

# Grocery Chain Project



## Background:

- Grocery chain consists of over 100 stores in five states
- Distribute products received from certified vendors to stores
- Stores 60,000 products in departments, such as frozen foods and dairy
- Bar codes are scanned directly into the cash registers' POS System by Sales person
- Sales Products are promoted via coupons, temporary price reductions, ads, and in store promotions
- **Purchasing department** received products from vendor
- Sales Persons overtime hours are captured in Excel **by Sales Manager**
- Backup of the Grocery Chain Transaction Processing System has been provided to you
- Database Administrator has granted full administrative privileges on both Analysis and Relational Database Instances



## Analytic Requirements:

1. Need to know what is **selling** in the stores each day to evaluate product movement, as well as to see how sales are impacted by promotions
2. Need to understand the mix of products in a customer's market basket
3. Changes to Point of Sales Device on each channel are recorded to know the frequency of channel POS device replacement
4. **Need to understand the most ordered products from each Vendor in each store**
5. **The management decided to track changes to vendor information to determine the impact on the delivery services**
6. Sales Manager is interested to know the effects of product rebranding on Sales
7. **Human Resources Management needs to know** the effects of changes to marital status on salesperson's overtime hours
8. Needs to perform sales analysis on overall product brand sales and rebrand product sales
9. **Purchasing Manager needs to know the efficient vendors based on differential days between order date and delivery date**
10. Sales Manager needs to know what are the most demanding products for each time period of the day



## Deliverables:

- You are required to build an Enterprise Data ware housing that addresses the analytic requirements
- Build Data Mart Cubes for functional areas based on the analytic requirements using SQL Server Analysis services (Using both Multidimensional and Tabular Models)
- Using Tableau and Power BI to design Data Visualisations for business users and management to enable informed decisions