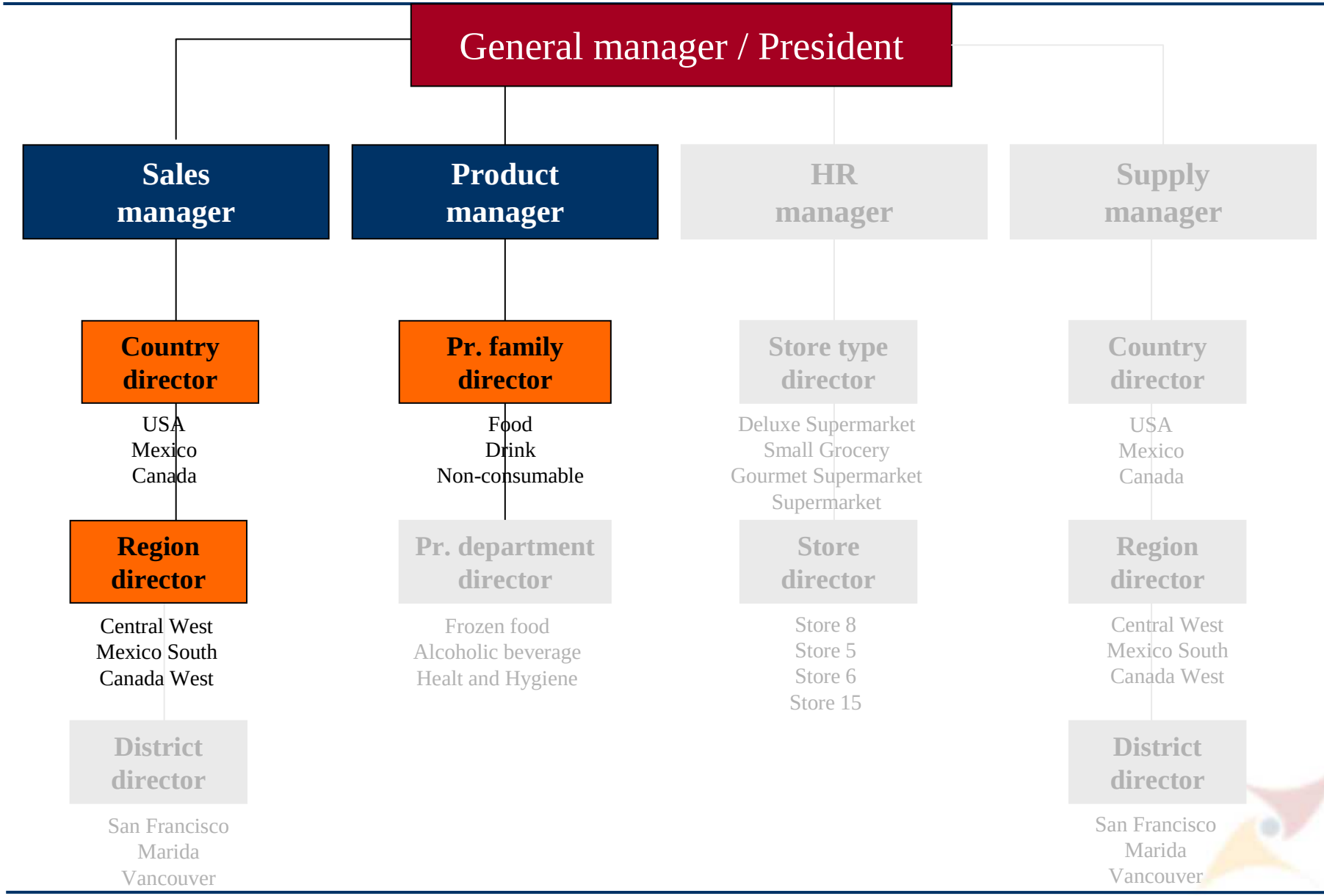
San Francisco
Marida
Vancouver

Case study – starting point



Case study – starting point

Aims:

- satisfy the users' analytical needs
- regulate the visibility on data and documents in relation to the users' roles and business responsibilities
- set up a representative model of the users behaviour
- choose the rigth tools for every category of users and analysis need
- build a customized model and analytical environment, with different freedom degrees
- set up an evolutionary development plan

Analytical questions

General director:

- Are the profits in line with my expectations?
- What's the value of the effort to reach the annual aims?
- How am I with respect to my competitors?
- What are the product lines with best performances?
- What are the distribution lines with best performances?
- What is my position on the market?
- What is my factor of competitiveness ?
- What are the growth rates with respect to last year?
- What is the company's state of health?
- What are the critical states on the internal costs management?
- What are the structure costs to optimize ?
- What are the greater inefficiency factors?
- What is the costs optimization degree ?
- …

Analytical questions

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Analytical questions

Sales manager (Country Sales director, Regional Sales director partially):

