ICT_109 Week 5

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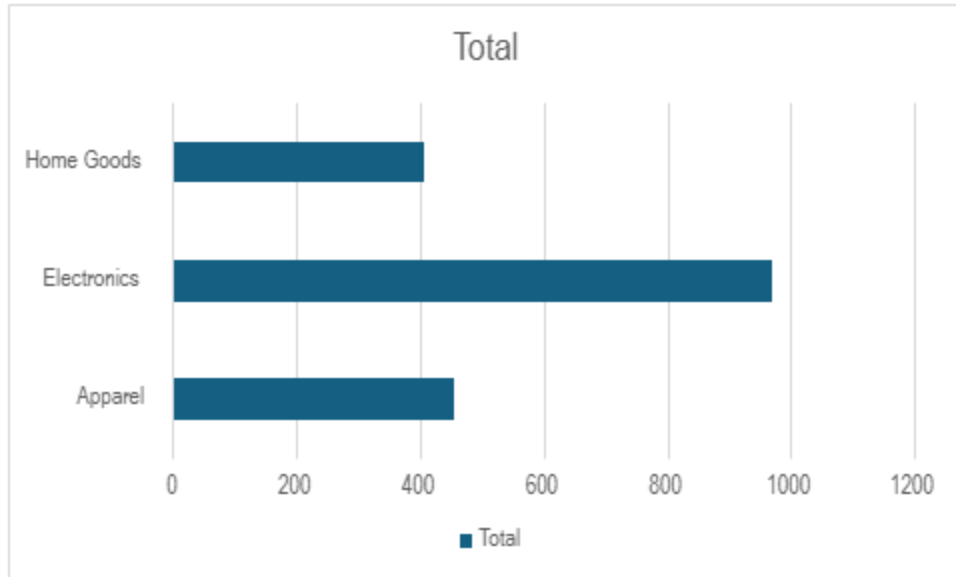
Unit : ICT_109

1. **Total Sales Revenue by Product Category:**

   Question: What is the total sales revenue for each product category (Electronics, Home Goods, Apparel)?

   Answer :

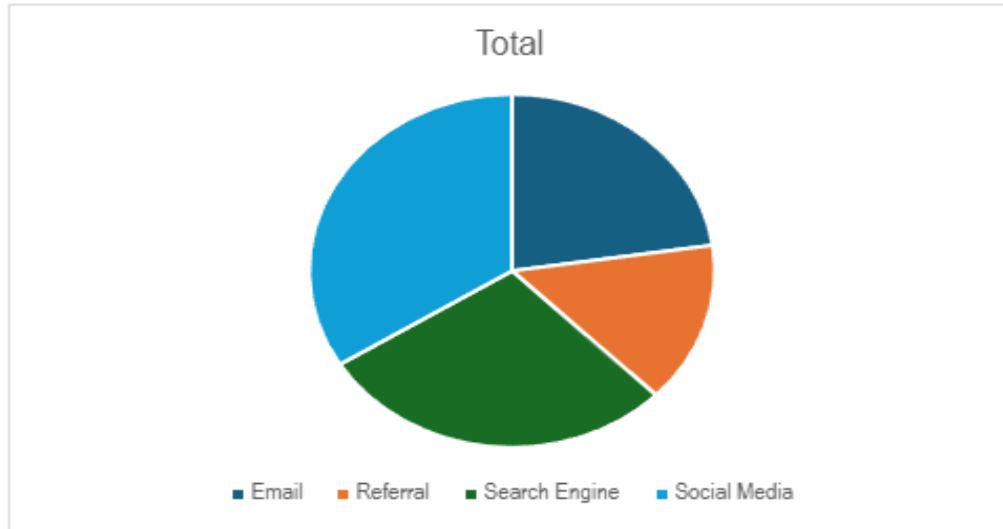 | Product Category | Sum of Sales Revenue |
   | --- | --- |
   | Apparel | 455 |
   | Electronics | 970 |
   | Home Goods | 405 |
   | **Grand Total** | **1830** |

