



# 1 Problem Statement

# Business Challenge



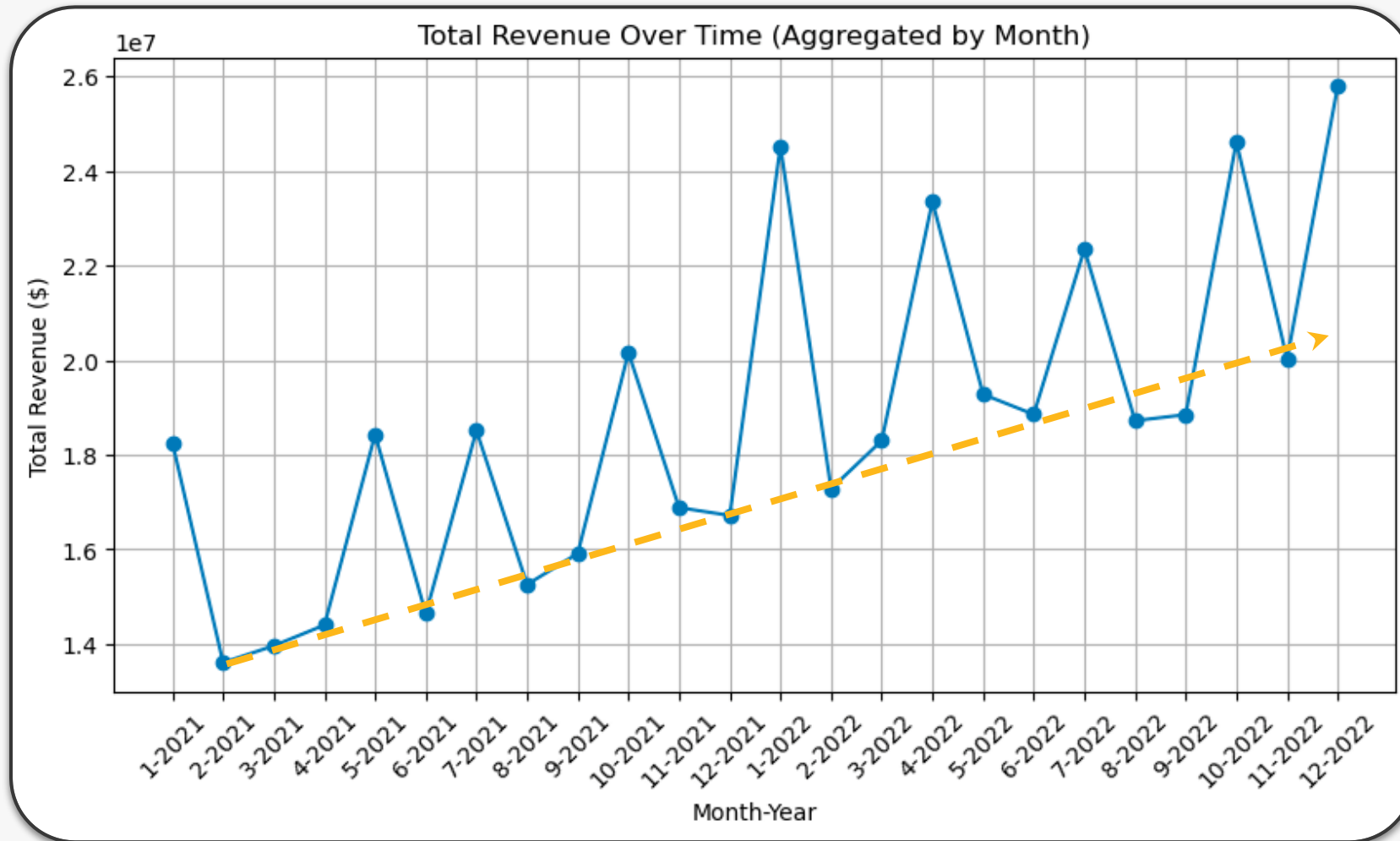
Synergix Solutions is a multinational consumer goods e-commerce company that sells a wide range of consumer products. With a strong presence in the market, the company continually strives to enhance its market share, drive revenue growth, and strengthen its brand equity. The Company's e-commerce portal was launched two years ago, and it has been successful in attracting customers from various parts of the world.

