



INDIAN INSTITUTE OF TECHNOLOGY MADRAS

## *CAPSTON PROJECT*

CAPSTON FINAL SUBMMITION

**TITLE- ISSUES AND ANALYSIS FOR NEW BUSSINUSS**

# BY

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## **Executive Summary:**

This is final submission ,in this final submission we will talk about everything in detail. The project aims to find the optimal purchasing rate and profit margin for new shop of tiles and marble to increase revenue. Shop owner is facing so many problems ,we tried to solve 3 of them ,we used mixed-method approach for analysis of problems .we analysed that which brand of tiles and which model of marble is in demand, and we also analysed that how we can increase profit margin through qualitative data of AVADH SALES.

After completing analysis process, firstly we know which brand is in most demand, that brand in tiles is Kajaria and in marble is Italian. For getting this we use mixed -method approach ,in which we used bar chart and pie-chart. With help of this approach we reach that conclusion Kajaria in tiles and Italian in marble can generate more revenue. Secondly ,for knowing seasonal effect, we use line chart with sales data, with help of this we got that summer season affect very little bit.

This report provide a detailed of analysis of data, which method we used reach conclusion of our problem, what is position of our shop ,and recommendations for the shop to tackle with its financial problems and increase revenue. With help of this report we can make better decision how to manage purchasing rate and profit margin of model to increase the revenue for new business.

## **Detailed Explanation of Analysis Process/Method:**

In this project, for analysis we used mixed-method approach,which includes both qualitative and quantitative data.The goal of analysis was to find which SKU is better and how we can generate better revenue with good profit,and And is there any seasonal effect on the sales of marble and tiles.

**Cash flow:** When we met the owner of AWADH SALES, we talked about many topics, then we talked about stopping the cash flow, he told many things. They

tell that new business man can start by creating Start by creating a budget that outlines all of your expected expenses and revenues. This will help you to identify areas where we can cut costs or generate more revenue. And it is very necessary to pay attention on your expenses and look for ways to reduce them. For example, you may be able to negotiate lower prices with suppliers or find more cost-effective ways to market your business.

Overall, attention to detail is key when it comes to managing cash flow in a new business. Keep a close eye on your finances and be willing to make adjustments as needed to ensure that you maintain a healthy cash flow.

**NOTE:** Owner of AWADH SALES was not comfortable to give details about finance so we were not able to make any calculation so am sorry for not explaining any calculative analysis.

For better understanding we are tagging two table ,through this we can understand very well(pic. from google site)

