

Case Study: Fufu Republic - Solutions

1. Map out the necessary entities, relationships, and constraints:

Entities: Customers, Orders, Menu Items, Locations, Payments, Inventory, Promotions

Relationships: Customers place Orders, Orders contain Menu Items, Menu Items are available at specific Locations, Payments are linked to Orders, Inventory is associated with Menu Items, Promotions are applied to Customers based on behavior.

Constraints: Payment methods availability per location, Menu item availability per location, Stock levels for Inventory, Promotion conditions based on customer behavior.

2. Create a dimensional model:

- Business process: Sales tracking
- Business question: What is the average number of sales per channel per day?
- Grain: The level of detail is daily sales per channel.
- Dimensions: Date, Channel, Payment Method, Location, Menu Item
- Fact: Sales (count of events, total sales amount)