# BDM PROJECT FINAL TERM SUBMISSION
## (MAY 2022 TERM)

# FINDING MAJOR FACTORS AFFECTING THE SALES OF THE BUSINESS

PRIYADARSH SINGH

21F1005104

PROJECT TITLE

# Executive Summary:

Clothing is an important part of a person's life and when we shift our focus specifically to female clothing, there is a lot of variety and choices available specifically in India.

Saree is something which plays a vital role in the Indian subcontinent clothing culture, having its presence way back to the Indus Valley civilization which flourished during 2800-1800 BCE around the north-western part of South Asia.

Although the present world has advanced quite a lot in terms of technology and machinery, yet the significance of handwoven sarees is increasing as the time is moving forward and this results in their increased demands and high rates.

This project addresses a business problem of a B2C Saree shop "Shraddha Fashion" located in the holy city of Varanasi (popularly known as Banaras), famous for its "Banarasi Sarees", which was established on November 20, 2017 in Varanasi on the most important street of Varanasi called the "Kashi Vishwanath Dham street". The shop deals in various types of sarees like "Banarasi Silk", "Lucknawi Chinkari", "Gujarati Bandhani" etc.

The main aim of this project is to provide them with some important measures which when applied can bring a significant amount of change in the sales of the business irrespective of the seasonality and other relevant factors that may affect the sales of the business.

# #Problem Statement:

After having a few rounds of discussions with the owner of the shop Mr. Manoj, his concern was that although his shop is very new

into this saree business, it has gained a lot of popularity but still its sales are not up to the mark which it had been a few years before.

Hence our main objectives are:
- The owner wants to make his sales consistent throughout the year.
- He wants to increase his reach to more customers in the city as well as other cities of the state and the country.
- To provide significant measures that are very effective as the owner is not willing to make heavy investments into his business.

# #Analysis Process:

We will be preferring Microsoft Excel as our primary tool for the purpose of data collection, data cleaning, sorting and data analysis through different charts.

The problem statements are majorly solved using Trend analysis of sales. Sales Trends analysis basically refers to the collection of sales data over a period of time from multiple sources and comparing it with previous timeframes to identify patterns and project future trends. In other words, sales trend analysis allows us to use what already has happened in the past to predict what will possibly happen in the future.

Through this process, we find which time of the year the business made max profits and which fabric of saree made max sales over a period of time which inturn enables our progress in marketing objectives.

## 1. Time Series Analysis:

Time series analysis is a specific way of analysing a sequence of data points collected over an interval of time. In time series analysis,

analysts record data points at consistent intervals over a set period of time rather than just recording the data points intermittently or randomly.

The problem statement requires us to do detailed revenue analysis of the past few years of his business. Hence we plan to plot a time series chart to figure out which time of year the sales were most. In order to plot a time series chart, we create a pivot table which includes revenues as values and months as rows.

## 2. <u>Revenue and forecast:</u>

Revenue forecasting basically refers to the process of predicting how much revenue a company can expect to generate over a set duration of time in order to make data-driven business decisions.
In our case we will be using Bar charts on an annual basis to understand any patterns (if present), so as to improve our sales of the business

## 3. <u>Quarterly sales performance:</u>

Quarterly sales performance refers to the growth of a business in a particular quarter when compared with growth of the business in different quarters.

For evaluating quarterly sales performance, we'll be using frequency distribution to organise the data to study generated revenue. Here we will be using Stacked bar charts for making comparisons among different fiscal years on a quarterly basis. This comparison will enable us to know in which quarters the business performed well and accordingly we can find if there were any specific reasons for it.

## 4. <u>Monthly Sales performance:</u>

We will be comparing the performance of the business on a monthly basis and for that purpose a column chart is the most popular and useful way of showing activities/tasks against time.

We plan to plot a column chart to study the time-series of sales data plotted for the Monthly time intervals to understand the seasonality effects on the sales.

## 5. <u>Percentage Share Revenue comparison:</u>

Since we are considering the dataset of the business for 3 financial years hence we would like to know, among these 3 FY's which financial years which FY made the most revenue and for that purpose we would be using a Pie chart in order to compare the revenue of the respective financial years and would try to understand any factors affecting the revenue.

# <u>#Results and their Interpretations :</u>

Microsoft Excel has been used to perform the Data Analysis of the sales data as well as for plotting charts to determine the underlying trend of the data provided.