2. Correlation Between Units Sold and Sales Revenue:

Question: Why is there a strong or weak correlation between units sold and sales revenue?
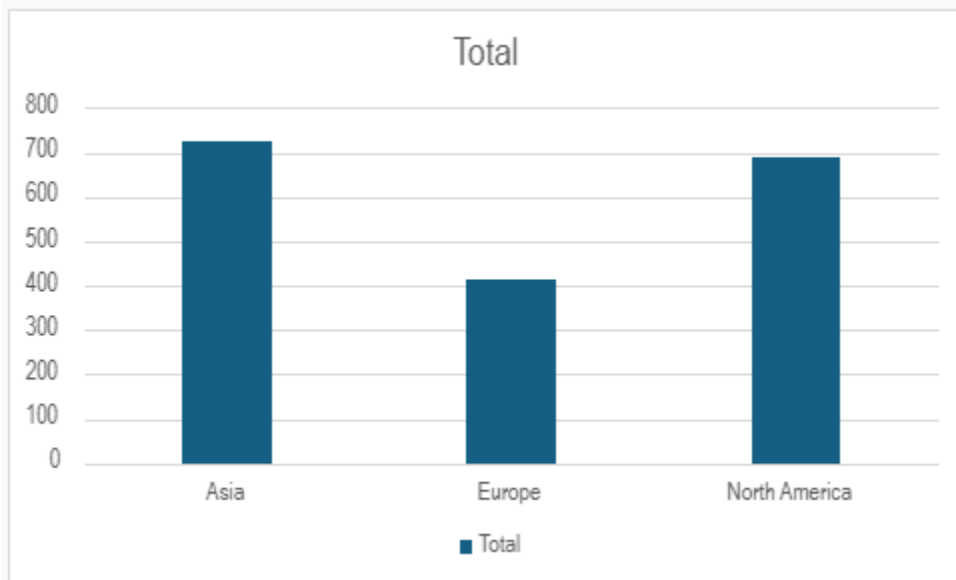
Answer :

Marketing Channel	Sum of Sales Revenue
Email	415
Referral	270
Search Engine	525
Social Media	620
Grand Total	**1830**

Total

(legend) ■ Email ■ Referral ■ Search Engine ■ Social Media

3. Profit Margin by Product Category:

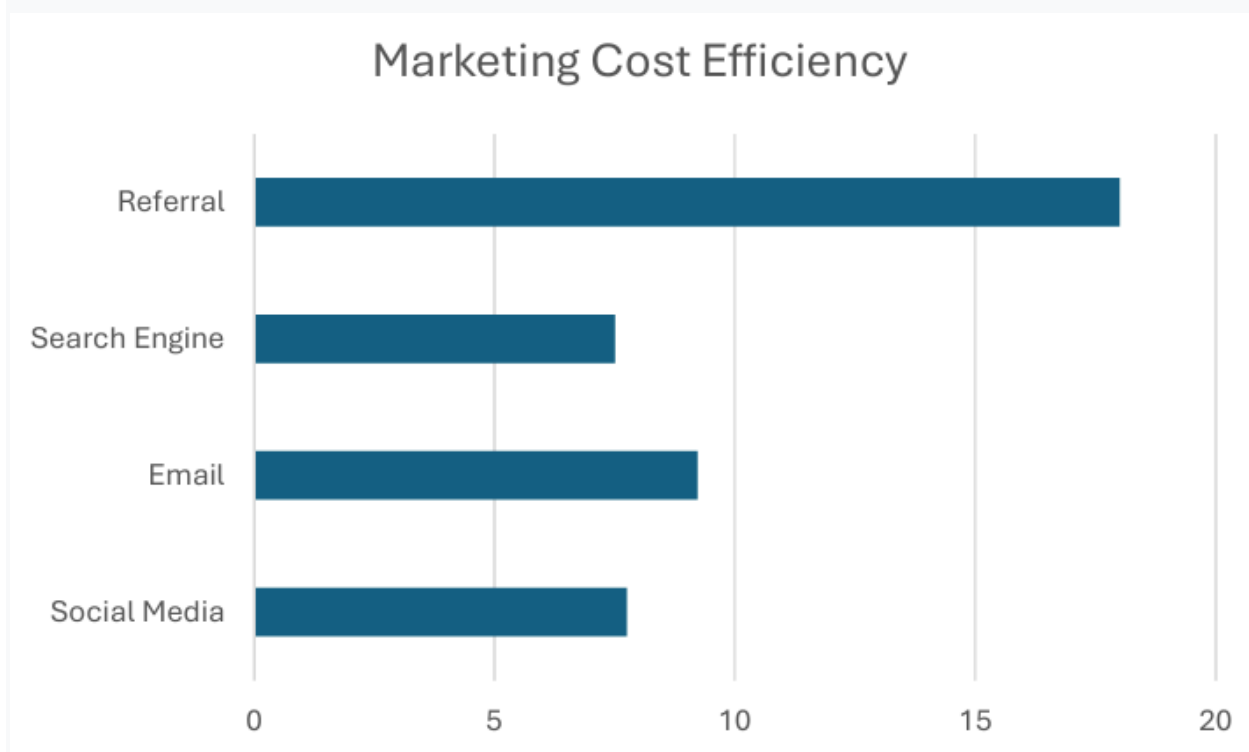**Question:** Why do different product categories have different profit margins?