**Example 3. Cash Flow Budget**

| Name: Mayer Farm                   | Year: 2013     |                  |             |          |             |                   |                   |
|------------------------------------|----------------|------------------|-------------|----------|-------------|-------------------|-------------------|
| Cash Inflows                       | Total for Year | January February | March April | May June | July August | September October | November December |
| <b>Operating</b>                   |                |                  |             |          |             |                   |                   |
| Livestock income                   | 233,587        | 38,931           | 38,931      | 38,931   | 38,931      | 38,931            | 38,931            |
| Sales of crops                     | 380,800        | 31,909           | 152,891     | 34,364   | 0           | 0                 | 161,636           |
| Other crop income                  | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| USDA payments                      | 18,000         | 9,000            | 0           | 0        | 0           | 9,000             | 0                 |
| Custom hire income                 | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| Farm rents, interest               | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| Other                              | 6,000          | 1,000            | 1,000       | 1,000    | 1,000       | 1,000             | 1,000             |
| <b>Sales of Capital Assets</b>     | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| <b>Financing</b>                   |                |                  |             |          |             |                   |                   |
| New short-term loans to receive    | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| New long-term loans to receive     | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| <b>Non-farm Income</b>             | 7,400          | 400              | 400         | 2,900    | 400         | 400               | 2,900             |
| <b>a. Total Cash Inflows</b>       | 645,787        | 81,240           | 193,222     | 77,195   | 40,331      | 49,331            | 204,468           |
| Cash Outflows                      | Total for Year | January February | March April | May June | July August | September October | November December |
| <b>Operating</b>                   |                |                  |             |          |             |                   |                   |
| Seed                               | 49,050         | 16,350           | 16,350      | 0        | 0           | 0                 | 16,350            |
| Fertilizer and lime                | 84,500         | 21,125           | 42,250      | 0        | 0           | 0                 | 21,125            |
| Chemicals                          | 20,200         | 0                | 20,200      | 0        | 0           | 0                 | 0                 |
| Crop insurance                     | 10,700         | 0                | 0           | 0        | 0           | 10,700            | 0                 |
| Drying fuel                        | 16,600         | 0                | 0           | 0        | 0           | 16,600            | 0                 |
| Custom hire or machine rental      | 1,750          | 0                | 0           | 438      | 875         | 437               | 0                 |
| Purchased crops                    | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| Purchased livestock                | 11,200         | 1,867            | 1,867       | 1,867    | 1,867       | 1,867             | 1,867             |
| Purchased feed                     | 78,400         | 13,067           | 13,067      | 13,067   | 13,067      | 13,067            | 13,067            |
| Health and veterinary              | 5,600          | 933              | 933         | 933      | 933         | 933               | 933               |
| Marketing                          | 6,720          | 1,120            | 1,120       | 1,120    | 1,120       | 1,120             | 1,120             |
| Real estate taxes                  | 11,000         | 0                | 5,500       | 0        | 0           | 5,500             | 0                 |
| Cash rent                          | 80,000         | 0                | 40,000      | 0        | 0           | 0                 | 40,000            |
| Hired labor                        | 30,000         | 5,000            | 5,000       | 5,000    | 5,000       | 5,000             | 5,000             |
| Repairs and upkeep                 | 13,000         | 2,889            | 1,444       | 1,444    | 1,444       | 2,889             | 2,889             |
| Fuel and lubrication               | 25,000         | 2,500            | 5,000       | 5,000    | 2,500       | 5,000             | 5,000             |
| Other fixed expenses               | 6,000          | 1,000            | 1,000       | 1,000    | 1,000       | 1,000             | 1,000             |
| Equipment lease payments           | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| Miscellaneous operating costs      | 9,000          | 1,500            | 1,500       | 1,500    | 1,500       | 1,500             | 1,500             |
| <b>Purchases of Capital Assets</b> | 50,000         | 0                | 0           | 50,000   | 0           | 0                 | 0                 |
| <b>Financing</b>                   |                |                  |             |          |             |                   |                   |
| Accounts payable                   | 23,523         | 23,523           | 0           | 0        | 0           | 0                 | 0                 |
| Short-term notes due               | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| Long-term loan payments            | 37,555         | 7,511            | 22,533      | 0        | 0           | 0                 | 7,511             |
| Installment contract payments      | 0              | 0                | 0           | 0        | 0           | 0                 | 0                 |
| <b>Non-farm Expenditures</b>       |                |                  |             |          |             |                   |                   |
| Family living expenses, taxes      | 36,000         | 6,000            | 6,000       | 6,000    | 6,000       | 6,000             | 6,000             |
| Non-farm investments               | 23,000         | 2,000            | 13,000      | 2,000    | 2,000       | 2,000             | 2,000             |
| <b>b. Total Cash Outflows</b>      | 628,798        | 106,385          | 196,764     | 89,369   | 37,306      | 73,613            | 125,362           |

### Example 3. Cash Flow Budget (continued)

| Summary                                 | Total for Year | January February | March April | May June | July August | September October | November December |
|---|----------------|------------------|-------------|----------|-------------|-------------------|-------------------|
| c. Net Cash Flow (a - b)                | 16,989         | (25,144)         | (3,542)     | (12,174) | 3,025       | (24,282)          | 79,106            |
| d. Beginning cash balance               | 6,146          | 6,146            | 1,002       | 2,460    | 1,286       | 4,311             | 2,029             |
| e. New operating loan received          | 58,000         | 20,000           | 5,000       | 11,000   |             | 22,000            |                   |
| f. Repayment of operating loan          | 60,000         |                  |             |          |             |                   | 60,000            |
| g. Interest paid on oper. loan balance  | 18,589         | 0                | 0           | 0        | 0           | 0                 | 18,589            |
| Ending cash balance (c + d + e - f - g) | 2,546          | 1,002            | 2,460       | 1,286    | 4,311       | 2,029             | 2,546             |
| Operating Loan Balance                  |                |                  |             |          |             |                   |                   |
| h. Beginning loan balance               | 203,200        | 203,200          | 223,200     | 228,200  | 239,200     | 239,200           | 261,200           |
| Ending balance (h + e - f)              | 201,200        | 223,200          | 228,200     | 239,200  | 239,200     | 261,200           | 201,200           |

**How much we need to invest:** Deciding how much to invest in a new business of marble and tiles depends on several factors such as market demand, competition, production costs, and capital requirements. After that we talk to Mo. Saddam to know how much demand is and how is competition level, then they said that **we meet 3-5 customer per day** who want marble and tiles then we make general calculations, consider that we are getting 4 customer in a day then we are getting more than 100 order in one month and if we talk about competition level, there is no competition level because there is no shop of marble and tiles. So, with the help of sales data. In calculation we want fill our stock for up to 3 month, so we are getting approx. more than 300 orders of marbles and tiles, if one customer orderd 50 box tiles and 10 slab marble, so we got more than 15000 boxes tiles and 3000 slab marbles order, After making calculations we get we need to invest in invent **appx 30-35 laks**.

