Bhandari Fast Food

FINAL SUBMISSION

Submitted by

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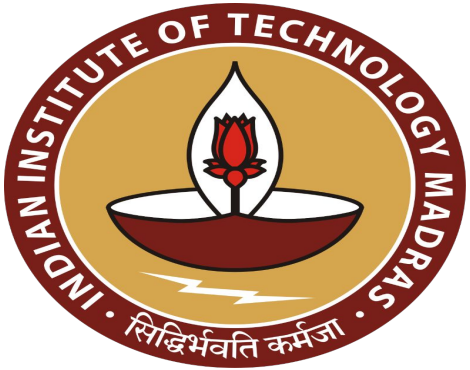

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TITLE-Bhandari Fast Food

Executive summary

Bhandari fast food is a new startup located in a small city dehradun in uttarakhand. Mr Ravi bhandari is the owner of this business.He is very disciplined and hard working towards his work. He started this business recently and he is ready with a team of 6 members.The area where his shop is crowded area and shop is surrounded by many other retail and vegetable shops few of them are his competitors too.Basically this business will target all residents living in this area as it is a B2C business. Their menu contains variety of delicious and affordable food items to customers.He has a good team for all arrangements, still lot of problems are being faced by the them..

Currently low sales and unorganised data is being faced by the business. which is one of the major barrier for the growth of business and these problems are recurring.

Collecting of data ,conducting market research,analysing data, identifying trends through graphs on excel will be involved in this project report, which will help to understand the root cause of these problems and on the basis of that analysis solutions will be driven.

Detailed Explanation of Analysis Process/Method

* First of all the primary sales data of firm from sales register were taken. I also interacted with team and owner to understand the business and operations.

* After collecting data in picture form, i transferred all data into excel form to make it organise and more suitable to perform mathematical operations,It was the most difficult part to understand data and note it down in excel file.The data was only from last 15 days still It took me 2 days to convert all data from raw and unorganised form Into excel file because the data was in handwritten form,so i entered all data One by one in excel sheet.

* Once when i got organised data then i performed many mathematical and General excel formulas to get needed informations and graph patterns. I have used various excel general formulas and methods for analysis like select,copy,print,Count function,Sum function,Average function,Text function to convert date into day,Pivot table,percentage,Line graph,Bar graph,Scatter plot,Pie chart etc

* I found mode,least value,mean,highest and lowest sale of the day in last 15 days,Pareto principle, Volume pareto,Revenue pareto,Scatter plot and trend analysis as these were Enough to understand the sales pattern.

Results And Findings

Descriptive statistics was applied on sales data and the data i got directly from the sales notebook in which organisation use to note down the sales of products. Last 15 days (From 22-03-2023 to 5-04-2023) data have been taken here to analysis it. By using these data I am gonna find….

* The mode(Most selling item in last 15 days).

* The least items which sold in last 15 days.

* The mean(Average of sales per day in last 15 days).

* The highest and lowest sale of the day in last 15 days.

* Pareto Principle (Those items which covers 80 percent of the sales).

* Volume Pareto

* Revenue Pareto

* Scatter Plot

* Trend Analysis

Results And Findings

* The mode(Most selling item in last 15 days) is Noodles. It shows that Noodles has highest demand among other items(Shown in figure 1).

* The least items which sold in last 15 days is not specific as there are a lot of items in menu and also there are many items which has lowest demand as we got same value for multiple items(34 Items has value 1)(Shown in figure 2).

* The mean(Average of sales per day in last 15 days) is 4457(Shown in figure 3).

* The highest sale is 9710 on (31-03-2023) and the lowest sale is 2250 on (28-03-2023)(Shown in figure 3).

* In this case data of sales fails to prove Revenue Pareto Principle(Shown in figure 4).

* In this case it pass the Volume Pareto Principle(Shown in figure 5).

* Revenue Pareto is highest for Veg momos (15.15%) then after for noodles(14.85%)(Shown in figure 6).

* Volume Pareto is highest for Roti (Chapati) which is around (20.46%) of total volume and second highest for veg momos which is around (13.41%)(Shown in figure 7).

* In this case it fails to prove Pareto Principle for Revenue Pareto(Shown in figure 9).