# Business Challenge



However, in the recent past, the **sales have not been increasing as predicted, and the management is concerned about the future of the business.** They have tried various strategies such as discounts, promotions, and ads but these have not yielded desired results. The management believes that there may be **underlying issues that need to be addressed to improve sales performance.**

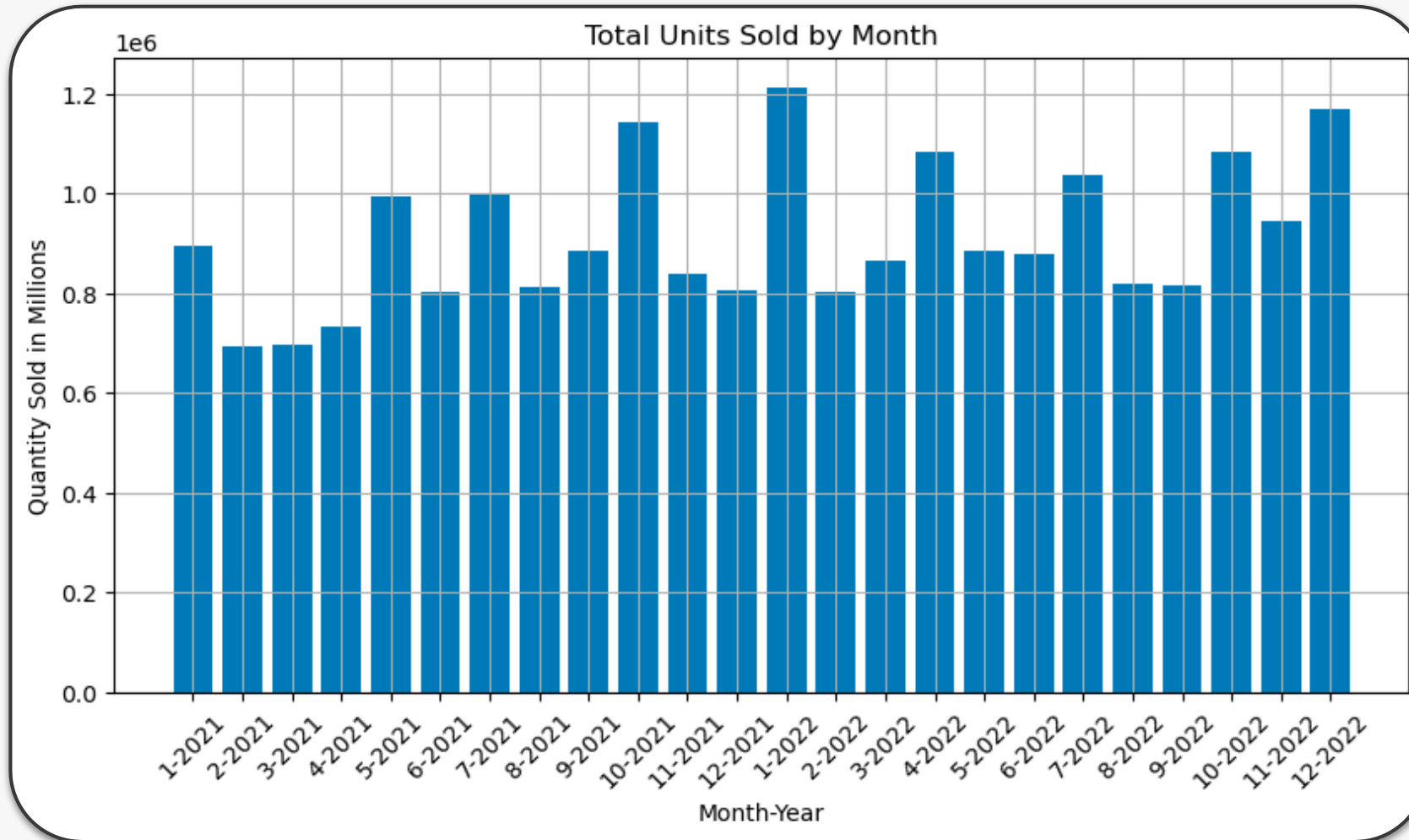
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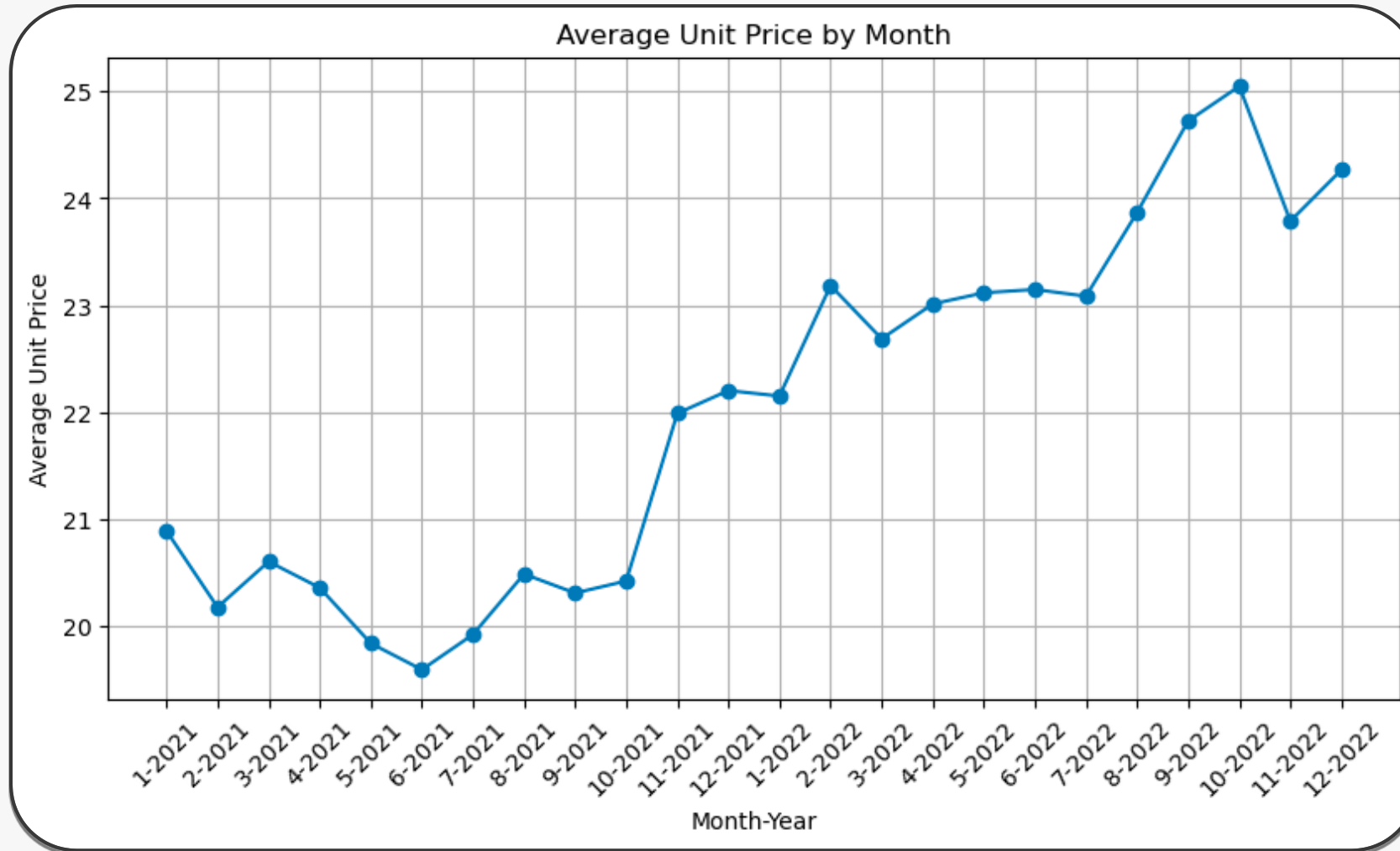
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$$\text{Revenue} = \text{Price} * \text{Units Sold}$$