- Am I respecting the sale aims?
- What about the sales with respect to last year?
- What are the most difficult zones?
- **How the sales are distribuited over geography?**
- **How do the promotions act on the sales?**
- Why are the sales of a product fallen in a few zones?
- **...**

Product manager (Product family director partially):

- Where a promotion is useful ? Where a promotion is necessary ?
- What product could be the most competitive ?
- Where and when the launching of a the product is opportune ?
- **How is the product sales state ?**
- What is the most profitable product?
- What is the most expensive product for the company?
- What products are more fashionable?
- **What is the product most bought from young people? And from old ones ? And from female ?**
- …

Toward an answer

Data Analysis

- Identify the relevant indicator to answer to the Analytical questions
  - Grane, historical depth
- What elementary data they involve ?
- Where elementary data are ?

Implementation

- How can I reach source data ?

  ⇒ ETL/EAI/EII, loading critreria (time, policy)

- How have I to organize data in order to satisfy the analytical needs ?

  ⇒ Data Model

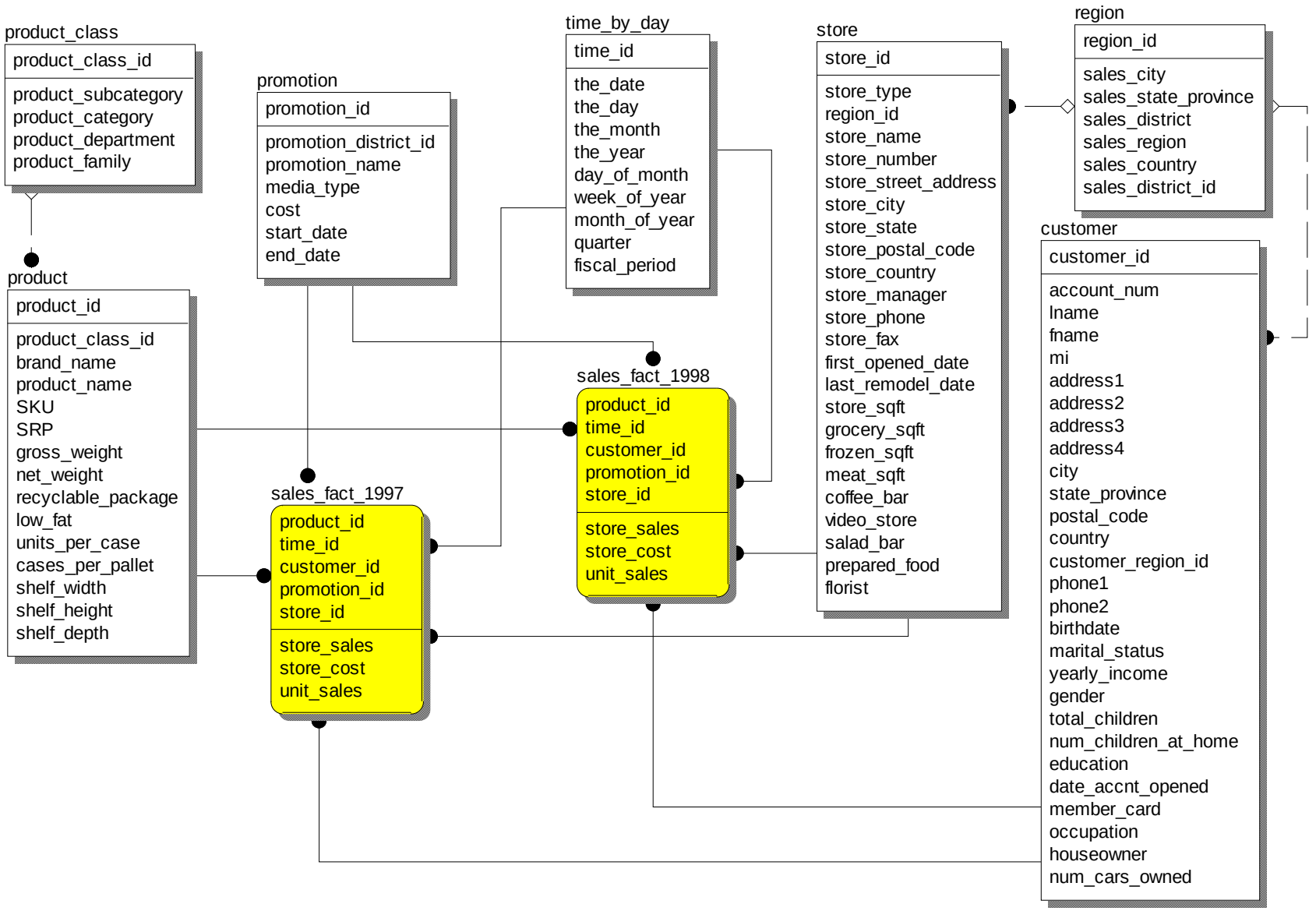
- What are the meaningfull views ?