**Which brand(SKUs) of tiles and marble will create better profit and revenue for our business:**

- **With General View:**

First and foremost, it's vital to consider the interest and patterns in target market. Research what kind of tiles and marble are sought after, what tones, gets done, and plans are well known, and what sticker costs our rivals are advertising. This can assist with figuring out

which brands and SKUs are probably going to create more income and benefit for our business. Furthermore, consider the quality and strength of the items we are thinking about. Clients will generally pick items that are enduring and superior grade, regardless of whether they cost more. Consequently, picking brands and SKUs that offer great quality and durability is significant. Thirdly, consider the valuing and edges of the items we are thinking about. While it very well might be enticing to pick items with the most noteworthy net revenues, it's critical to offset that with the price tags that our clients will pay. Decide a fair and serious valuing methodology that will create adequate net revenues for your business without undermining our deals. At long last, consider the standing of the brands and SKUs we are thinking about. Pick brands and SKUs that have a decent standing on the lookout and are known for their quality and dependability. This can assist fabricate trust and believability with our clients and improve the probability of rehash business.

In synopsis, picking the right brand and SKU of tiles and marble that will produce better benefit and income for your business includes considering elements like interest, quality, valuing, edges, and notoriety. Directing intensive exploration and examination can assist you with settling on an educated choice that lines up with your business objectives and target market.

- **With Help Of Data:** With the help of data ,we pick up purchasing data and and revenue data and compare with each other , after analysis we get as of now kajariya shop sells marble with 60% profit margin and tiles with apx. 45% margin with 15% discount. So the genuine net revenue is 45% of marble and 30% of tiles. Kajariya Shop owner are selling with 45% and 30% profit margin rate . So my advice to Mo Saddam is to increase the discount rate of AWADH SALES from 15% to 20% which will reduce their

net profit rate but will increase customer trust and net revenue. Mo Saddam already has a hardware shop so Mo Saddam can attract customers towards his new shop by giving 5% discount on the rate of hardware which will increase the net revenue of his hardware with a good profit.

However, with the proposal to decrease creation, the organization necessities to sell the item with a 60% overall revenue with no limits all together to handle costs and increment income.

- Overall, the examination cycle for this venture included gathering both subjective and quantitative information from retailers and the organization. This information was then, at that point, broke down to recognize the ideal purchasing rate, overall revenue. We involved this information to make proposals for the organization to tackle its monetary issues and increment income by decreasing the of sluggish brands, expanding net revenues, and zeroing in on quick brands.
- .
- **When we talk about that which brand will sucessful in tha market,thai is totaly depend upon customer demant,so we just take a feedback of customer on tiles and marble ,we got that in tiles kajariya have more demand and marble have itelian model . when we plot a bar chart, frqncy chart of sales data we got same result. So decided that we will invest more in kajariya brand for tiles and itelian model in marble.**
- We additionally examined the information from the contenders and the retailers to comprehend the market pattern and the client inclination. This aided the shop to settle on the net revenue for every item. By contrasting the information from the contenders and the retailers, We had the option to distinguish the valuing methodology of the contenders and the market



pattern. This assisted the organization with settling on the benefit edge for every item.

## **The Picture Of Our Tiles and Marble for Example:**

### **TILES:**

**GLASS**



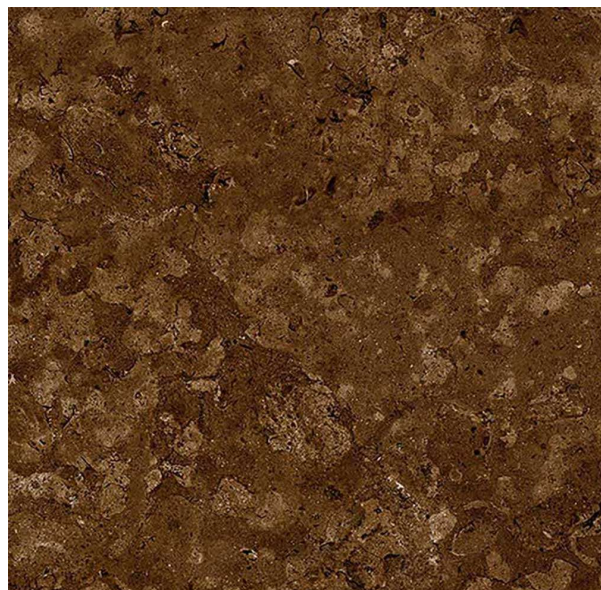
**CERAMIC**



**GRENITE**



**LIMESTONE**



MARBLE:



