

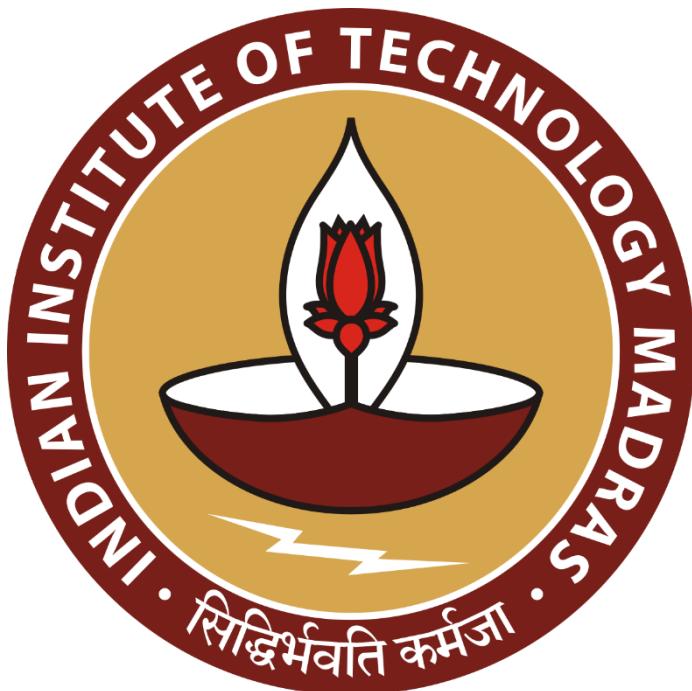
# **Sales analysis of a home based artificial jewellery business to increase profitability**

**Mid term report for the BDM capstone Project**

Submitted by

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### **Declaration Statement**

#### **Sales Analysis of Artificial Jewellery**

I am working on a Project titled "[Business to increase profitability](#)". I extend my appreciation to [Shilpi Jaiswal](#), for providing the necessary resources that enabled me to conduct my project.

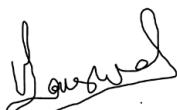
I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analyzed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the information of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project's completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfillment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.



Signature of Candidate: (Digital Signature)

Name: [Vikas Jaiswal](#)

Date: [05/11/2023](#)

## **1 Executive Summary and Title**

The study in the report intends to provide sales analysis to home based artificial jewellery business in Gorakhpur Uttar Pradesh and make recommendations. The data was collected through telephonic conversation with the owner and as well as rough book records and WhatsApp group information. The findings aim to identify key problems and suggest potential solutions for the business.

Key problems identified and their solutions are as follows. The owner of the business is facing stiff competition therefore profits are reduced. This project aims to look into how the profits can be increased. The owner's revenue is low due to limited sales the project aims to look into how the sales can be increased. Her customers are demanding other women's fashion products which the business owner is looking to stock. This project aims to look into whether she should continue specializing in artificial jewelry or add other fashion products to attract customers.

Proposed solution consists of creating product differentiation. The owner's core business is in fashion jewellery and is suggested to specialize in the same even if she is stocking other fashion products in demand. The owner is suggested to improve customer experience by providing a warranty for 6 months on the jewellery and provide repair service free of cost during the warranty. This will help the owner build trust with her customers. Owner was suggested to put herself in customer shoes and go shopping like a customer to other jewellery stores in the city which will help her to price products optimally. The owner was also suggested to buy jewellery from the wholesale market in the metros to improve her profit margins. On further interview with the owner it was discovered that she is getting a good credit facility for the current seller that she is buying and can continue to do so. Deciding on other channels of sales the owner was suggested to have a storefront on ecommerce website catering to small businesses like "meesho" which would give her a customer base of the platform and would help her increase her sales beyond the boundaries of the city.