* **Use this link to connect with workbook** (https://1drv.ms/x/s!AmcIomN0niF4gVMNWx-t1vS5ew0d?e=GBM8tj).

Results And Findings

Most selling item

Row Labels	Count of Sales
Grand Total	**751**
Noodles	146
Veg momos	130
Tea	56
Spring roll	38
Chicken momos	37
Roti	32
Rice	25
Veg Thali	24
Coke	19
Kulhar Tea	17
Special thali	15
Paratha	14
Kadhai paneer	7
Water bottle	7
Chicken noodles	6
Daal	6

FIGURE 1

*Aim is to find mode(most selling item) as we can see in Figure 1, The mode is Noodles with number of selling 146 in last 15 days.

*To find mode **pivot table** and the **filter** option to arrange the column values in ascending order have been used.

* After using pivot table and filter we have got mode for the given data.

Results And Findings

Least selling item

Row Labels	Count of Sales
Aaloo paratha	1
Aaloo paratha with	1
Aaloo sabji	1
Butter naan	1
Butter paneer masa	1
Chicken Brayani	1
Chicken lolipop	1
Chicken masala	1
Chicken steam mor	1
Chicken tikka masal	1
Curd	1
Daal	1
Daal roti	1
Daal tadka	1
Egg fried rice	1
Garlic butter naan	1
Kulahar tea	1

FIGURE 2

*Aim is to find least selling item as we can see in Figure 2, The least selling item is not specific as there are many items with same number of selling 1 in last 15 days.

*To find least selling item **pivot table** and the **filter** option to arrange the column values in ascending order have been used.

* After using pivot table and filter we have got a group of least selling items for the given data.

Results And Findings

Lowest, Highest and Average sale in last 15 days

F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
	22-03-2023	23-03-2023	24-03-2023	25-03-2023	26-03-2023	27-03-2023	28-03-2023	29-03-2023	30-03-2023	31-03-2023	01-04-2023	02-04-2023	03-04-2023	04-04-2023	05-04-2023
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15
Total sales on that day	₹ 3,740.00	₹ 3,450.00	₹ 3,830.00	₹ 2,750.00	₹ 2,750.00	₹ 3,425.00	₹ 2,250.00	₹ 2,490.00	₹ 4,820.00	₹ 9,710.00	₹ 5,240.00	₹ 5,800.00	₹ 4,230.00	₹ 8,010.00	₹ 4,360.00
Average of total 15 days sales		₹ 4,457.00			Max sale	₹ 9,710.00		min sale	₹ 2,250.00						

FIGURE 3

*Aim is to find Average, highest and lowest sale in last 15 days. As we can see in Figure 3,

→Lowest sale is ₹2,250

→Highest sale is ₹9,710

→Average sale is ₹4,457

*To find needed values here MIN(), MAX(), SUM(), AVERAGE() have been used on the data.

Results And Findings

Revenue Pareto

Row Labels	Sum of Reve	Sales percentage of each ite	Cumulative Revenue	percentage C.R
Veg momos	₹ 10,130.00	15.15%	₹ 10,130.00	15.15%
Noodles	₹ 9,930.00	14.85%	₹ 20,060.00	30.01%
Chicken momos	₹ 4,240.00	6.34%	₹ 24,300.00	36.35%
Spring roll	₹ 3,120.00	4.67%	₹ 27,420.00	41.01%
Veg Thali	₹ 2,380.00	3.56%	₹ 29,800.00	44.57%
Special thali	₹ 2,160.00	3.23%	₹ 31,960.00	47.80%
Kadhai chicken	₹ 2,150.00	3.22%	₹ 34,110.00	51.02%
Roti	₹ 1,910.00	2.86%	₹ 36,020.00	53.88%
x	₹ 1,500.00	2.24%	₹ 37,520.00	56.12%
Chicken curry	₹ 1,300.00	1.94%	₹ 38,820.00	58.07%
Kadhai paneer	₹ 1,250.00	1.87%	₹ 40,070.00	59.94%
Tea	₹ 1,200.00	1.79%	₹ 41,270.00	61.73%
Paratha	₹ 1,110.00	1.66%	₹ 42,380.00	63.39%
Rice	₹ 1,000.00	1.50%	₹ 43,380.00	64.89%
Chicken tandoori	₹ 950.00	1.42%	₹ 44,330.00	66.31%
Kulhar Tea	₹ 940.00	1.41%	₹ 45,270.00	67.71%
Chicken noodles	₹ 800.00	1.20%	₹ 46,070.00	68.91%
Chicken thali	₹ 780.00	1.17%	₹ 46,850.00	70.08%
Tandoori chicken	₹ 750.00	1.12%	₹ 47,600.00	71.20%

FIGURE 4

The last 15 days sales data to find whether this data follows 80-20(pareto principle)rule or not were organised.

