**Dairy\_Goods**

**Summary Report:**

# **Description:** Dairy goods encompass a wide range of products derived from milk, including but not limited to milk itself, butter, cheese, yogurt, ice cream, and various cultured dairy products like curd and buttermilk. These products are integral components of diets worldwide, providing essential nutrients such as calcium, protein, vitamins, and minerals.

1. **Dependency of Number of Cows on Farm Area:** There appears to be a very weak positive correlation (0.009606) between the number of cows on a farm and the area acquired. This suggests that while there might be some slight relationship between the two variables, it's not significant.
2. **Average Expiry Days of Each Product:**
   * Butter: 32.93 days
   * Buttermilk: 10.57 days
   * Cheese: 57.32 days
   * Curd: 6.03 days
   * Ghee: 105.74 days
   * Ice Cream: 25.46 days
   * Lassi: 14.85 days
   * Milk: 12.92 days
   * Paneer: 10.66 days
   * Yogurt: 25.52 days The products with the maximum and minimum shelf life are "Ghee" (105.74 days) and "Milk" (12.92 days) respectively.
3. **Summary of Data Based on Brands and Land Acquisition:**
   * The AMUL Factory covers the most extensive area.
   * Britannia Industries has acquired the least amount of land.
4. **Average Shelf Life for Different Storage Conditions:**
   * Ambient: 105.74 days
   * Frozen: 32.51 days
   * Polythene Packet: 1.47 days
   * Refrigerated: 18.01 days
   * Tetra Pack: 25.55 days It's evident that products stored in ambient conditions have the highest average shelf life, followed by frozen and refrigerated conditions, while products in polythene packets have the shortest average shelf life.

**Conclusion:** The Dairy Goods Analysis project leverages data-driven insights to empower stakeholders in the dairy industry with valuable information for strategic planning and operational optimization. By understanding the interplay between farm management, product characteristics, and market dynamics, businesses can make informed decisions to drive growth and profitability in the dairy sector.

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