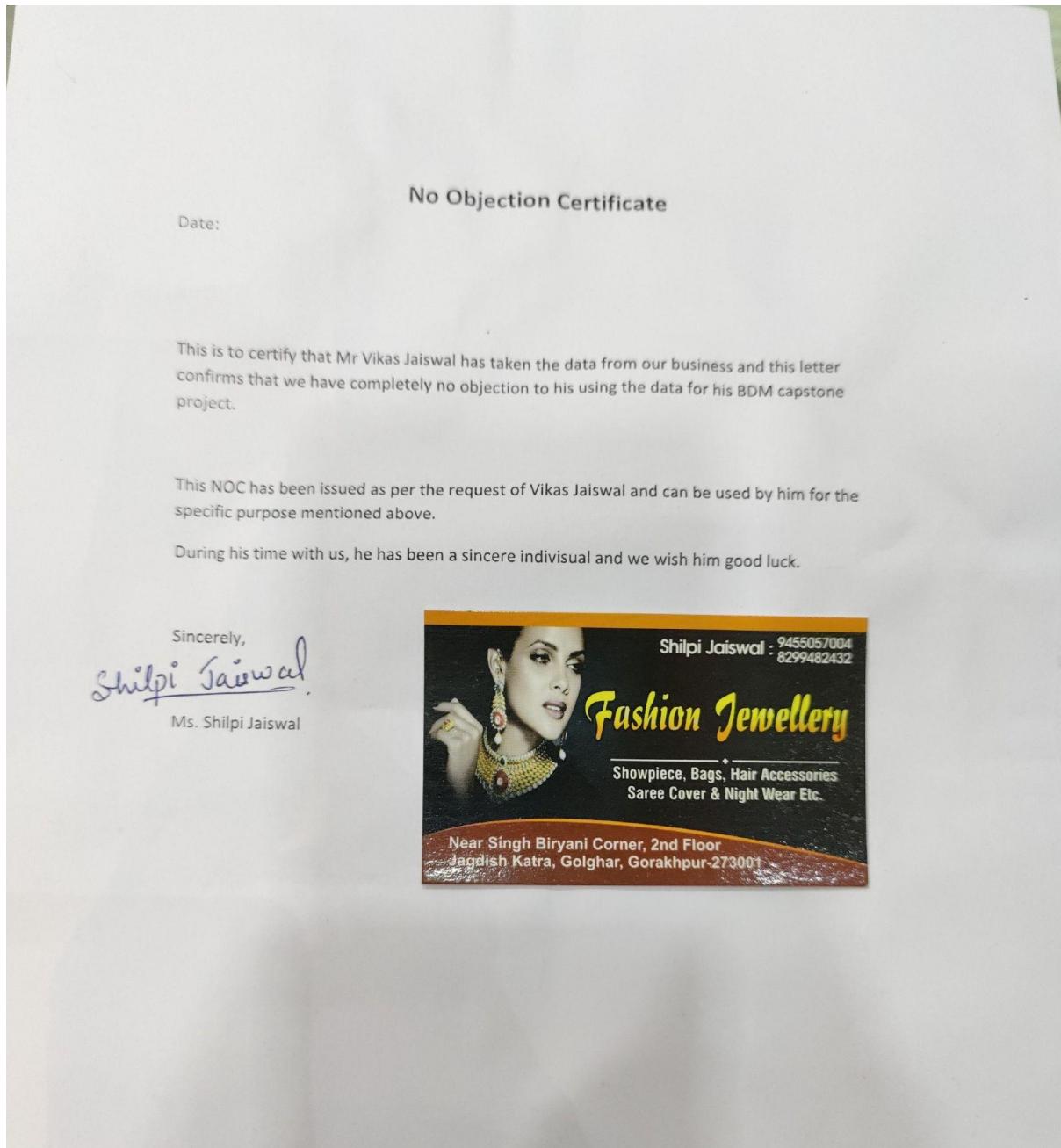
The owner was suggested to register for GST as required by the ecommerce platform. The owner is suggested to invest in marketing by promotions like newspaper inserts, posters etc which are low cost and good to reach local customers. The owner is also suggested to collaborate with others like tie up with other small business clothing shops to expand customer base and increase sales as clothing is complementary to jewellery along with other fashion products. The existing customers are demanding other fashion products and the owner is suggested to keep them as well along with jewellery to increase her sales. Owner is suggested to explore the local market and look into other fashion products that generally sell well along with jewellery and is suggested to keep the same.

**Tools used** are all in Excel and Google Sheets.

**Time period** is different for all the data i.e., One year purchase data is included. Sales data from YTD is presented. The report concludes with recommendations, including opening a physical store, diversification of product offerings, and exploring online platforms.