For checking Revenue Pareto principle **Pivot table**, **Filter**, **Sum of Revenue**, **Percentage of each sold item induadly**, **Cumulative Revenue** and **Percentage of Cumulative Revenue** were needed.

After finding all needed columns, I noticed that 20 percent of items are not responsible for 80 percent of sales, It is only 70 percent as we can see in figure 4. Hence it proves that Revenue pareto does not exist on this particular data.

Results And Findings

Volume Pareto

Row Labels	Sum of Sales	Percentage of indudial	Cumulative sales	Percentage C.S
Roti	216	20.46%	216	20.46%
Veg momos	141.5	13.41%	357.5	33.87%
Noodles	137	12.98%	494.5	46.85%
Tea	101	9.57%	595.5	56.42%
Spring roll	43.5	4.12%	639	60.54%
Chicken momos	41.5	3.93%	680.5	64.47%
Veg Thali	38	3.60%	718.5	68.07%
Coke	30	2.84%	748.5	70.91%
Kulhar Tea	27	2.56%	775.5	73.47%
Paratha	20	1.89%	795.5	75.37%
Special thali	18	1.71%	813.5	77.07%
Rice	17.5	1.66%	831	78.73%
x	14	1.33%	845	80.06%
Butter roti	11	1.04%	856	81.10%
Aaloo payaj paratha	9	0.85%	865	81.95%
Veg kabaab	8.5	0.81%	873.5	82.76%
Aaloo paratha	8	0.76%	881.5	83.51%
Chicken noodles	8	0.76%	889.5	84.27%
Paneer paratha	8	0.76%	897.5	85.03%

FIGURE 5

The last 15 days sales data to find whether this data follows 80-20(pareto principle) rule or not were organised.

For checking Volume Pareto principle **Pivot table**, **Filter**, **Sum of sales**, **Percentage of each sold item induadly**, **Cumulative sales** and **Percentage of Cumulative sales** were needed.

After finding all needed columns, I noticed that 20 percent of items are responsible for 84 percent of sales as we can see in figure 5. Hence it proves that volume pareto exist on this particular data.

Results And Findings

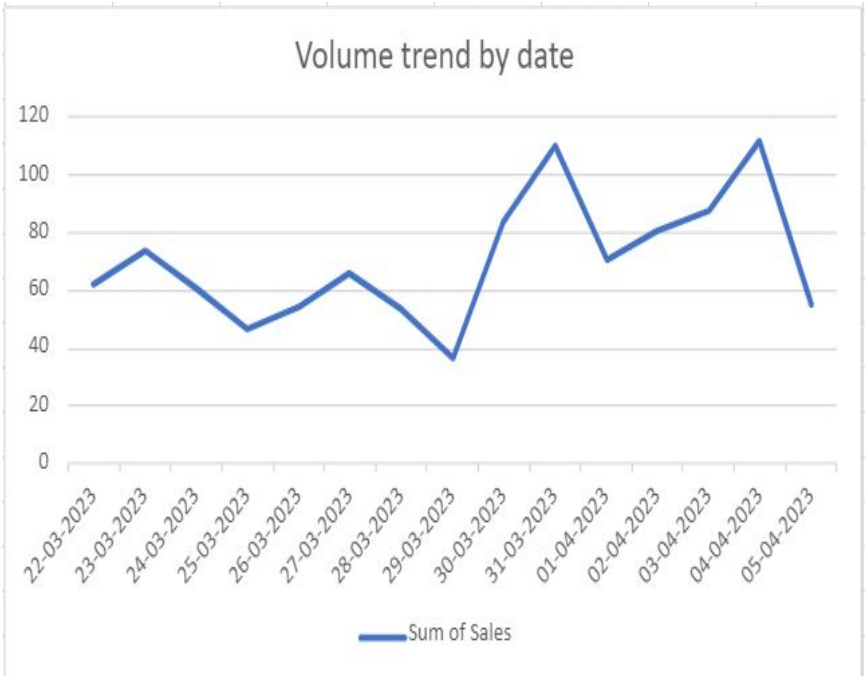

FIGURE 6

* Aim is to find Volume trend by date in last 15 days. As we can see in Figure 6, The Volume trend is being increased in last days.