  ⇒ Analytical document types and templates

- How user works with analiytcal documents

  ⇒ Behavioural model

Data mart - Sales



Analytical document types and templates

General director

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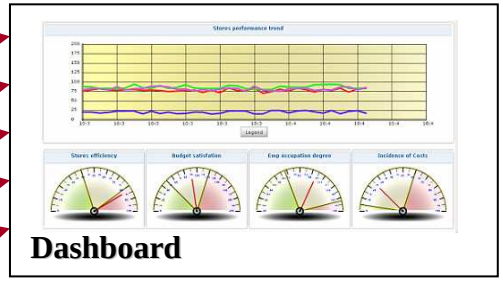
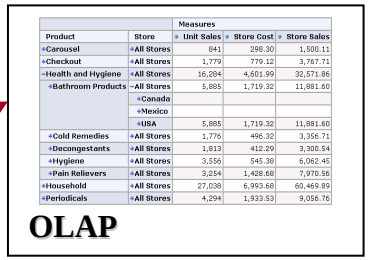
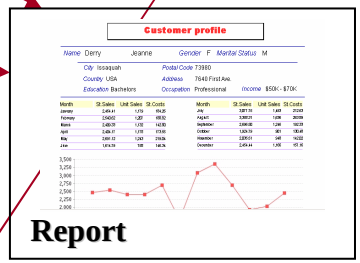
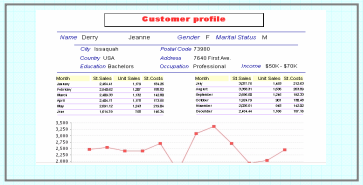






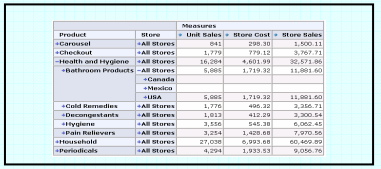
Analytical document types and templates

REPORT



DASHBOARDS

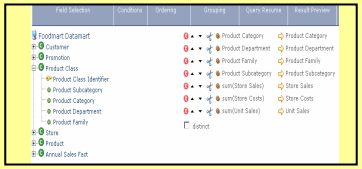
OLAP



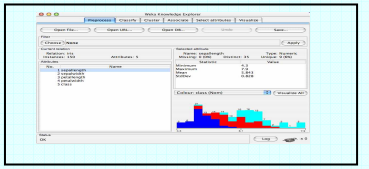
Product	Store	Measures		
		Unit Sales	Store Cost	Store Sales
+Carousel	+All Stores	841	299.30	1,500.11
+Checkout	+All Stores	1,779	779.12	3,767.71
+Health and Hygiene	+All Stores	16,284	4,601.99	32,571.86
+Bathroom Products	-All Stores	5,985	1,719.32	11,981.60
	+Canada			
	+Mexico			
	-USA	5,985	1,719.32	11,981.60
+Cold Remedies	+All Stores	1,776	496.32	3,326.71
+Decongestants	+All Stores	1,013	412.29	3,300.54
+Hygiene	+All Stores	3,556	545.38	6,062.45
+Pain Relievers	+All Stores	3,254	1,428.68	7,970.56
+Household	+All Stores	27,038	6,993.68	60,469.89
+Periodicals	+All Stores	4,294	1,933.53	9,056.76

