# Data Analysis Documentation with Results and Suggestions

### By: Amr Amgad

## 1. Best Manufacturer to Build Relationships

- **Question**: What is the best manufacturer to establish a business relationship with?
- Answer: Based on total sales and total profit, we determined that Fabrikam, Inc. is
  the best manufacturer to build a business relationship with, due to its high total
  sales and profit. Fabrikam, Inc. generated \$12,054,281.48 in total sales, making it
  the highest performer, followed by Contoso, Ltd. (\$10,561,497.35) and Adventure
  Works (\$7,464,271.58).
- Suggestion: If you are looking for a manufacturer with high sales and profits,
   Fabrikam, Inc. is the best option. However, if you prefer working with manufacturers offering more affordable products, you might also consider Contoso,
   Ltd., which has a relatively lower price and still strong sales figures.

### 2. Best Manufacturer for Computers

- **Question**: What is the best manufacturer for selling computers?
- Answer: Fabrikam, Inc. stands out for offering high-priced products in the
  computers category, with an average price of \$598.15, while Contoso, Ltd. offers
  more affordable computers at an average price of \$153.98. Proseware, Inc. offers
  computers with an average price of \$315.62.
- **Suggestion**: If you are seeking premium computers, **Fabrikam**, **Inc.** is the best choice due to its higher average price. For a more affordable range, **Contoso**, **Ltd.** offers competitive prices with an average price of **\$153.98**.

### 3. Total Sales for Each Manufacturer in Computers

- **Question**: What is the total sales for each manufacturer in the 'Computers' category?
- **Answer**: The total sales in the computers category are highest for **Proseware, Inc.**, with \$6,123,987 in sales, followed by **Adventure Works** (\$5,768,200) and **Wide World Importers** (\$5,150,000).

• **Suggestion**: **Proseware, Inc.** has the largest share of total sales in the computers category. If high-volume sales are a priority, this manufacturer is the best option.

# 4. Descriptive Statistics for Price by Manufacturer

- **Question**: What are the descriptive statistics for price by manufacturer?
- **Answer**: The descriptive statistics for the price show that **Fabrikam**, **Inc.** offers high-priced products, with a mean price of \$627.92, and a maximum price of \$2,899.99. In contrast, **Southridge Video** offers low-priced products, with a mean price of \$55.37, making it the most affordable option.
- **Suggestion**: For premium products, **Fabrikam**, **Inc.** offers the highest prices, with a large range. However, if you are looking for affordable products, **Southridge Video** offers much lower prices, with an average price of **\$55.37**.

# **5. Average Price for Computers**

- **Question**: What is the average price for computers by manufacturer?
- Answer: The average prices for computers show that Southridge Video offers the lowest-priced computers, with an average price of \$55.37. On the other hand, Fabrikam, Inc. offers the highest-priced computers, with an average price of \$598.15. Other manufacturers such as Contoso, Ltd. offer computers with an average price of \$153.98.
- **Suggestion**: If cost-effectiveness is a priority, **Southridge Video** offers the most affordable computers. For higher-quality products, **Fabrikam**, **Inc.** should be considered, with the highest average price for computers at **\$598.15**.