* To find Volume trend **pivot table**, **filter** and **stacked column graph** have been used.

* After using all needed options like pivot table, filter and graph we have got a Volume trend by dates for the given data.

Results And Findings

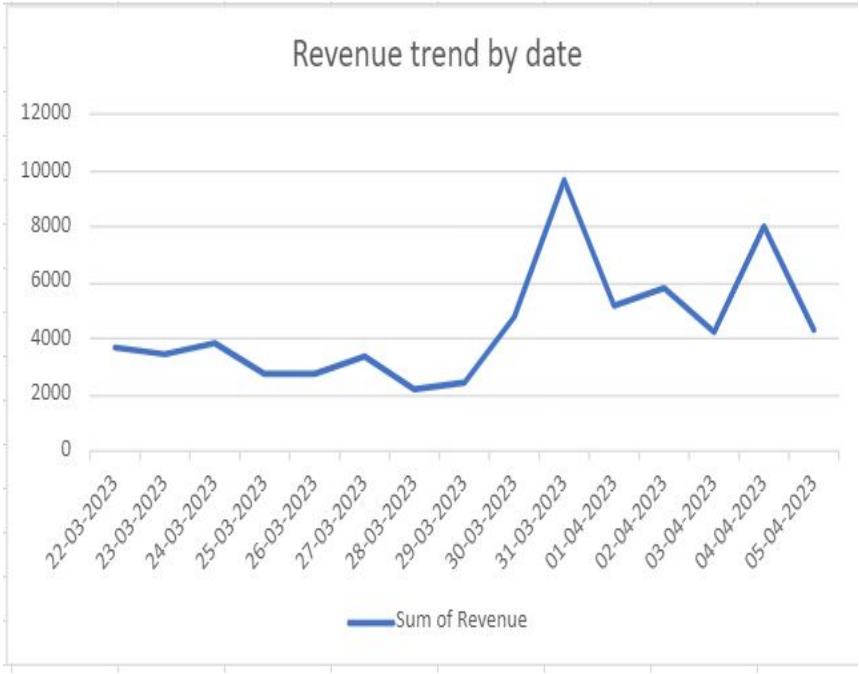

FIGURE 7

* Aim is to find Revenue trend by date in last 15 days. As we can see in Figure 7, The Revenue trend is being increased in last days.

* To find Revenue trend **pivot table**, **filter** and **stacked column graph** have been used.

* After using all needed options like pivot table, filter and graph we have got a Revenue trend by dates for the given data.