## 2 Proof of Originality

### 2.1 Letter from the owner of the business

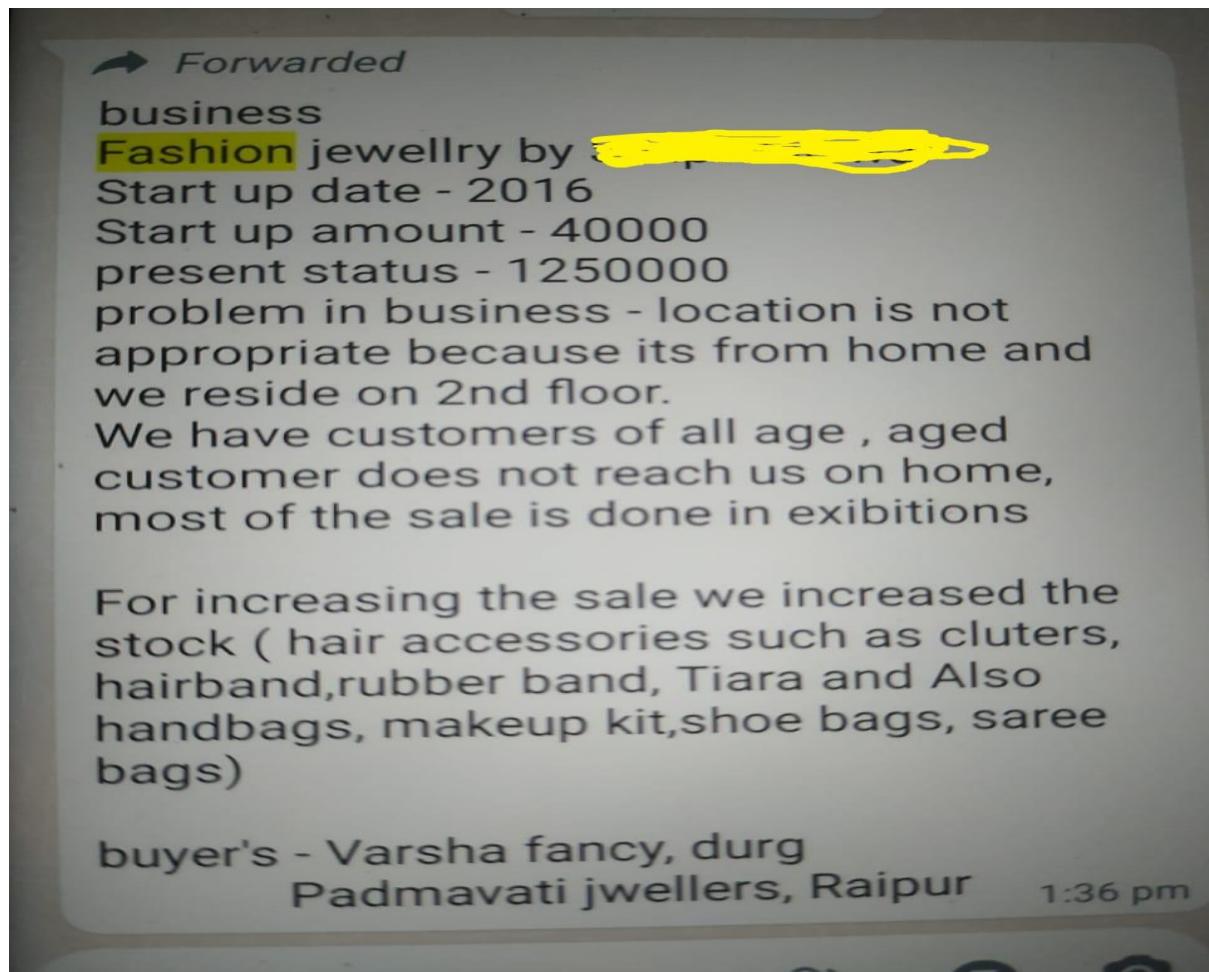


## 2.2 Images related to organization



Owner and her mother during a exhibition

## 2.3 Whatsapp message with the founder in the organization.



## 2.4 Video interview with the founder of the organization.

[https://drive.google.com/file/d/1ba4NIXQ7WfpFAVmeadJ8DXpf5YjuyR7I/view?usp=drive\\_link](https://drive.google.com/file/d/1ba4NIXQ7WfpFAVmeadJ8DXpf5YjuyR7I/view?usp=drive_link)

### 3 Data Collection

Ring:-  
 1602 532  
 Total:-  
 156 + 32 + 75  
 = 195.5120  
 = 3910/- + 600/-  
 = 4510/- Balance.

246  
 801  
 1203  
 1002  
 1101  
 194  
 191  
 Jewellery:-  
 1501  
 1601  
 1802  
 2801  
 2401  
 8001  
 Today:-  
 191 + 534 + 453  
 = 1178.00  
 = 23560/- Balance  
 Total@: 69 x 20  
 = 1380

303  
 1601  
 8001  
 5502  
 1401  
 Total:- 303 + 408  
 = 708.00  
 = 14160/- Balance  
 comes + 1401/-  
 14300/- Balance.

