**SALES STRATEGY ANALYSIS - NEW PRODUCT LAUNCH**

A **Sales Strategy Analysis for a New Product Launch** is a comprehensive evaluation and planning process aimed at ensuring a successful market entry and rapid revenue generation from a newly introduced product. It includes identifying target customers, setting sales goals, selecting channels, thus equipping the sales team to drive early adoption and revenue growth.

**About Dataset:** The dataset refers to a company that sells office and art supplies to specific customers and is available at database “[product\_sales.csv](https://www.kaggle.com/datasets/driubelluco/datacamp-data-analysis-professional)” in Kaggle datasets**.**

**About Pens and Printers:** Pens and Printers was founded in 1984 and provides high quality office products to large organizations. They have built long lasting relationships with the customers over the years and as the way in which consumers buy products is changing, their sales tactics have to change too. Launching a new product line is always expensive and it is very important to make sure that the best techniques are used to sell the new product effectively.

**New Product Launch**

Six weeks ago, P&P launched a new line of office stationery. Despite the world becoming increasingly digital, there is still demand for notebooks, pens and sticky notes. Announcing a **new product launch** to customers is a key moment for driving excitement and sales.

We have tested three different sales strategies for this, targeted  
email and phone calls, as well as combining the two.

**Email**: Customers in this group received an email when the product line was launched, and a further email three weeks later. This required very little work for the team.  
**Call**: Customers in this group were called by a member of the sales team. On average members of the team were on the phone for around thirty minutes per customer.  
**Email and call**: Customers in this group were first sent the product information email, then called a week later by the sales team to talk about their needs and how this new product may support their work. The email required little work from the team, the call was around ten  
minutes per customer.

**Data validation**

The original dataset contains 15000 rows and 8 columns before cleaning and validation. I have validated all the columns against the criteria in the dataset table:

* **week:** 6 unique values, from 1 to 6. No cleaning is needed.
* **sales\_method:** 3 unique methods including Call, Email and Email+Call, with 23 values like as “em + call” and 10 values like as “email” were corrected.
* **customer\_id:** character variable without missing values, same as the description. No cleaning is needed.
* **nb\_sold:** 10 numeric categories without missing values from 7 to 16, same as the description. No cleaning is needed.
* **revenue:** numeric values with 1074 missing values.
* **years\_as\_customer:** numeric values with 2 outliers identified as a customer with 47 and 63 years as customer. However, the store has been in existence for 39 years, since 1984.
* **nb\_site\_visits:** numeric values without missing values, same as the description. No cleaning is needed.
* **state:** 50 possible values without missing values, same as the description. No cleaning is needed.

**Exploratory Analysis**

Here are some **key questions** that we aim to explore in the **analysis**. These questions can help drive business insights and inform strategic decisions:

1. How many customers were there for each approach?
2. What does the spread of the revenue look like overall? And for each method?
3. Was there any difference in revenue over time for each of the methods?
4. Spread of the number of products sold for each sales method
5. Based on the data, which method would you recommend to use?

**Key Findings**

**1. Email method**

* Almost 50% of customers have been approached through email for the new product launch. AOV (average revenue per order) increased gradually over time and reached USD 128 by the end of week 6. However, total revenue over time which has peaked in week 1 started sharply declining thereafter. The email method, which initially had the highest revenue, experienced a continuous decline over the weeks.

**2. Call method**

* The call method has been utilized to reach 33% of customers for the new product launch. It is the sales method with the lowest average revenue per order over time.

**3. Combination of email and call method**

* Around 17% of customers has been approached using the combination of email and call method. Total revenue showed consistent growth, peaking in week 5.AOV increased significantly over time, reaching USD 220 by the end of week 6. **This method exhibited a positive trend in total revenue and AOV** with consistent growth.

**Business Recommendations**

1. Allocate more sales team members and resources to prioritize **Combination of email and call method** as the **primary customer engagement strategy** as this hybrid approach has exhibited a positive trend and a significant growth in total revenue and AOV. The data suggests that leveraging both email and phone communication enhances customer responsiveness and purchasing behaviour, making it a high-impact method for driving conversions and increasing basket size.
2. The **email-only approach**, with **low operational cost** is a valuable channel to maintain. The email approach should focus on innovation and continuous improvement such as personalization, automation etc to enhance engagement and conversion rates without increasing workload significantly.
3. The **call-only approach** has consistently **underperformed** in terms of both **Total revenue** and **Average Order Value (AOV)**. Additionally, it demands significantly more time and effort from the sales team compared to other methods. **Discontinue the call-only strategy** as a standalone outreach method. Redirect resources toward more effective and scalable strategies, such as the **email + call hybrid** approaches, which yield better returns with lower effort.