## 1. <u>Time Series Analysis:</u>

For time-series analysis, we have collected revenue data for over the span of three financial years. We have collected data for around 3 financial years namely : FY 2019-2020, FY 2020-2021, FY 2021-2022.

While plotting the time series chart, we have considered all three years in one time series chart as it would be easy for making comparisons between the financial years.

Following is the time series chart of the three financial years:
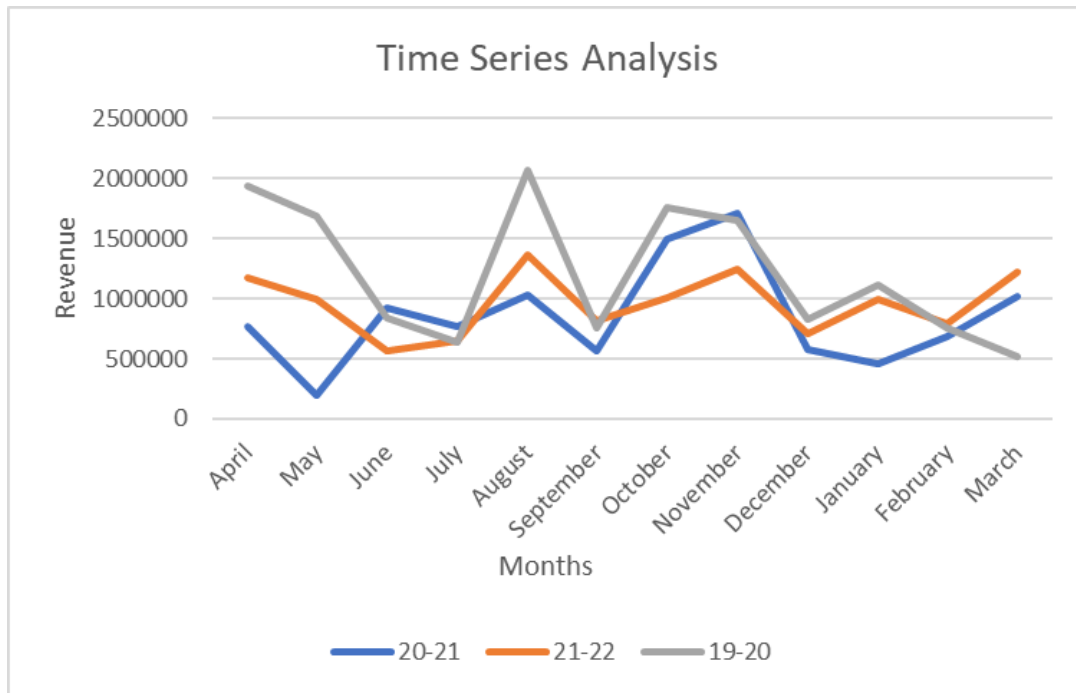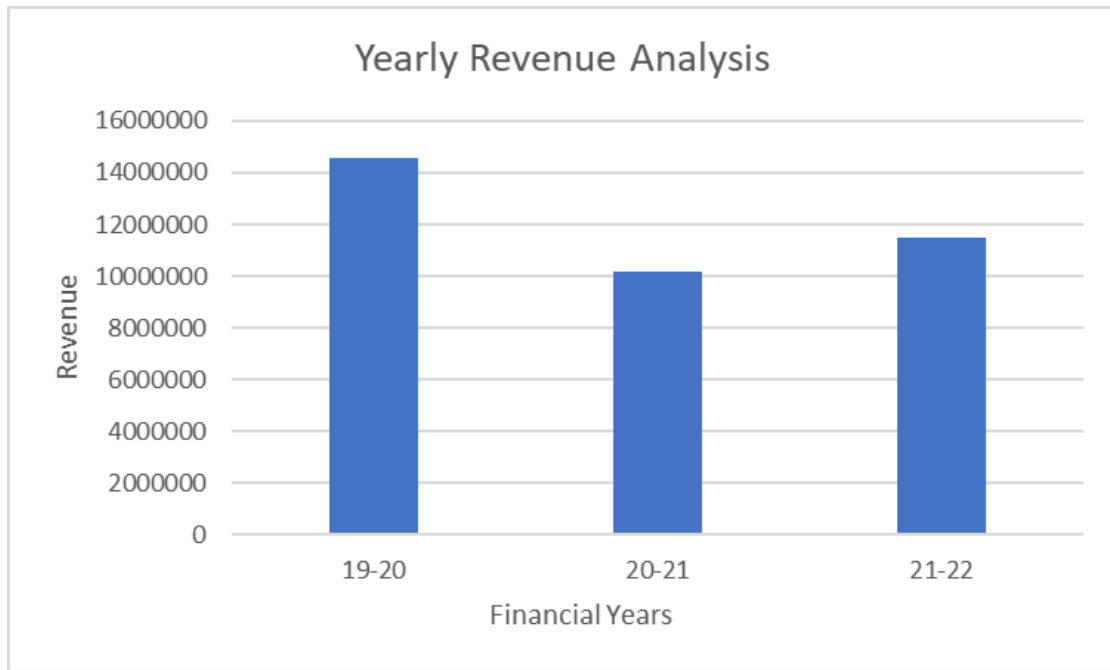
**Figure 1.0**