ITELIAN MARBLE

CARRARA MARBLE



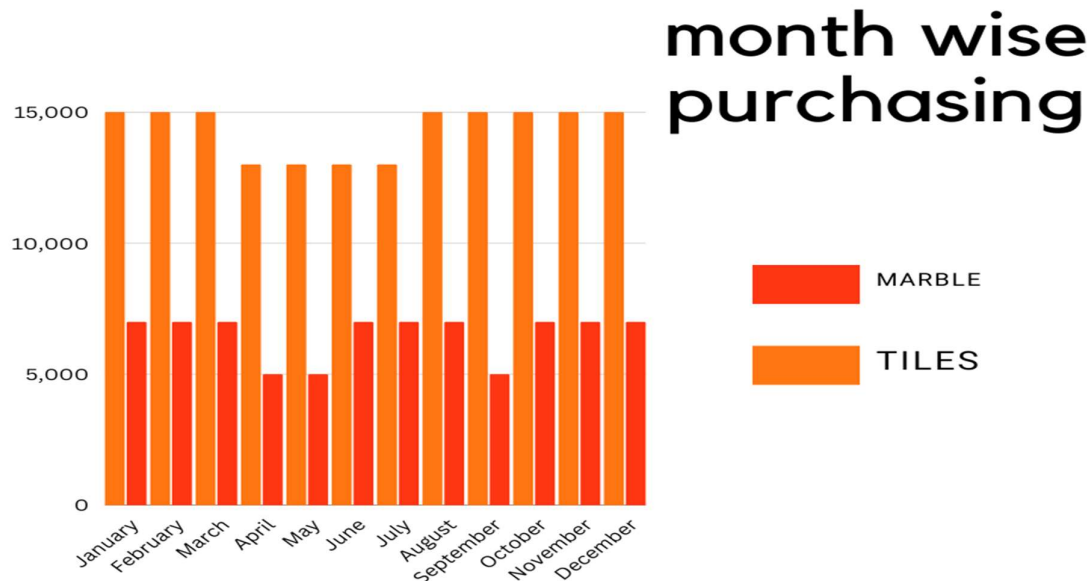
CULCATTI MARBLE



**NOTE:** These pictures are picked from google sites.

## Results and Findings:

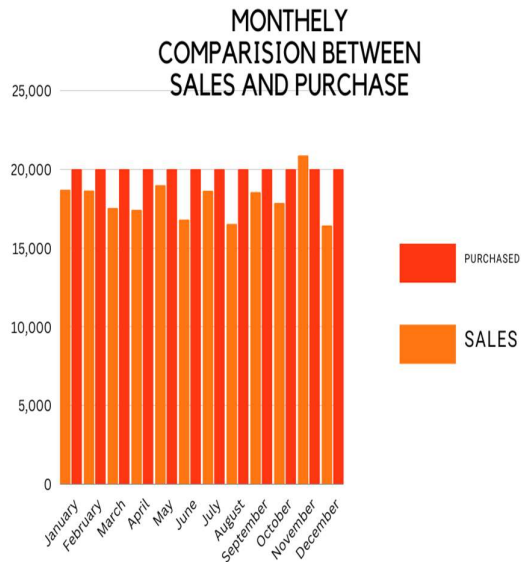
**The below Graph shows the purchased in each month:**



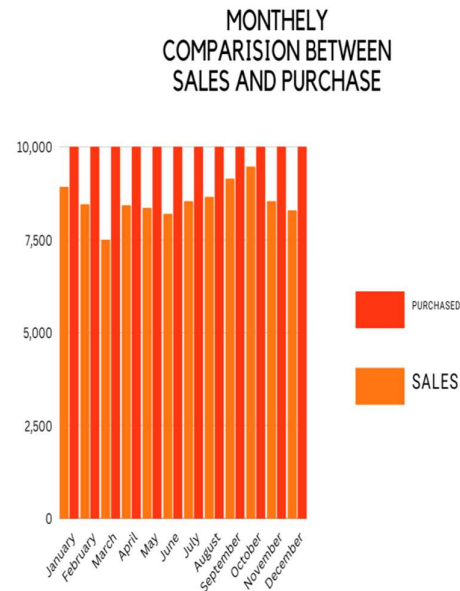
- This graph shows the AWADH SALES purchasing output, where range of tiles are 13,000 to 15,000 and range of marble are 5,000 to 7,000. It is sufficient in stock, there are certain months where the purchasing out is slightly lower than usual.
- In March-July, AWADH SALES owner purchased less than other months due to availability of tiles boxes in stock.
- But, in August-February, the shop purchased 15,000 boxes each month due to less boxes in the stock.
- This data highlights the shop's ability to adapt to market trends and capitalize on opportunities, and presents a positive picture of shop's intact performance.