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# Problem Statement

## 1. Identify the factors to predict units sold for products

SKU_ID	Date	Page_traffic	Revenue(\$)	Unit_price	Units_sold	Manufacturer	Sector	Category	Segment
SKU1009	1/2/2021	0	0		0	Synergix solutions	Personal Care	Beauty Products	Makeup
SKU1337	5/7/2022	2791	32535	26.51589242	1227	Synergix solutions	Personal Care	Beauty Products	Skincare
SKU1011	2/12/2022	4734	18935	15.30719483	1237	Synergix solutions	Personal Care	Beauty Products	Makeup
SKU1014	5/7/2022	0	0		0	Synergix solutions	Personal Care	Beauty Products	Skincare
SKU1024	4/10/2021	3083	12282	11.68601332	1051	Synergix solutions	Personal Care	Beauty Products	Skincare
SKU1025	10/2/2021	4444	26524	14.18395722	1870	Synergix solutions	Personal Care	Beauty Products	Skincare
SKU1229	12/10/2022	2808	45112	20.05869275	2249	Synergix solutions	Personal Care	Beauty Products	Skincare
SKU1901	6/5/2021	1039	13690	44.59283388	307	Synergix solutions	Personal Care	Beauty Products	Hair Care
SKU257	7/3/2021	1022	0		0	Synergix solutions	Personal Care	Beauty Products	Hair Care

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# Problem Statement

1. Identify the factors to predict units sold for products
- 2. Identify which products will cross a certain threshold in terms of units sold**

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# How to identify the right threshold?

# Identify the Right Threshold

Total Unique Products	297
Total Average Units Sold	<b>702</b>
Total Median for Units Sold	<b>765</b>

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Total Unique Products	297
Total Average Units Sold	702
Total Median for Units Sold	765
Products with 0 Sales throughout	<b>110</b>

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Total Unique Products	297
Total Average Units Sold	702
Total Median for Units Sold	765
Products with 0 Sales throughout	110
Mean of Units Sold where Units Sold > 0	<b>1115</b>
Median of Units Sold where Units Sold > 0	<b>1114</b>



# Problem Statement



1. Identify the factors to predict units sold for products
2. Identify which products will sell more than 1000 units