

Case Study

Purpose: To develop a clear understanding of the different types of hierarchies in dimensional model

AlphaMart is a large retail brand store that sells a wide variety of products including electronics, clothing, personal care and decor items through e-commerce and physical stores. Electronic products and clothing items are sold in physical stores whereas personal care and décor items are sold online. AlphaMart have decided to use dimensional modeling to design their data warehouse. They want to implement a data warehouse to track their sales performance, customer behavior, and inventory levels across their stores and online platform. The details of the organization are as follows:

- Alphamart receives orders online and in the physical stores. However, their ID is unique.
- Each orders can be classified as large or small
- The mart has also signed contracts with companies for supplying products to them and it also serves individual customers.
- The customer, both company and individuals, belongs to a segment, premium, new, regular. etc.
- The store has over 1000 products. Products have prices, name, description, category (electronics, clothing, décor, and personal care)
- AlphaMart has products of different brands. However, they do not sell unbranded products
- It is important to note that some products have been discontinued.
- Electronic products and clothing items are sold in physical stores whereas personal care and décor items are sold online.
- AlphaMart physical stores are spread across three countries, Pakistan and Sri Lanka and in every city or village.
- The administrative structure hierarchy of Sri Lanka is, Country → Province → Districts → Villages or City
- The administrative structure hierarchy of Pakistan is, Country → Province → Division → Districts → Tehsil → Villages or City
- In Sri Lanka the financial year is April to March
- In Pakistan the financial year is From July to June
- The standard calendar year is January to December

❖ Dimensions

- Order
- Customer
- Product
- Store
- Time