## Sales Graph: It shows the sales by month and also show the seasonal demand for Marble & Tiles:

### TILES



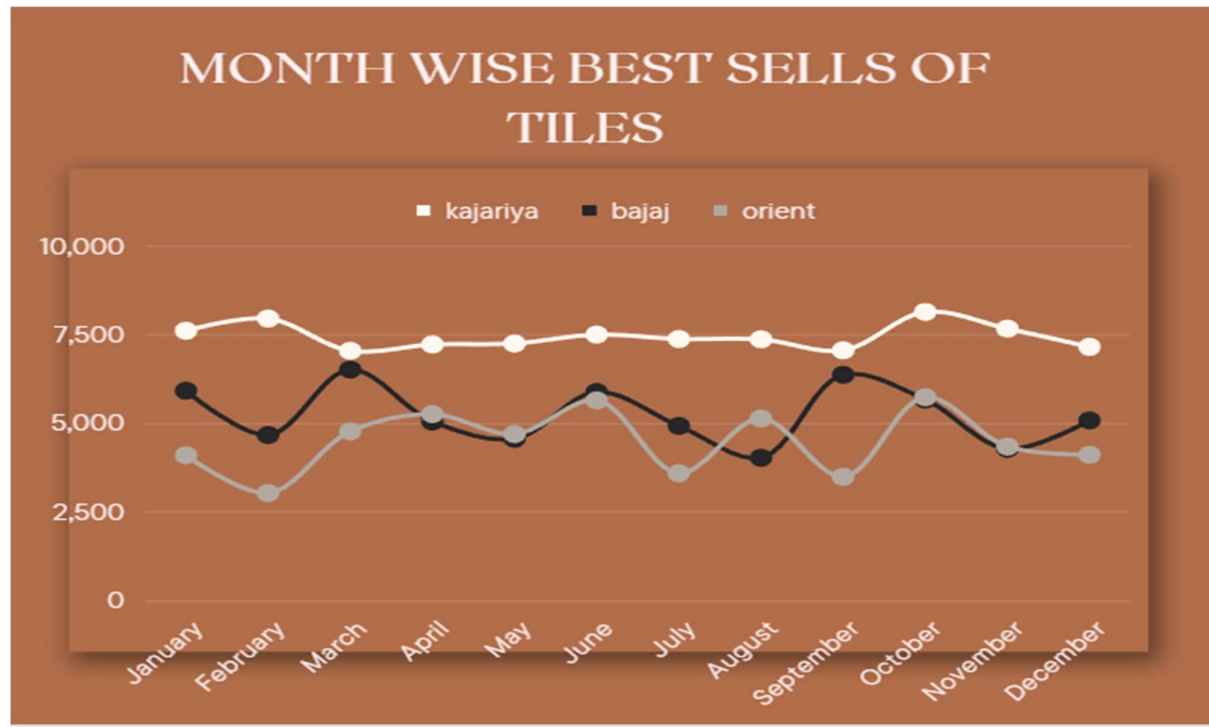
### MARBLE



- The going with chart presents an extensive investigation of the deals of brands and models by the shop. It is obvious that the shop has encountered a consistent development in its deals throughout the long term.
- The period among all months saw the shop selling an great number of models, with a sum of 100000(out of 120000)units sold.
- In case of marble ,we see that the period between nov-feb,shops sales got down.
- In case of tiles,we saw same rethom The period among all months saw the shop selling an great number of boxces.
- Generally, the diagram presents a positive image of the shop's deals execution and its true capacity for future development.

The below graphs shows the month wise sales of each model for better understanding of the sales of a model:

### TILES:



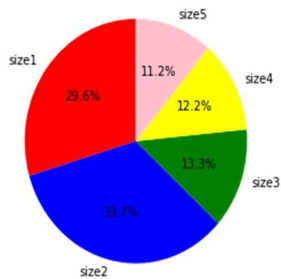
- This graph represent that the monthely sales of different type of tiles. Through this line graph representation we can clearly see that which brand is in more demand in ithe market.
- Trough this graph are clearly seeing that KJARIA is in most demand ,due to demand is in top of selling.
- In the time of month between september-february,we are gettinf that salling rate is in good race,and between march – september selling rate become slitley less comperision to other monthes.
- After analysis of this graps, we see that Bajaj is in less demand in comparision to kajaria,but is is high in comparision to Orient. In that case selling rate is average in comparision to Kajaria.

## MARBLES:



- Through this graph, we are clearly seeing that Italian is in most demand, due to demand being in top of selling.
- In the time of month between November-February, we are getting that selling rate is in good race, and between March – October selling rate becomes slightly less competition to other months.
- After analysis of this graph, we see that Calcutta is in less demand in comparison to Italian, but is high in comparison to Carrara. In that case, selling rate is average in comparison to Italian.
- This graph highlights the importance of identifying peak demand period and aligning purchasing and marketing strategies accordingly. It also illustrates the importance of understanding market trends and consumer preference.

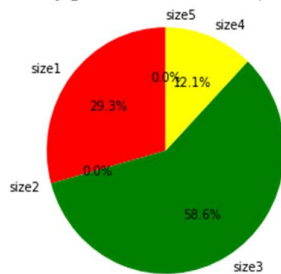
**The below graph shows the comparison of sizes:**



**KAJARIA**

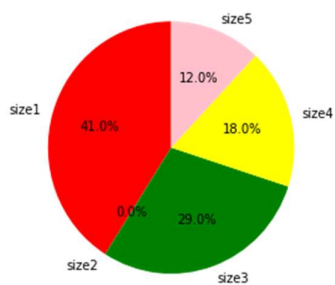
- In this graph we can see clearly , AWADH SALES store 5 type of size in kajaria brand , in which size2 is in top of demand.