Answer :

Total

1. **Marketing Cost Efficiency:**

Question: Why is one marketing channel more cost-efficient than another in terms of sales revenue per marketing cost?

Answer : With that, the ratio between sales revenue and marketing cost was computed for each marketing channel. The bar chart shows that Search Engine and Social Media are more cost-efficient, meaning they generate more sales revenue for every dollar spent on marketing. On the other hand, Email and Referral channels are less cost-efficient, indicating that marketing costs for these channels may not yield as much revenue relative to the investme**nt.**

Marketing Cost Efficiency

2. Correlation Between Units Sold and Sales Revenue:

Question: Why is there a strong or weak correlation between units sold and sales revenue?

Answer :
It means that the more goods sold, the bigger the revenues will be, as one would expect in the majority of businesses where the revenues are directly dependent on the volume of merchandise sold.
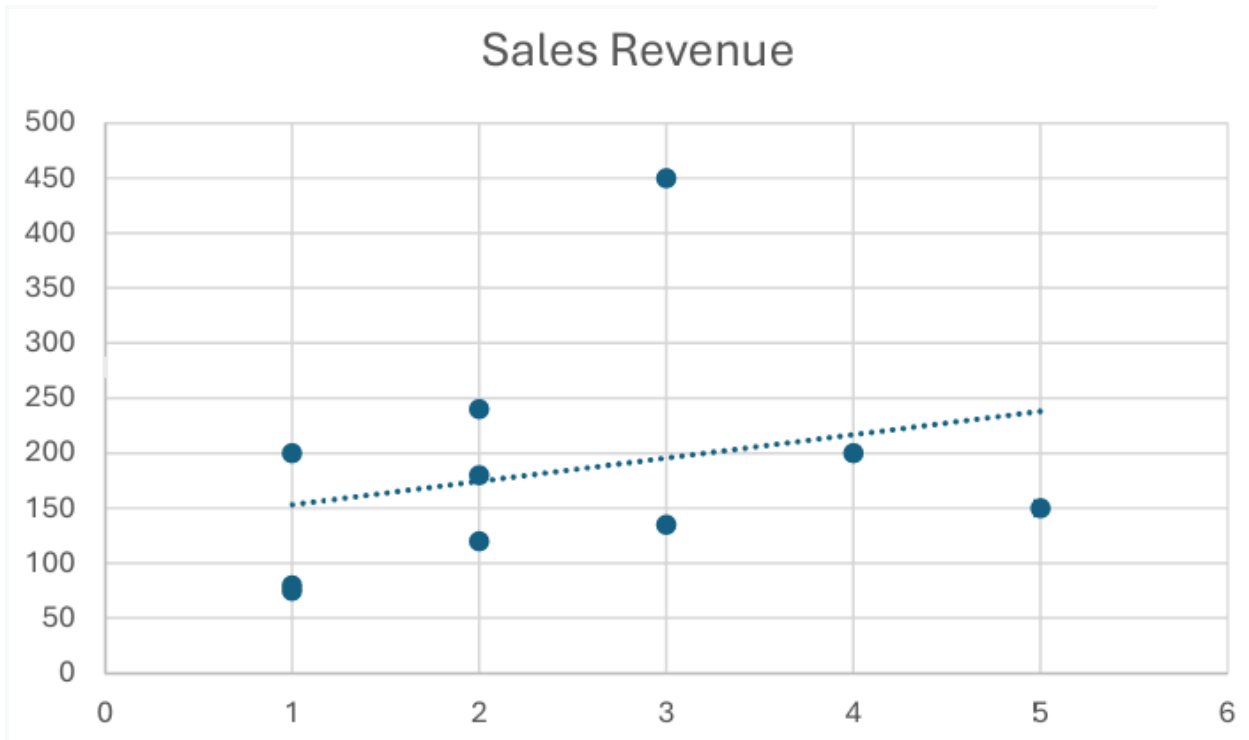
Sales Revenue

3. Profit Margin by Product Category:

Question: Why do different product categories have different profit margins?