DOSSIER

QBE – Query by Example

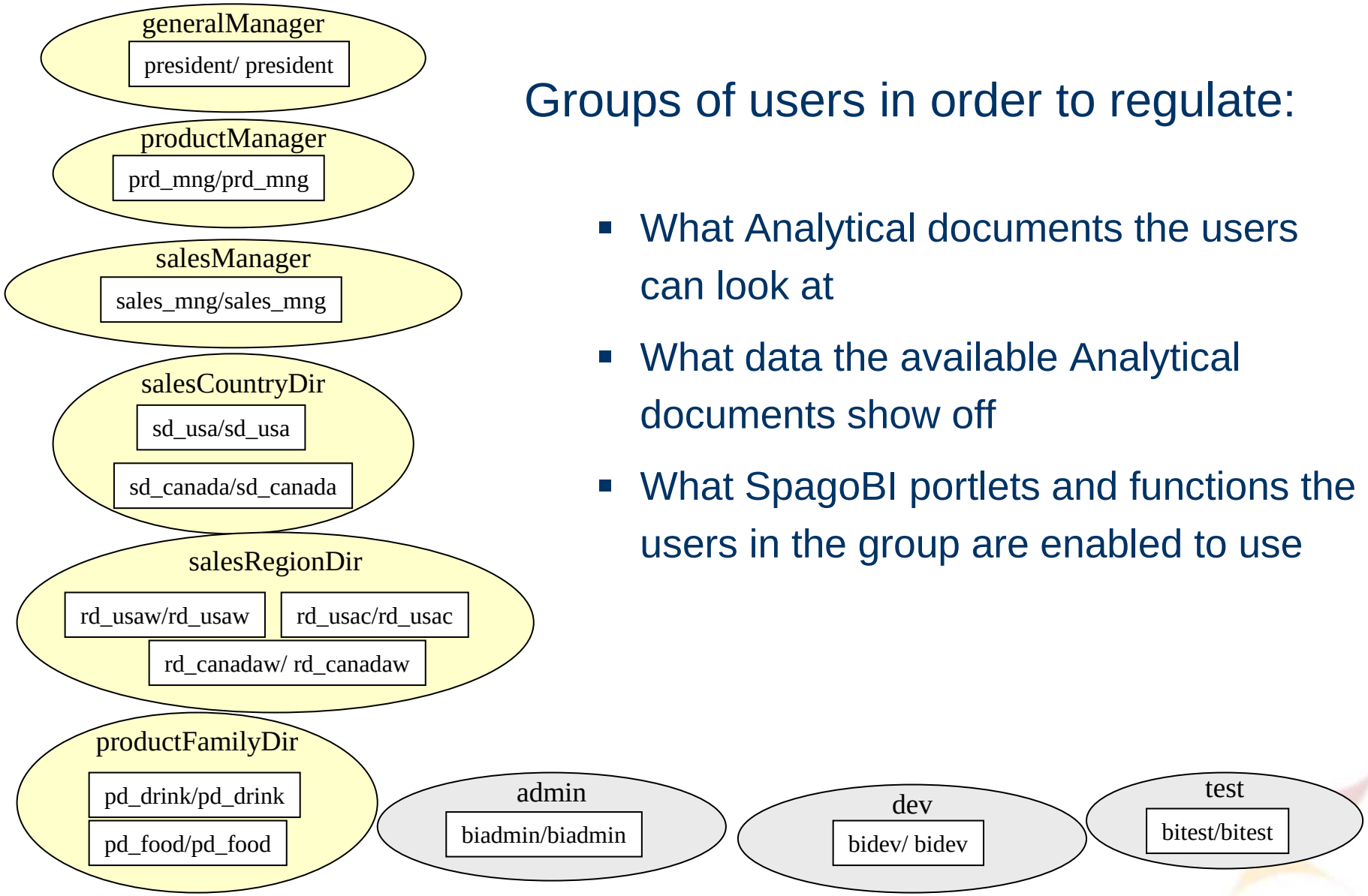


DATA MINING



GEO

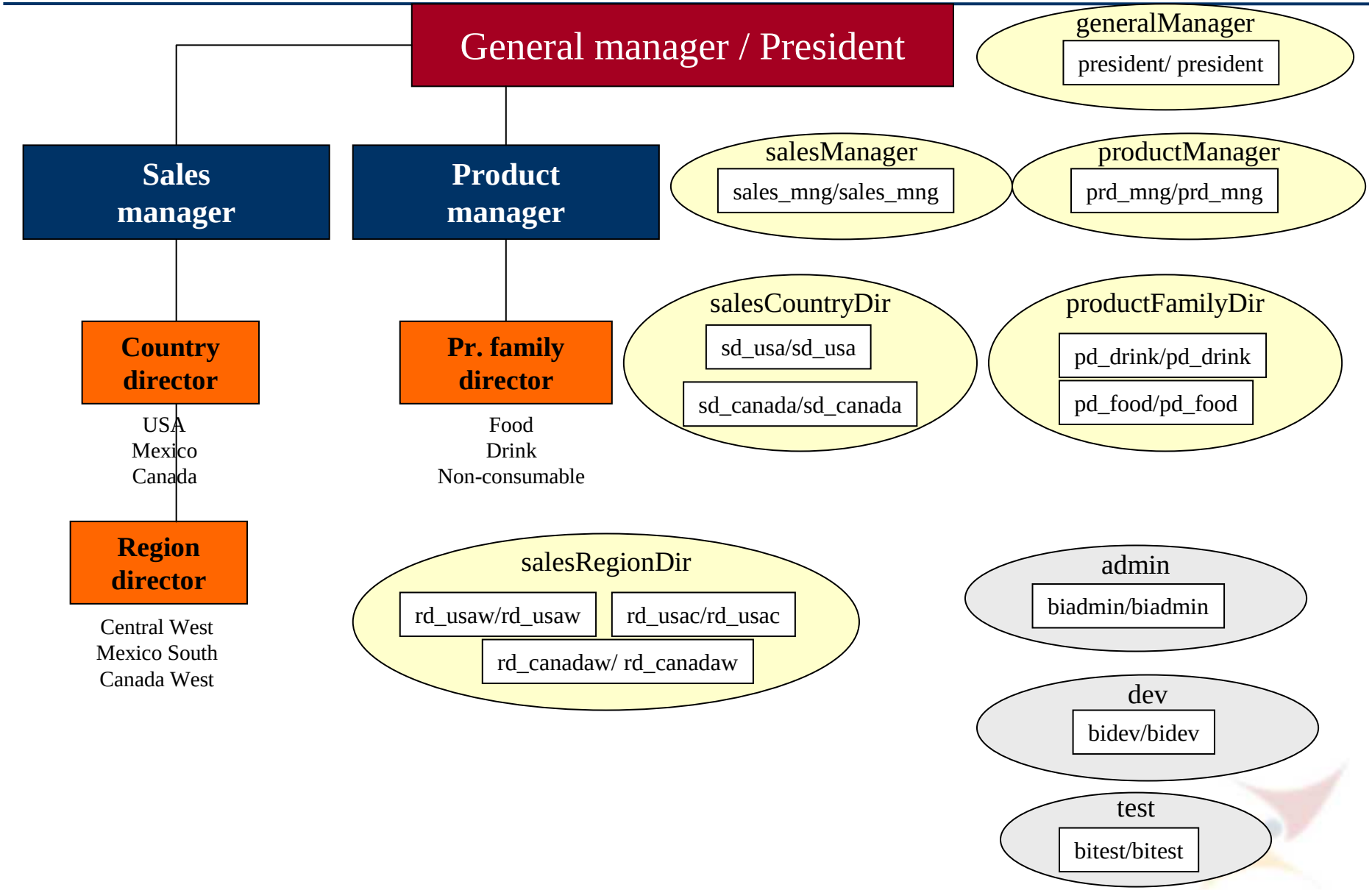
Behavioural model set up



Groups of users in order to regulate:

- What Analytical documents the users can look at