- In this graph we can see clearly , AWADH SALES store 4 type of size in kajaria brand , in which size3 is in top of demand.



**BAJAJ**

- In this graph we can see clearly, AWADH SALES store 4 type of size in kajaria brand , in which size1 is in top of demand.

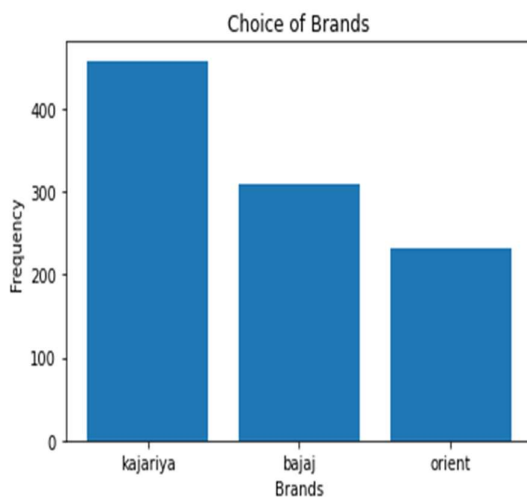


**ORIENT**

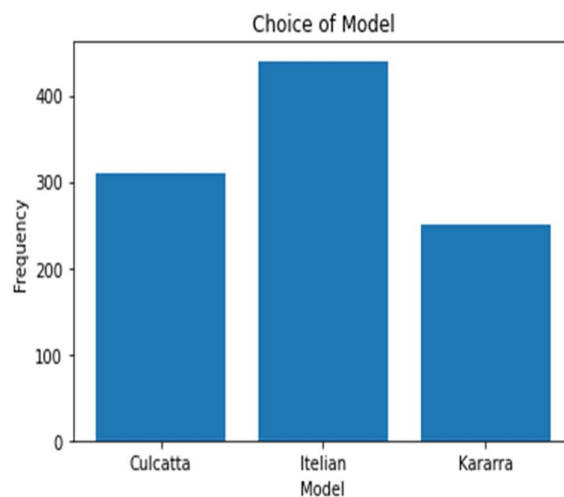
- This graph represent the size of boxces of tiles of different brands ,which in most demanded in the marcket.

- Through this graph ,we can assume that which selling rate fo size is high,and in which sizes of tiles we can invest more yhan other.

**The the below graph shows the demanded brand of tiles and model of marble of the customer:**



**TILES**



**MARBLE**

- With this graph, we can compare which brand of marble and which model of tiles is in demand.
- Through this graph we can clearly say that in the tiles kajariya is most demandable and best ,in marble Italian model is in demand,
- This graph helps to figure out ,in which brand we need to invest more and plan its accordingly



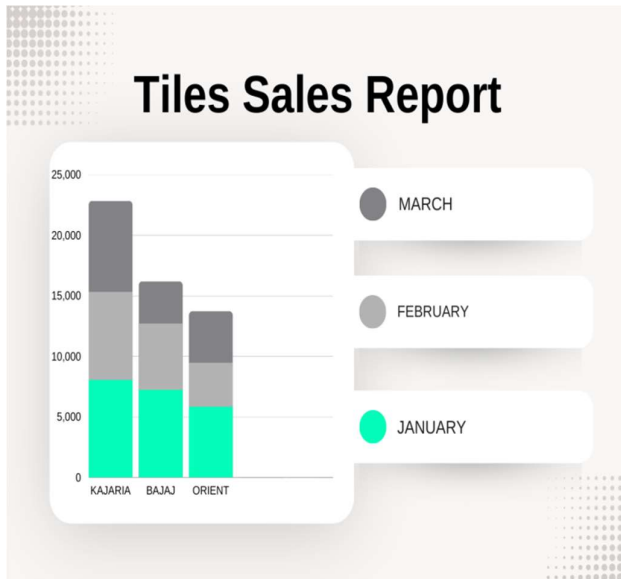
**The below graph shows the comparison between sales and stock of each model:**



- This graph represent the sales and stock availability of various model offered by AWADH SALES shop.
- Through the graph , we see that the brand kajaria has sold in high numbers and average stock availability.
- Similarly, in Marble graph ,we see that the model Italian has sold in high numbers and average stock availability, after closer examination,it is clear that other model sold well but they have much stock remains.
- With the help of graph ,we can say that indicates potential issue with orient brand,and carrara model as a bad seller despite its low sales number.
- This graph tells that which brands we need to invest less or high, which brand's selling rate is high we need to invest much more than other brand ,we can manage negative cash flow also through this graph.