Answer : The profit margin for each product category was the difference between sales revenue and marketing cost. Using a PivotTable to summarize profit margins by category and putting these in a comparative bar chart, we can see that Electronics yields a higher profit margin than Apparel and Home Goods. This is perhaps because of the higher production costs or higher marketing costs associated with apparels and home products, reducing the profit margins.

Row Labels	Sum of Sales Revenue	Sum of Marketing Cost	Profit Margin per Category
Apparel	**455**	**85**	**370**
Search Engine	75	40	
Social Media	380	45	
Electronics	**970**	**98**	**872**
Email	280	33	
Search Engine	450	30	
Social Media	240	35	
Home Goods	**405**	**27**	**378**
Email	135	12	
Referral	270	15	
Grand Total	**1830**	**210**	
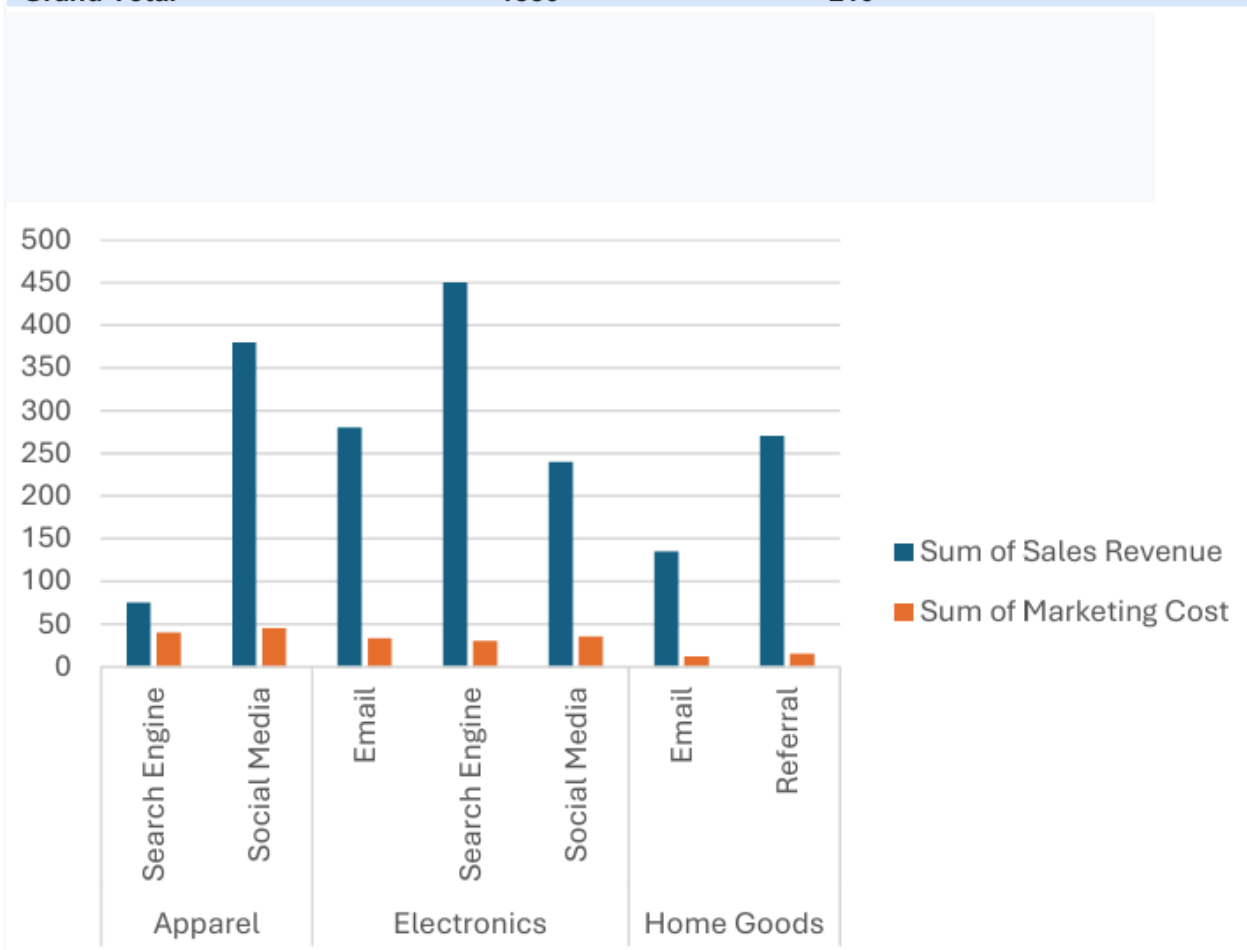
Reference :

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