From the above chart, we can observe that the time frame of months from July-September as well as from early October-early December, the revenues are high as compared to other time frames.

This pattern indicates the presence of seasonality effect, and considering the fact that the dataset under consideration is of India, where the time frame from July-September and October-December is considered to be the wedding season as per the Indian culture, has resulted in high revenue in the above mentioned time frames.

## 2. **Revenue forecast:**

We performed the revenue analysis of the sales data for the respective financial years using the column charts.
Following is the revenue chart :

**Figure 1.1**

From the above chart, if a trendline was drawn then we would have obtained a "U" shaped curve with the curve attaining its minimum value in the FY 2020-2021.

Covid-19 pandemic and the lockdown imposed due to it, can be considered as the major factor for the business attaining its minimum revenue among the three FY's. However, as the pandemic situation came into control and restrictions like lockdown were eased, we can observe from the chart that the business gradually started to reach its normal.

## 3. <u>Quarterly Sales Performance:</u>

For making analysis comparisons on a quarterly basis, stacked charts are being used.

The quarters are defined as: Q1 - April to June, Q2 - July to September, Q3 - October to December, Q4 - January to March.
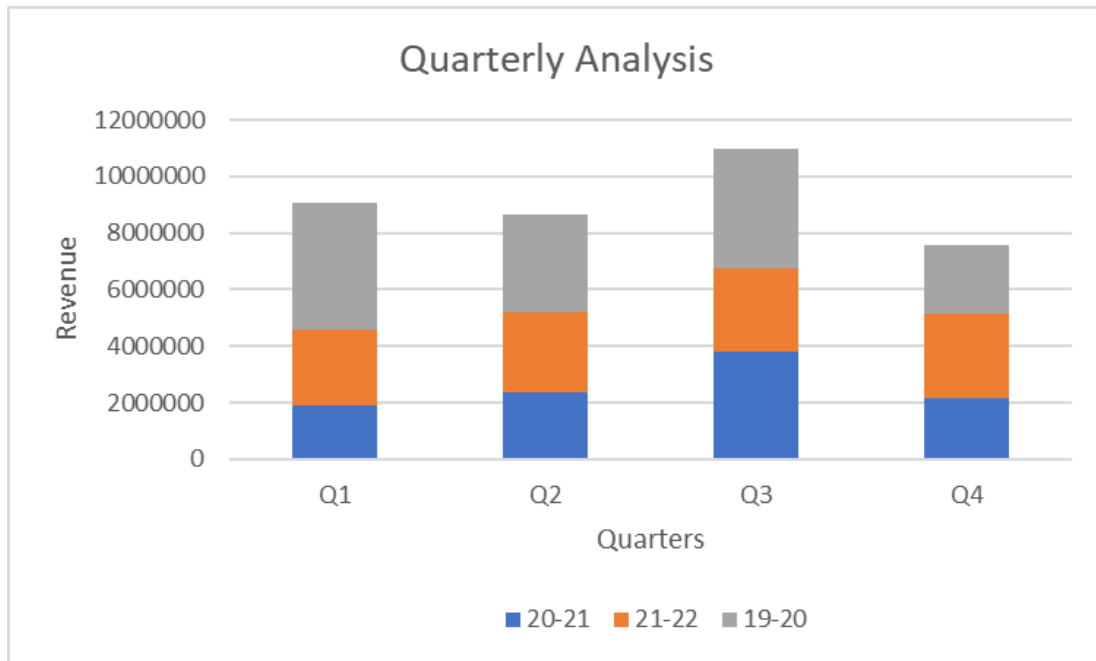
**Figure 1.3**

From the above chart, we can see that the revenue of the business in the first quarter of the FY - 2020-2021, was lowest as compared to the other first quarter of respective FY's and its main cause can be attributed to the rising pandemic situation.