2001	1801	1901	5002
1503	1101	6301	
	1901	1406	
	2001		
	22003		
	3001		
	6001		
	3301		
	349		
	436		
		Bracelets:-	Tika:-
		1408	802
		1902	1001
		2401	1101
		2802	1301
		2801	154
		3602	
		3802	
		402	1103
			1401
			8001
			4001
			134

= 63360/- Balance.  
 comes.  
 comes gone.

Link to Sheet for data collected:

[ShilpiJaiswal\\_Data](#)

### 4 Metadata

Sales data collected is Year to Date(YTD) and Purchase data collected is for 1 year. Sales data has various kinds of jewellery items being stocked by the owner. The data presented is of the month in which purchase has been performed by the owner of the business for last year. Sales data is month wise sales done by the business till date. The owner has not shared individual item sales data rather total amount sold per month.

### 5 Descriptive Statistics

Analyzing the sales data we can see that Aug 2023 has the maximum sales. Another high sales month is March. On further discussing the same with the owner it came out that sales were high in the

month when she sold in exhibitions. For the last one year, maximum purchases are in Jun'23. High purchase and high demand products are antique sets, AD sets and earrings.

Owner has started to stock other fashion products along with jewellery as per her statement to attract more customers.

Mean of Sales: Average sales for YTD Rs .14,247.78

Median of Sales: Mid point of sale is Rs 15,680 or the med value

Min of Sales: The lowest sale is of amount Rs. 500

Max of Sales: Highest sale is Rs. 45,000

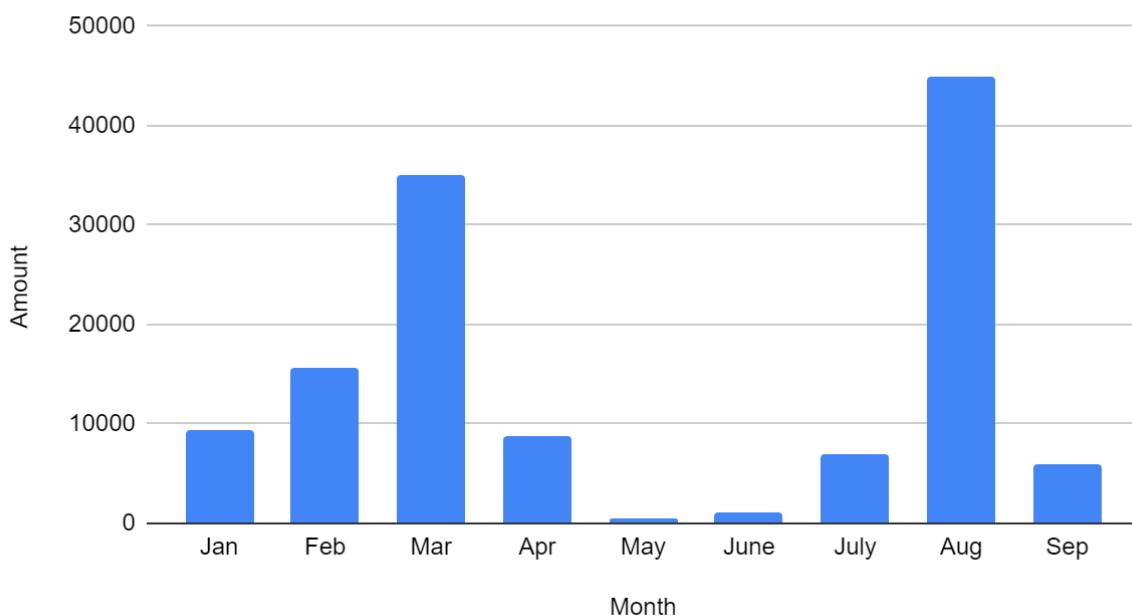
Standard Deviation: 15487.58517

## 6. Detailed Explanation of Analysis Process/Method

The data shared from the owner are in the form of purchase receipts. The owner is currently buying from one owner only and after putting all the data from the receipt from this vendor in google sheet i was able to come up with a table of purchase data for a year. Missing data is replaced with 0. Sales data is on month bases till date. More detailed breakup of sales data with regards to product sold would have helped us to identify highest selling items using data, but that according to the owner is not available so have presented consolidated sales data month wise. Please refer to the link to the datasheet in the data collection section above. Have drawn conclusions about high selling items from purchase data assuming that certain items are purchased more because there is more demand for the same.