**The below graph shows the products sales report of first three months:**

## **TILES**



## **MARBLE**



- This graph represent sales report of AWADH SALES ,in which thr graph represent first 3 three month of year 2022.
- With the help of this graph ,we can predest which brand and model can give better revenue,which is very important from the prospective of new bussiness,and its allow us to assess our financial performance.
- Through this graph ,we can see how much number of unit sold,and its allow us to track changes in sales volume over time.
- The aim of making this graph was to see which produch can return fast revenue and profitability because ,in case of new business, we see that the investor don't have much money to invest so they want to invest on that Product who return fast revnue with profit.

**THE BELOW GRAPH IS EVIDENCE OF UPCOMING MARKET OF TILES AND MARBLE WILL BE PROFITABLE:**

### Topline Growth: Tiles Market Leaders

₹ Crores

■ Kajaria ■ Somany ■ AGL

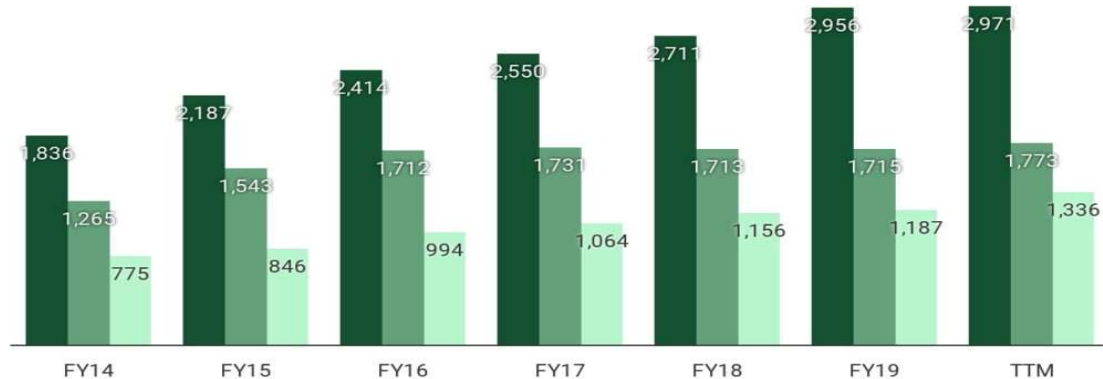
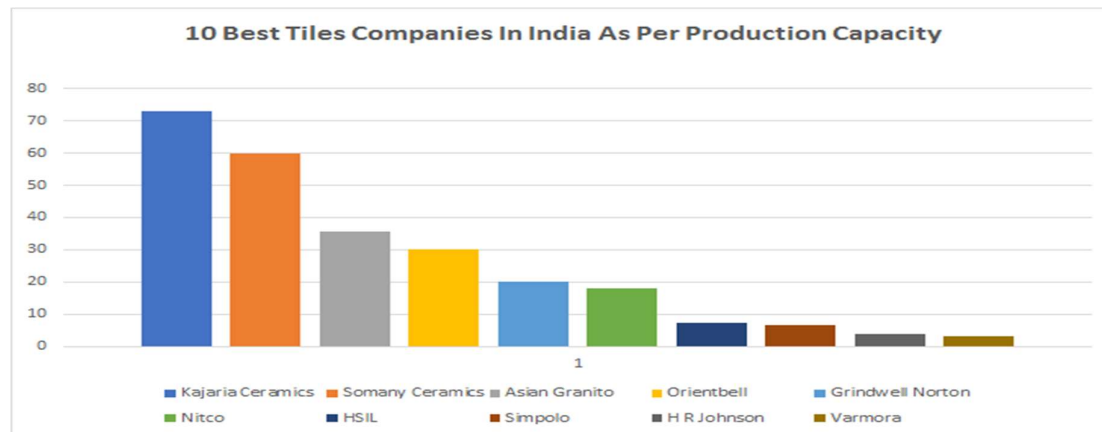


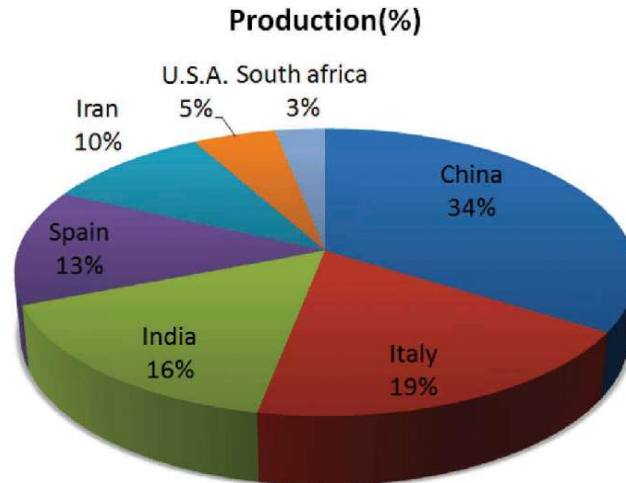
Chart: Capitalmind • Source: Rate Star • Created with Datawrapper

