**Foodmart Database Summary**

The Foodmart database contains all data tables that describe entities and their associated properties and data tables with records of facts and transactions/events of the Foodmart company.

It has entities and dimensional tables that describes the participating entities like:

* customer – Describes the customers and maintains other relevant profile information of customers
* account - Out of these tables the account tables contains the information on different internal accounts maintained withing the organization for internal transaction and logistics.
* Employees – Contains information on employees employed by Foodmart and some of the relevant profile information
* Product – Enlists all the products sold by Foodmart along with relevant information like brand and other information
* Store – Enlists list of stores with information associated with location, size, facilities
* Warehouse – Enlists warehouses with location information
* Region – Details of regions where Foodmart has business
* store\_ragged – Details of stores that are in old/worn condition
* department – Enlists internal departments
* reserve\_emplpoyee – Employees who are not working and their details
* promotion – Promotions that are available for products

Metadata or Properties tables like:

* position – Various internal job positions with pay scale
* category – Expense and accounts categories
* product\_class – Details of categories and sub categories of products of products sold
* salary – Details of salaries paid for the employees with time information
* days – Enlists week days
* currency – Enlists currencies of regions where Foodmart operates

And it has Fact/Transaction tables like

* agg\_c\_10\_sales\_fact\_1997 - store sales facts with time details
* agg\_c\_14\_sales\_fact\_1997 - Product, customer and promotion corelated store sales fact with store and time details
* agg\_c\_special\_sales\_fact\_1997 – This table looks mostly like redundant table of agg\_c\_14\_sales\_fact\_1997 as the records counts based on unique key matches and the columns are same
* agg\_g\_ms\_pcat\_sales\_fact\_1997 - store sales fact correlated by customer and product categories with time details
* agg\_lc\_06\_sales\_fact\_1997 - Time location correlated store sales fact
* agg\_lc\_100\_sales\_fact\_1997 - Store sales correlated by customer and product with time details
* agg\_ll\_01\_sales\_fact\_1997 - store sales correlated by Product, time and customer
* agg\_l\_03\_sales\_fact\_1997 - store sales fact correlated by time and customer
* agg\_l\_04\_sales\_fact\_1997 - time base store sales fact
* agg\_l\_05\_sales\_fact\_1997 - store sales fact correlated by product, customer, promotion and store
* agg\_pl\_01\_sales\_fact\_1997 - store sales fact correlated by product, customer and time category-expense category
* expense\_fact - expenses in appropriate currency, category and time
* inventory\_fact\_1997 - inventory fact correlated by product, time, warehouse and store for 1997
* inventory\_fact\_1998 - inventory fact correlated by product, time, warehouse, store for 1998
* sales\_fact\_1997 - Main total sales fact table for 1997 correlated by product, time, store, customer and promotion
* sales\_fact\_1998 - Main total sales fact table for 1998 correlated by product, time, store, customer and promotion
* sales\_fact\_dec\_1998 - total sales fact table for 1998 in December month correlated by product, time, store, customer and promotion

There are certain tables whose real purpose is unclear as it may need domain knowledge or more context within the business, like the account, expense\_fact. Inventory based facts tables are something has some contextual meanings that is understandable. However the difference between the store\_invoice and warehouse\_sales is something that is ambiguous. Also the context of expense\_fact tables is unclear and may need some reference to domain knowledge.

**Additional Attachment:** I am also submitting a Power BI tool which exposes the relationship between the tables based on the foreign keys that should have been there. This was created to illustrate the relationship and summary of the tables withing a single report.