Results And Findings

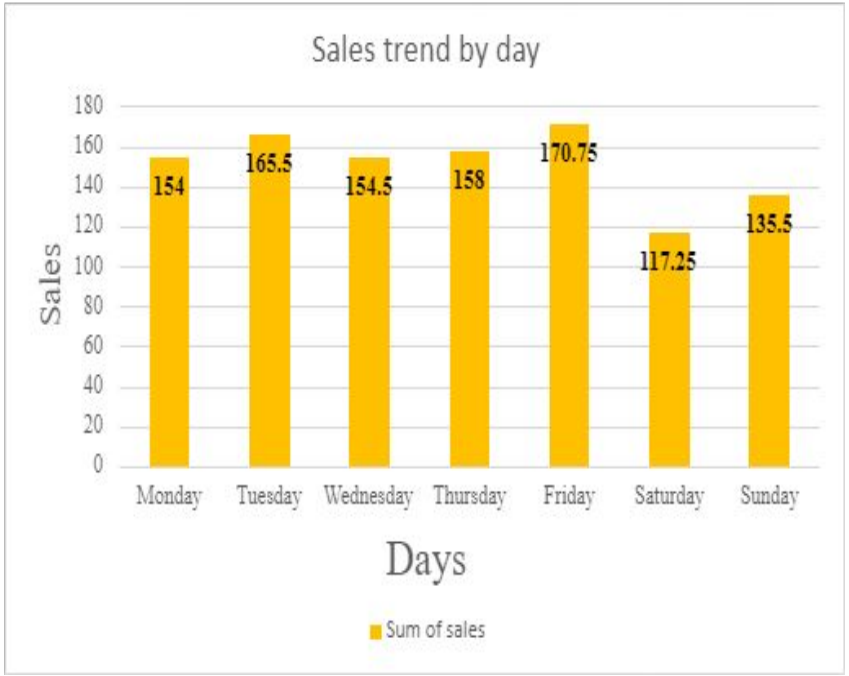

FIGURE 8

* Aim is to find Sales trend by day in last 15 days. As we can see in Figure 8, All days have almost same sales but Sale on friday is quite high, Therefore there is a trend in Figure 8.

* To find Sales trend **pivot table**, **filter** and **stacked column graph** have been used.

* After using all needed options like pivot table, filter and graph we have got a Sales trend by day for the given data.

Results And Findings

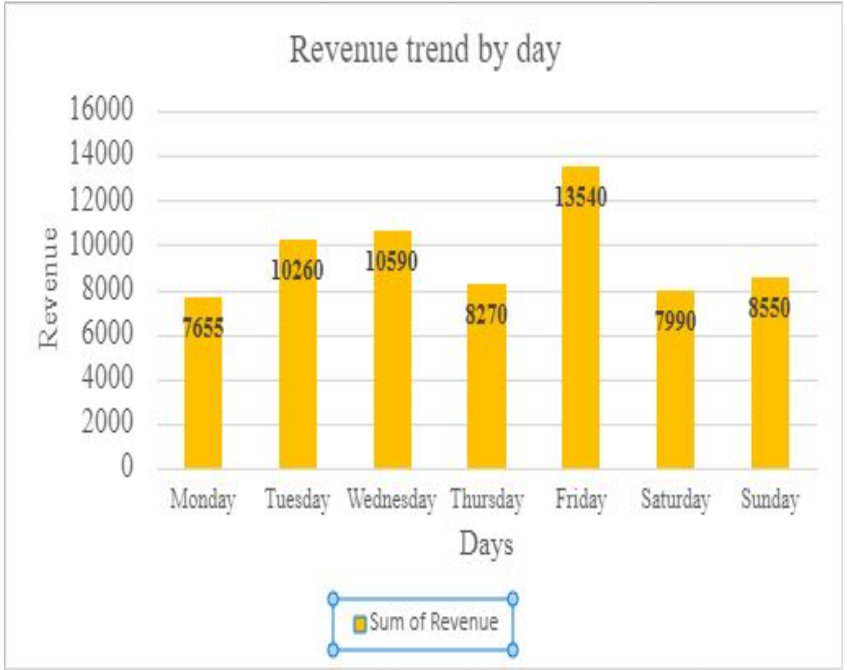

FIGURE 9

* Aim is to find Sales trend by day in last 15 days. As we can see in Figure 8, All days have almost same sales but Sale on friday is quite high, Therefore there is a trend in Figure 8.

* To find Sales trend **pivot table**, **filter** and **stacked column graph** have been used.

* After using all needed options like pivot table, filter and graph we have got a Sales trend by day for the given data.

Results and findings

Row Labels	Count of Sales
Grand Total	**751**
Noodles	146
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FIGURE 10

* According to the table the most selling items are chinese items and within chinese items noodles and veg momos has highest demand within all items as shown in Figure 10.

* To find this table **pivot table** and **filter** have been used.

* After using all needed options like pivot table and filter we have got a basic demand table for all items.