Quarter 3 of each FY's which basically comprises the months from October-December, also referred to as the wedding season has the highest sales and it can be said that business makes most of its revenues from the third quarter of every year.
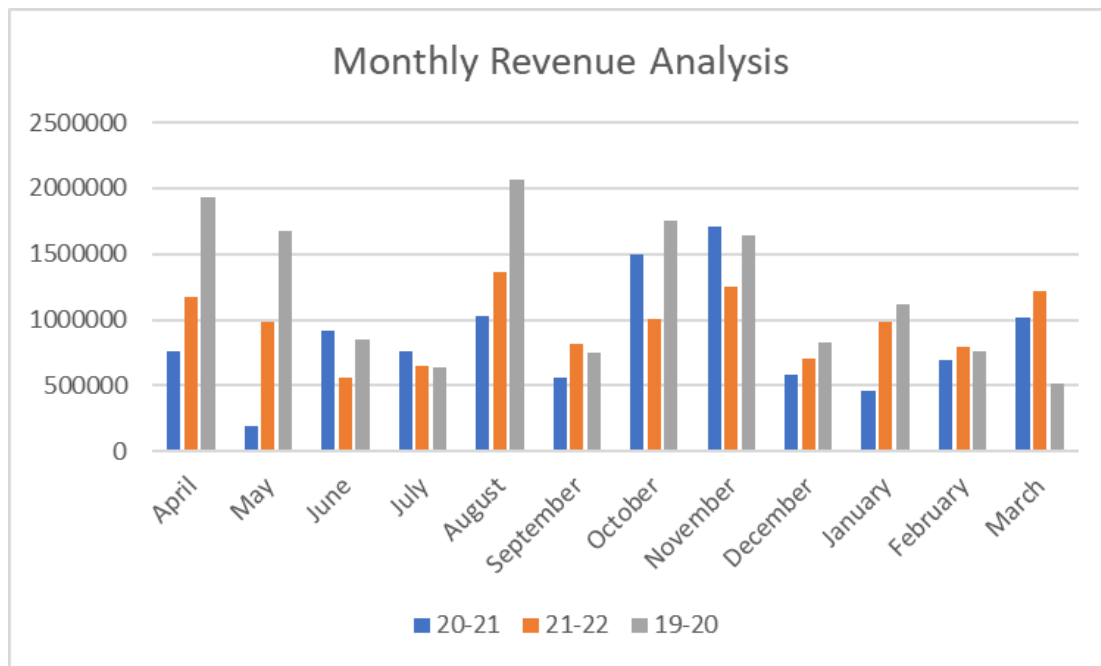
Even in the year the pandemic started, sales were high in Q3, and this could be as the restrictions had eased a bit.

## 4. <u>Monthly Sales Performance:</u>

With the help of column charts, we have plotted the revenue which the business received in each of the months of the respective FY's and have made comparisons among them.

Following is the accumulated column chart:

**Figure 1.4**

From the above chart, we can observe that the months like August, October and November for each of the respective FY's have received the maximum revenue as compared to the other months of the FY and its main reason is the festive season month of August and the wedding season months like October-November.

Another observation is that months like April and May have also received higher revenues like those happening in the months of October, November but only in the FY 2019-2020. Months of April, May also have little wedding season effect which could have resulted in higher revenues. For the FY 2020-2021 and 2021-2022 , lockdown imposed due to the first and second wave of the covid-19 pandemic could have been a major reason for lesser revenue in the months of April, May as compared to the FY 209-2020.