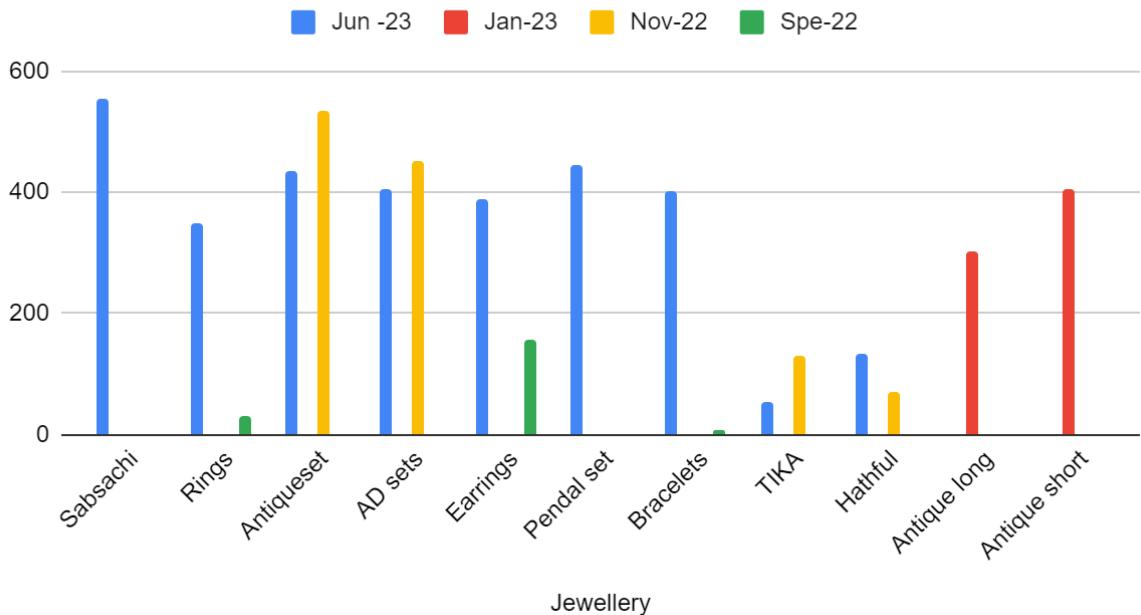
## 7 Results and Findings

Monthly Sales



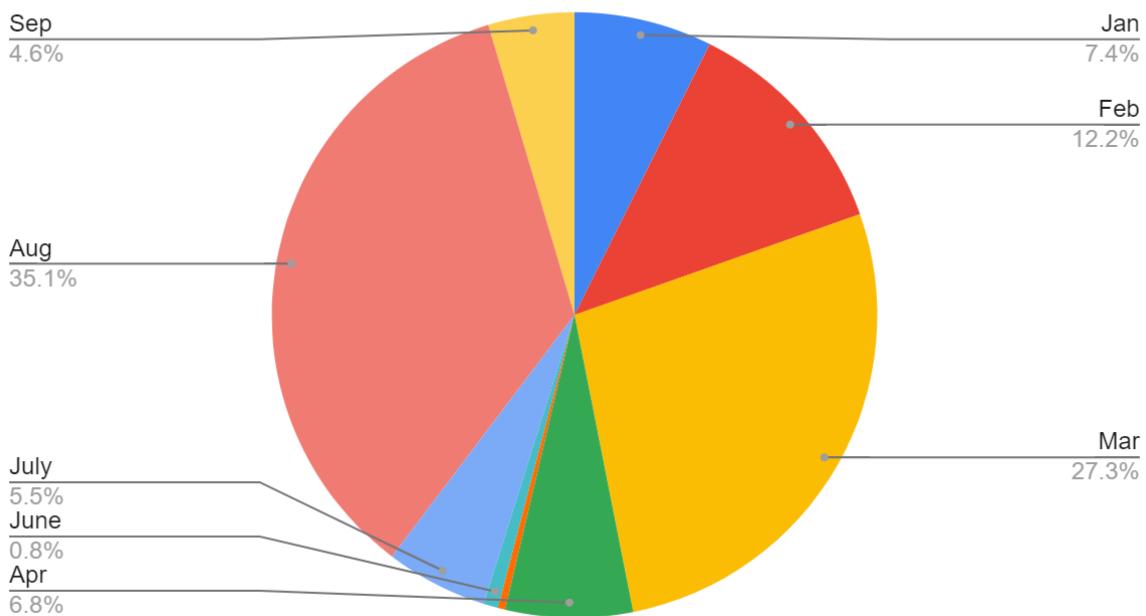
**Char1:**From the above chart created in GoogleSheet we can see that sales are highest in August month.

## Jun -23, Jan-23, Nov-22 and Spe-22



**Chart2:** From the purchase data from google sheet we can see that the owner is seeing good demand for different sets.

## Amount



**Chart3:** From the Pie Chart we can conclude that August and March have had the highest sales and this is because the owner had set up exhibitions during these months.