This report provides an overview of the Fresh Food Farms dataset. The objective is to analyze sales, customer behavior, and product performance, and then present insights through both Power BI dashboards and written reporting. These findings can be used for decision-making, identifying growth opportunities, and improving operational efficiency.

**Data Summary** The dataset used for this analysis is freshfarms\_final.csv. It contains cleaned sales and customer transaction records. Key columns include:

* **Date** – timeline of transactions
* **Zone** – location or market area
* **Product** – product categories sold
* **Revenue** – sales amount
* **Customer Path** – buying journey of customers

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**Insights & Visuals**

1. **Revenue by Zone, Age & Gender**

* Frozen and Produce Aisle are the top-performing zones, driving the majority of sales.
* Secondary zones (Frozen Foods, Dairy Section, Promo Zone, New Arrivals) provide steady but smaller contributions.
* 25–34 year olds lead revenue, followed by 35–44, making these the core customer base.
* Female shoppers contribute slightly more revenue than males.

2. **Hourly Footfall Trends**

* Customer visits peak between 12 PM – 2 PM (lunchtime) and again 5 PM – 7 PM (after work).
* Footfall is lowest in the early morning and late night hours.

3. **Monthly Revenue Trends**

* Revenue shows clear spikes in early July (7th & 17th) and a general increase during summer months.
* These peaks indicate seasonal shopping patterns and promotional response.

4. **Product Category Performance**

* Fresh Produce and Frozen dominate sales, followed by Beverages.
* Other categories like contribute moderately.

5. **Customer Path Sequences (Sankey)**

* The most common journey: Fresh Produce → Dairy → Beverages.
* Other frequent flows include Frozen → Promo Zone → Checkout.

6. **KPI Monitoring**

* Track revenue, product mix, and demographic splits with monthly KPI dashboards.
* Use KPIs to identify underperforming zones or products early and adjust strategies quickly.

**Conclusion & Recommendations**

The analysis of Fresh Food Farms data provides valuable insights into sales performance, customer behavior, and market opportunities. Key findings show strong contributions from specific zones and categories, alongside clear customer purchasing patterns.

**Recommendations:**

1. **Optimize High-Value Zones**
   1. Allocate more staff and promotions in **Produce Aisle** and **Frozen Zone**, as they consistently generate the highest revenue.
   2. Use **targeted offers for females aged 25–44**, the strongest customer segment in these zones.
2. **Leverage Peak Shopping Hours**
   1. Enhance operations during **lunch (12–2 PM)** and **evening (5–7 PM)** peaks.
   2. Offer **express checkout lanes** and **ready-to-go meal deals** to improve throughput and capture impulse purchases.
3. **Plan Seasonal Campaigns**
   1. Replicate successful campaigns from **early and mid-July**, where sales spiked significantly.
   2. Build **holiday and summer promotional calendars** to maximize seasonal demand.
4. **Strengthen Product Strategies**
   1. Ensure consistent stock of **Fresh Produce and Dairy**, which lead in sales.
   2. Cross-promote with **Beverages** and **Frozen Foods** to raise basket size.
5. **Enhance Customer Pathways**
   1. Support the frequent journey **Fresh Produce → Dairy → Beverages** with **bundled discounts**.
   2. Increase signage and sampling in **Frozen Foods** and **Promo Zones** to distribute traffic more evenly.
6. **Use KPIs for Continuous Improvement**
   1. Track revenue, product mix, and demographic contributions monthly.
   2. Flag underperforming zones or products early, and adjust pricing, stocking, or promotions quickly.