## 5. <u>**Percentage Share Revenue Comparison:**</u>

A Pie chart is used to showcase the percentage share of revenue of each financial year of the total revenue.
Following is the Pie chart:
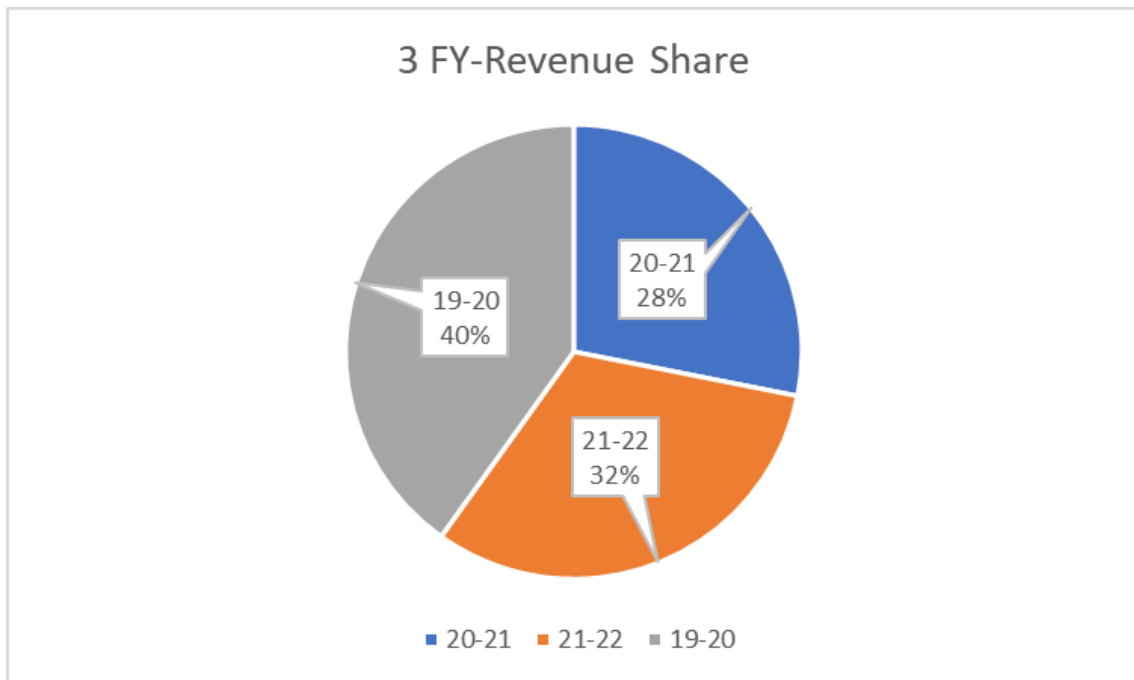
**Figure 1.5**

From the above pie chart, we can see that the revenue generated in the FY 2019-2020 has the highest share among total revenue generated in the three FY's as the FY 2019-2020 didn't face any restrictions like lockdown imposed due to the covid pandemic.

FY 2020-2021 making the least contribution due to the start of the covid-19 first wave and the restrictions imposed due to it. FY 2021-2022 was also hit by the second wave of covid 19 pandemic but due to fast vaccination process and easing up of the pandemic situation, we can see that the business was able to make up for its losses induced in the first few months due to lockdown.

# #Observations :

1. From the dataset provided, we can say that the business growth is steady, although due to the pandemic it was hit badly but as the restrictions have eased up, the business is returning to its normal.

2. Since the shop deals in Sarees, and from the dataset provided as well after doing the analysis we found that this type of business is affected a lot due to seasonal trends like for ex: the months like August, October  and November are referred to as the wedding seasons in India and from the analysis, the business on average makes around 40% of it's yearly revenue.

3. The lowest yearly sales were observed in the FY 2020-2021 and pandemic is the most legitimate reason.

4. It is also observed that the Quarter 1 which mainly comprises April - June has the lowest revenue when compared to other quarters of each of the financial years.

5. Lowest revenue generating months are mostly July and September, and we consider that July being affected by rains and September due to some religious rituals, the revenue is affected.

# #Recommendations :

1. In order to make the sales of the business consistent throughout the year, the owner must connect itself to the e-commerce websites which will give him more opportunities to increase his sales and make it consistent throughout the year. As e-commerce will connect the business to other parts of the world and people will be able to buy without being physically present at the shop.

2. The business can use attractive offers in order to increase their sales business in those months whose revenues are not much.

3. The business can give heavy discounts to its customers who make purchases on the cleaning services of premium sarees as these premium sarees cost around in the range from 30k-100k.

4. Although the business owner is not ready to make heavy investments, still opening another branch of the shop will considerably give a boost to the revenue of the business.