- What data the available Analytical documents show off
- What SpagoBI portlets and functions the users in the group are enabled to use

Behavioural model set up



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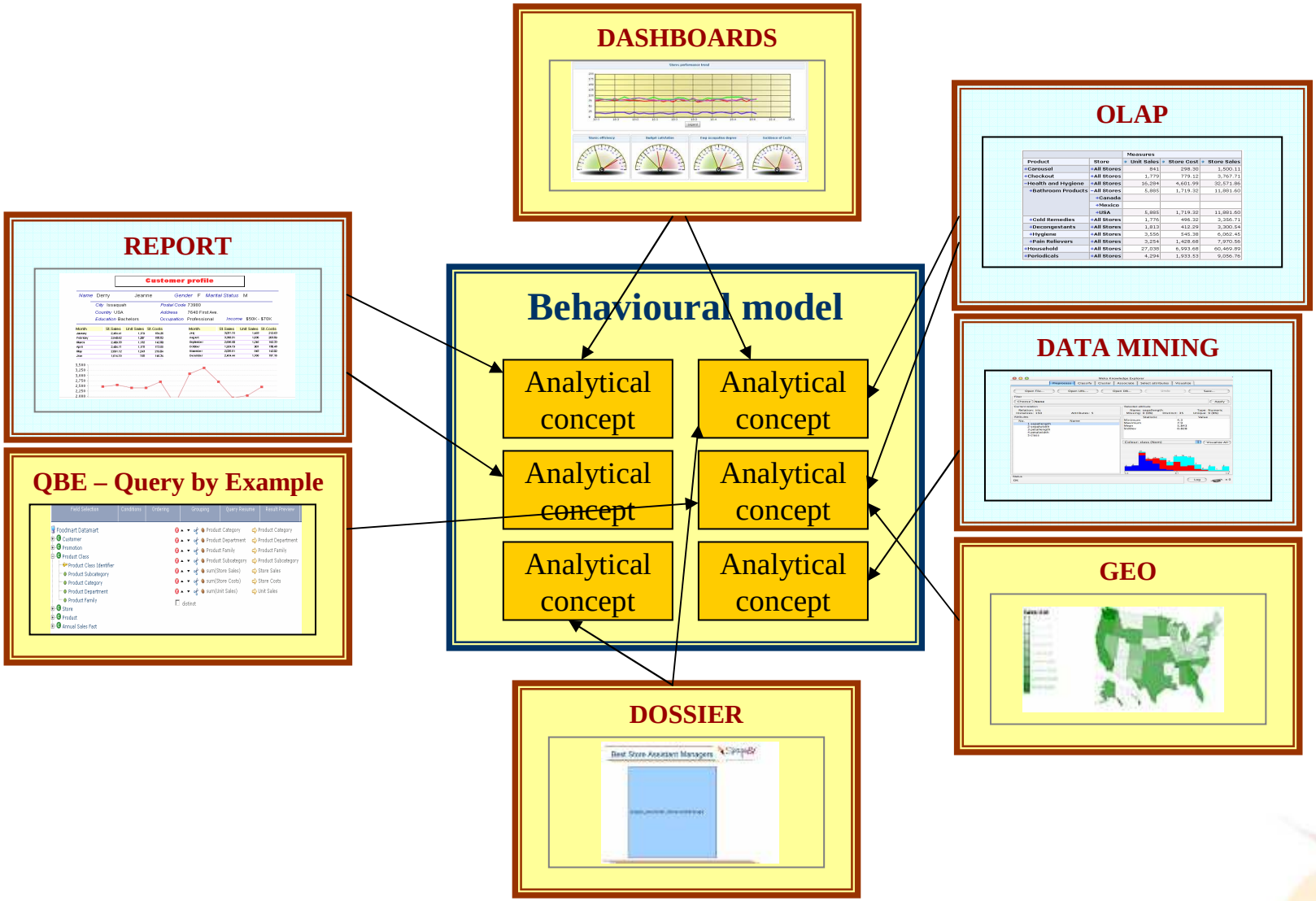