Results and findings

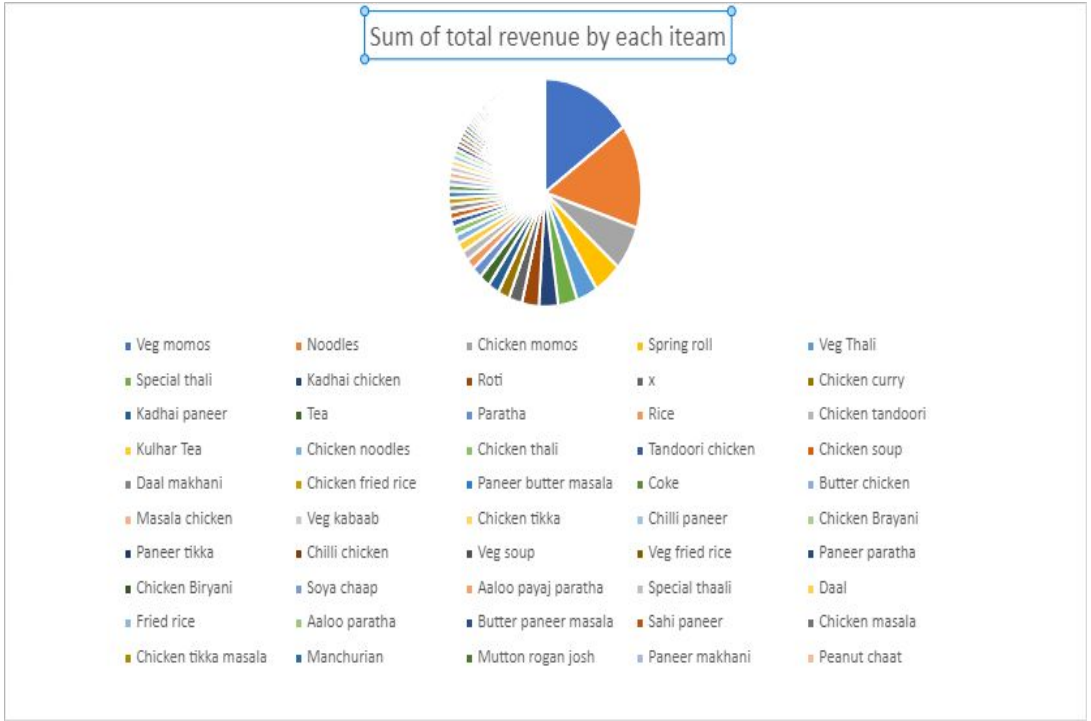

FIGURE 11

* According to the Pie chart the most Revenue getting items are chinese items and within chinese items Veg momos and Noodles has highest Revenue percentage of 30% as shown in Figure 11.

* To find this Pie Chart **pivot table**, **Filter** and **Revenue Pareto table** have been used.

* After using all needed options, We have got a basic Revenue table for all Selling items.

Interpretation of Results and Recommendation

INTERPRETATION:

As i am working on this project to understand the business as well as analysing the problem statements, which business have been faced. After having couple of meetings with business owner and the staff members, I came to know several factors for current problems.

LOW SALES AND PROFIT :

⇨ Lack of available ingredients and offering too many type of food items because of this customers are being confused to choose their product.

⇨ Low marketing strategies as they do not have any social media account even not registered at google business.

⇨ The location of shop is not easily reachable by new people.

⇨ Staff members are not specialized for particular roles, Anyone is doing any work in the absence of other person.

POOR DATA MANAGEMENT:

⇨ The business is not collecting, organizing and analysing critical data such as sales and customer preference. As there is not a particular person for data collecting that is why all raw data is being recorded in a register by anyone, who is available at that time. This problem is being lead to missed opportunities, inefficient operations and difficulties in predicting trends.

RECOMMENDATION:

LOW SALES AND PROFIT

MENU REDESIGNING AND INVOLVING INNOVATION:

⇨ Identify current food trends and customer preference.As chinese items are most in demand and responsible for maximum Revenue in this firm therefore the main focus should be on chinese dishes instead of focusing on multiple items

⇨ Update the menu with those items which are high in demand in the market to attract a wider audience.

⇨ Add limited-time offers and seasonal specials rather than fridays as there is highest sale on fridays.

ENHANCED CUSTOMER EXPERIENCE:

⇨ Train staff to provide a healthy and positive dining experience for every customer.

⇨ Implement a customer feedback system to gather insights and make improvements based on customer Suggestions.

⟹ Collaborate with food delivery platforms to expand reach and accessibility.

⟹ Use social media to attract new customers especially students who live nearby.

⟹ Should add more varieties of noodles as it is most selling item in this firm

POOR DATA MANAGEMENT

DATA MANAGEMENT AND ANALYSIS:

⟹ Invest in a software system to accurately track sales and inventory data instead noting down on a register.It will be easy to analyze sales data, customer preference and feedbacks to adjust strategies accordingly.