capitalmind



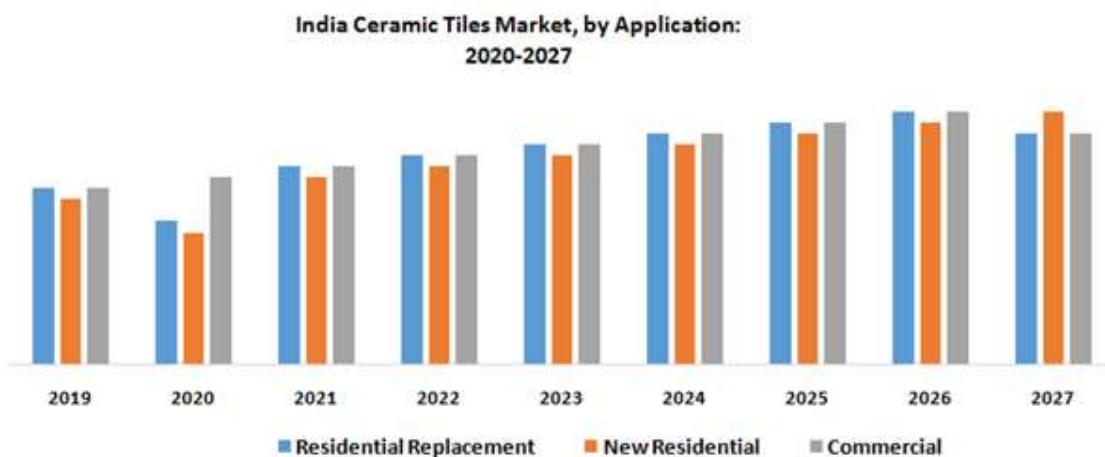
- The purpose of putting this graph in this slide is only to ensure that day by day, year by year, the market of stone and tiles is increasing because demand is increasing, and when we talk about which brand is trending to that our business will be profitable, then this graph ensures that KAJARIA is trending and its revenue is increasing per year.
- Through this graph we saw that revenues of Kajaria in FY19 stood at Rs 2,956 Crs, it registered the highest sales growth of 10% in the FY14-19 period. Somany's topline grew by 6% and AGL by 9%.

The below graph represent production of stone in top country:



- The purpose of this graph, this graph tells to us that in the list of production of natural stone INDIA lie in 3<sup>rd</sup> place across all over world, and the most popular model of stone is CULCUTTA marble. This graph ensures that if we pick up marble from source place then we can generate revenue with high profit.

The below graph show tentative demand and increassing revenue:



**NOTE:** These last three graphs are picked from google sites, and few (7-9) statement in results and finding section are copied from own mid term submission report.

## Interpretation of Results:

The analysis of data collected from AWADH SALES ,we got so many insights key that will aid in the optimization of shops purchasing rate and sales strategies and that gives best solution of top problems of Mo. Saddam 's new shop. The primary objective of this study was to identify the which factor increase negative cash flow, second was which SKUs is in more demand and which can generate more profitable revenue ,and third & last was is any session affect sales rate.

- First, was the which factor increase the negative cash flow and how we can manage that ,after analysis we got that cash flow depend on so many factor, one of them and most important is delayed payment who makes pressure on shop owner, so need to keep eye on large pending amount. Another is investment in low selling rate product who increases negative cash flow.
- Second, problem was to know which SKUs is in most demand, and which brand or model can return more profitable revenue. After analysis of data we reach that point Kajaria brand in tiles and Italian model in marble are most demanded, it is cleared by feedback and sales vs stock graph. In revenue section ,we can see clearly relation between demand and selling because in graphs we saw that most demanded product is directly proportional to selling rate. So, Kajaria brand in tiles and Italian model in marble will create more profitable revenue.
- Third and last ,was is there any season that affect the selling rate of product, for solve thish problem we pick up sales data, and create graph who shows selling rate month wise, after analysing data we saw that there is no special season which affect selling, if we see so deeply we got that in summer season selling rate slightly decreases ,for conformation we draw

another graph who represent each brand of tiles and each model of marble, we see that march-September selling rate become down,so, finally , summer season little bit affect to selling rate.

## **RECOMANDATION:**

After analysis of data ,when we talk about recommendation ,we got so many point where we wana point out .

- Firstly we want to point out on negative cash flow,we saw that cash flow increase when payment become delayed ,for tackle this problem we need to increase different type of payment method and we don't need to invest on low selling rate products.
- Secondly, before starting new business ,we should prepare a proper plane awareness in the several way like finance, selling market, purchasing market etc.

In conclusion, this study has revelled several key insights that will aid in optimisation of the shops purchasing and sales strategies. By understanding the resons behind cash flow, identifying peak demand periods,and determining the optimal purchasing rate,the shop can effectively adapt its strategies to capitalize on market trends and increase revenue. Additionally, by focusing on increasing the profit margin and reducing the purchasing of slow-moving products, the shop can avoid overstocking and reduce expenses, ultimately leading to a stronger financial position.