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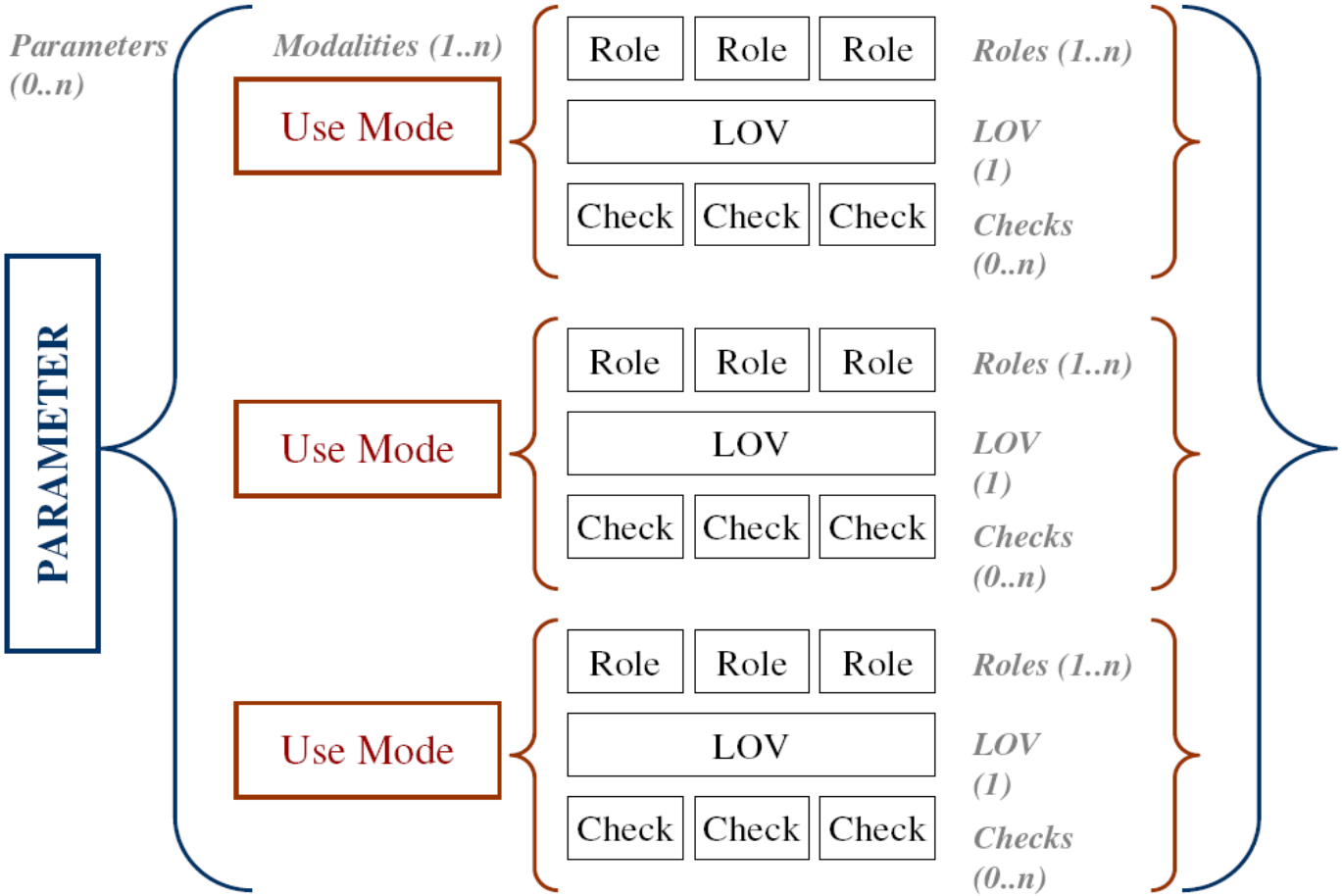

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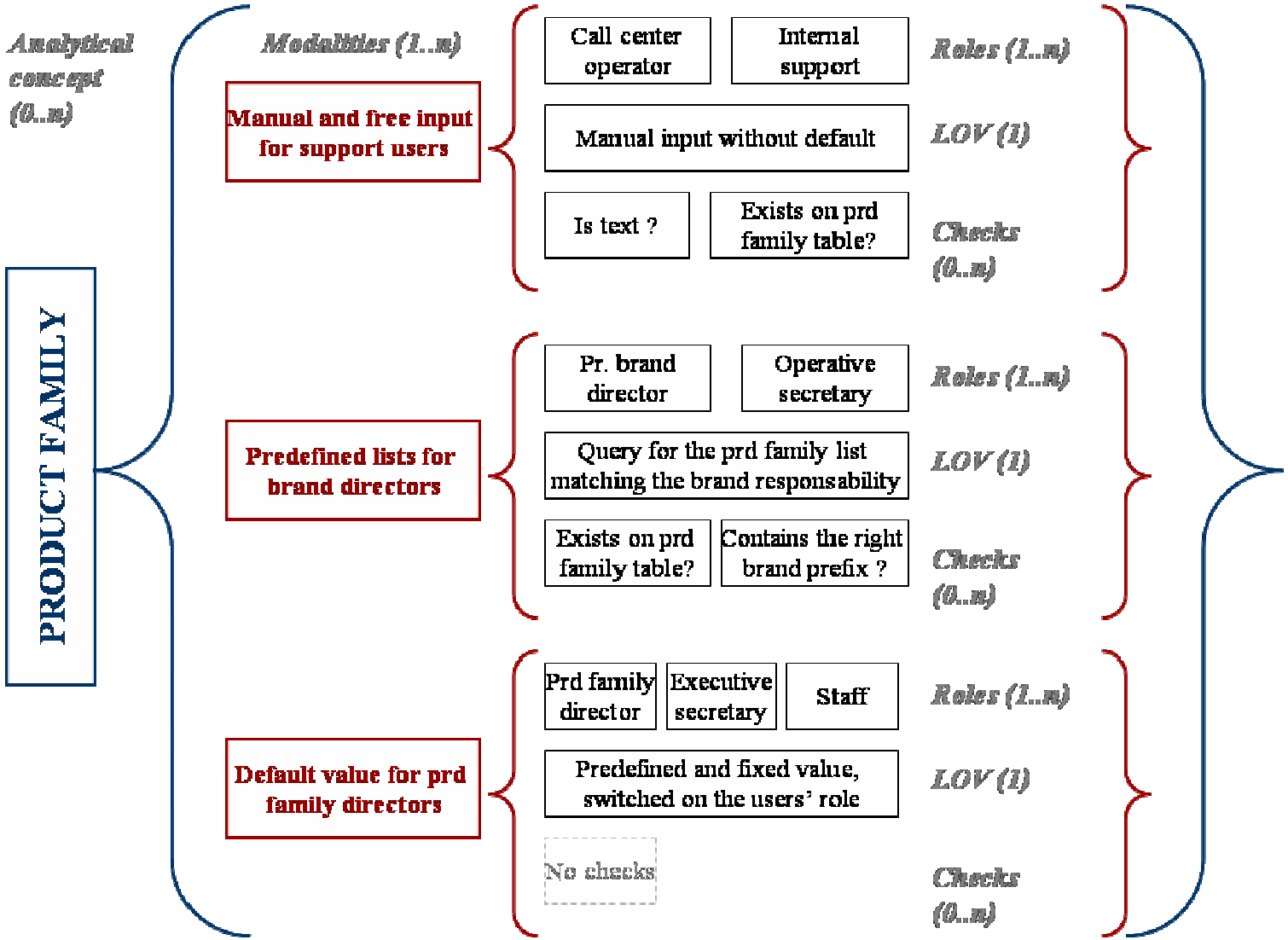


Behavioural model at work

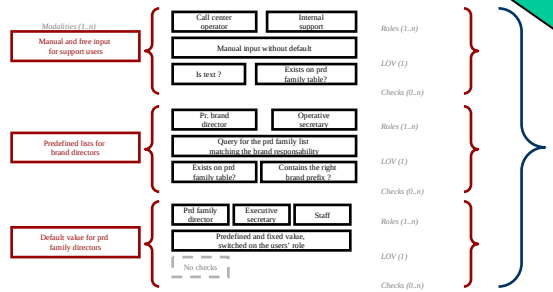
Call center operator	Internal support	Pr. brand director	Operative secretary	Prd family director	Roles ….

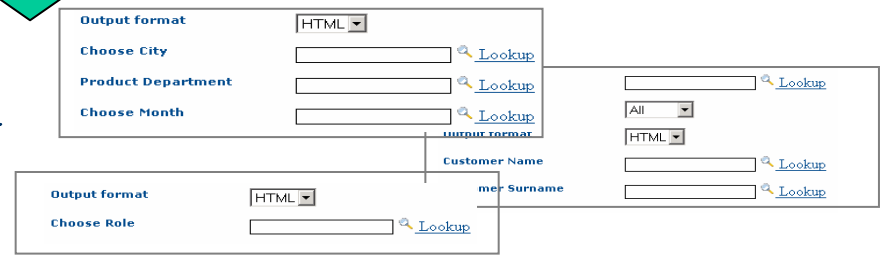
An authenticated user chooses the analytical document to be executed

Analytical document	Analytical document	Analytical document	Analytical document
Structural configuration	Structural configuration	Structural configuration	Structural configuration

The executive configuration of the analytical document is read and a page is produced for the input of the parameters according to the user's roles

PARAMETERS

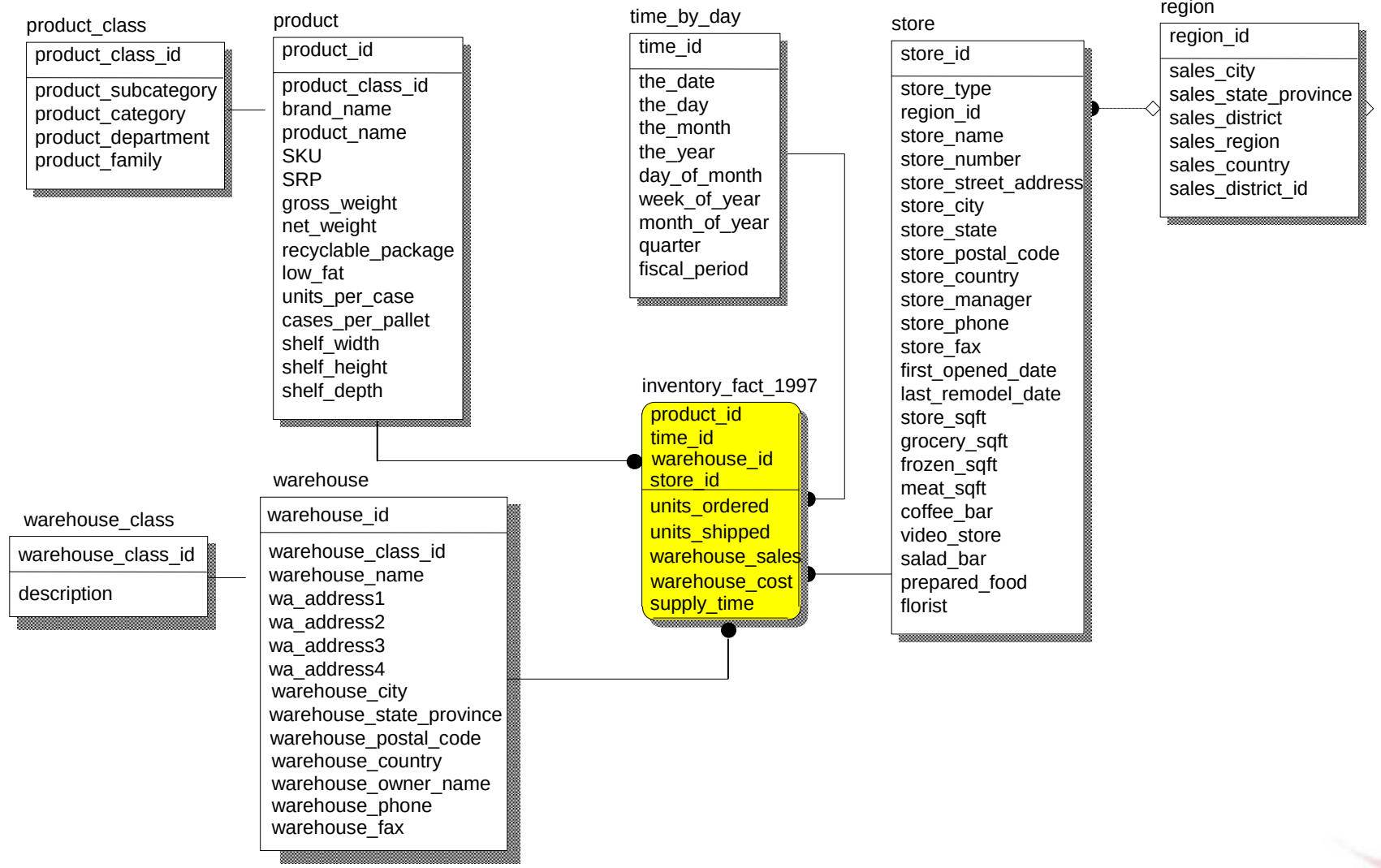




The input values for the parameters are checked according to the user's roles and the final document is come back to the end-user

Analytical document	Analytical document	Analytical document	Analytical document
Data Mining	OLAP	Dashboard	Report
Structural configuration	Structural configuration	Structural configuration	Structural configuration

Inventory (Data mart)



Inventory (Metrics)

Main metric: Out of stock

Analysis metric:

- Adjustment
- Frequence of order
- Size of order
- Product cost (related to reorder level)
- Store employees (salary, education level)
- Time period
- Promotion on product