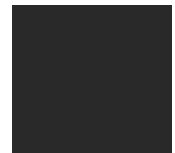# BUSINESS DEVELOPMENT MANAGEMENT

MID-TERM SUBMISSION

IMPROVING PROFITABILITY AND GROCERY STORE
THROUGH SALES STRATEGIES AND INVENTORY
OPTIMIZATION

NAME   VAISHANAVI MEHTA
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INDEX

EXECUTIVE SUMMARY

This report provides an analysis of various aspects of a grocery store, focusing on issues related to revenue generation, and inventory management. The **data was collected** through multiple in-person meetings with the owner, and rough book records. The findings aim to affirm the identified key problems and suggest potential solutions for the business.

Regarding **Revenue stagnation**, the analysis reveals that a Kirana store is a very common business model in the neighborhood and lack of novelty as well as online stores is the major reason for lack of progress. Offering seasonal offers (ex. Buy 1 Get 1 free), combo offers and discounts helps perpetuating into the local market. Home delivery in a 15-18km radius could also be explored.

In terms of inventory, it is seen that there is an unnecessary surplus of inventory procured at a time, while this cuts on the delivery costs, a lot of inventory gets damaged or expired on the shelf since the shop is fairly small. Either having more frequent purchase trips or finding a supplier that is closer could be a viable solution.

Tools used are all in Excel and Google Sheets with Charts and Formulas.

Time period is a total of 4 weeks

The report concludes with recommendations, including cost-saving measures, revenue increasing strategies and optimization of inventory,

Date- 20th April 2024

TANISHKA ENTERPRISES
No Objection Certificate

This is to certify that Mrs Vaishanavi Mehta, has taken the data from our organisation and this letter confirms that we have completely no objection to his using our data for his BDM capstone project.

This NOC has been issued as per the request of Vaishanavi Mehta. and can be used by her for the specific purpose mentioned above.

During his time with us, she has been an earnest individual and we wish her good luck.

Sincerely,

Mr. Suresh Kumawat

NOC letter.

PROOF OF INTERACTION

https://drive.google.com/drive/folders/1bH0Pp31kDkrON87e1PqiB9rlA3XH7H3u?usp=sharing

REVENUE STAGNATION

The first problem is that of not being able to increase profits past a certain point. This is due to 2 primary factors.

1. **Limited customer base**- Due to the remote location of the store, the customer base is limited to a small community of locals and students.
2. **Excessive competition-** There exist multiple stores of the same kind in the area as well as online stores, which are very popular among students.

POSSIBLE SOLUTION (1)

HOME DELIVERY: -

Starting a home delivery service in a 12km radius would be advantageous as it would have the added benefit of being comparatively sooner as opposed to online platforms, and will cover the area of hostel and student housings.

The owner already has a personal 2-wheeler, but will be required to hire an additional worker to handle deliveries.

Instead of making multiple round-trips, which would be a waste of time and resources, they could offer 2 types of deliveries:

1) Regular free delivery: since most of the students live in the same hostel, they could fix 1 time slots for delivery (6pm) every day when the goods would be delivered together.

(This is important since while the volume of individual purchases is more, the avg cost of a single order *by students* is usually less (as per the observations of the store owner) and will not compensate the additional costs)

2) Paid instantaneous delivery: Delivery of a single order immediately for a small fee of 30-40rs at a minimum order value 60rs.
   (the avg cost of an individual purchase is about 60rs)

Added expenses	Note	Added Cost /month
Helper	1	₹4,500
Fuel	[36km/day at 108.48rs (avg fuel cost in Jaipur) for 55 mileage scooter]	₹2,200
Total		**₹6,700**

Table 1: Added monthly cost if home delivery services are offered.

Based on a rudimentary calculation, only a minimum of 3 orders of avg cost would be required daily to offset the additional costs, which is highly feasible, and will easily be surpassed, leading to added profits.
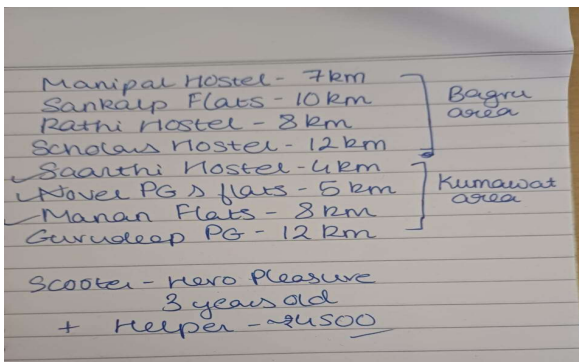
Picture 3: Rough data collected in notebook during the meeting with owner

Metadata

> Data in above table is collected for a time period of **1 month** cost for salary of 1 helper and fuel costs.
> Salary = ₹4,500
> Fuel= 36km/day for a 55-mileage scooter.
> Total added expense/month: 6700rs
> And the data is given by the owner **verbally** as they don't maintain any salary slip book.

Descriptive Statistics

1. Estimated worker salary: ₹4,500
2. Estimated Fuel costs: ₹2,200
3. Total monthly cost: ₹6,700

POSSIBLE SOLUTION (2)

COMBO OFFERS: -
To establish novelty, the store should release combo offers of items that are strategically chosen. This has 2 primary benefits, that are:

1. They will be able to stand out amongst other local businesses, especially if the offers are focused on confectionary, stationary and other low-profit, high volume items.

2. This will ensure movement of items that are bought less frequently, warranting that current inventory is sold before it expires/spoils, which also helps regulate inventory, and avoid overflow of one item while the other sells out.

Recommended item pairs would be determined of "Profitability", that is determined by combining the following factors:

1. Average units sold in 4 weeks.
2. Profit per unit of item.
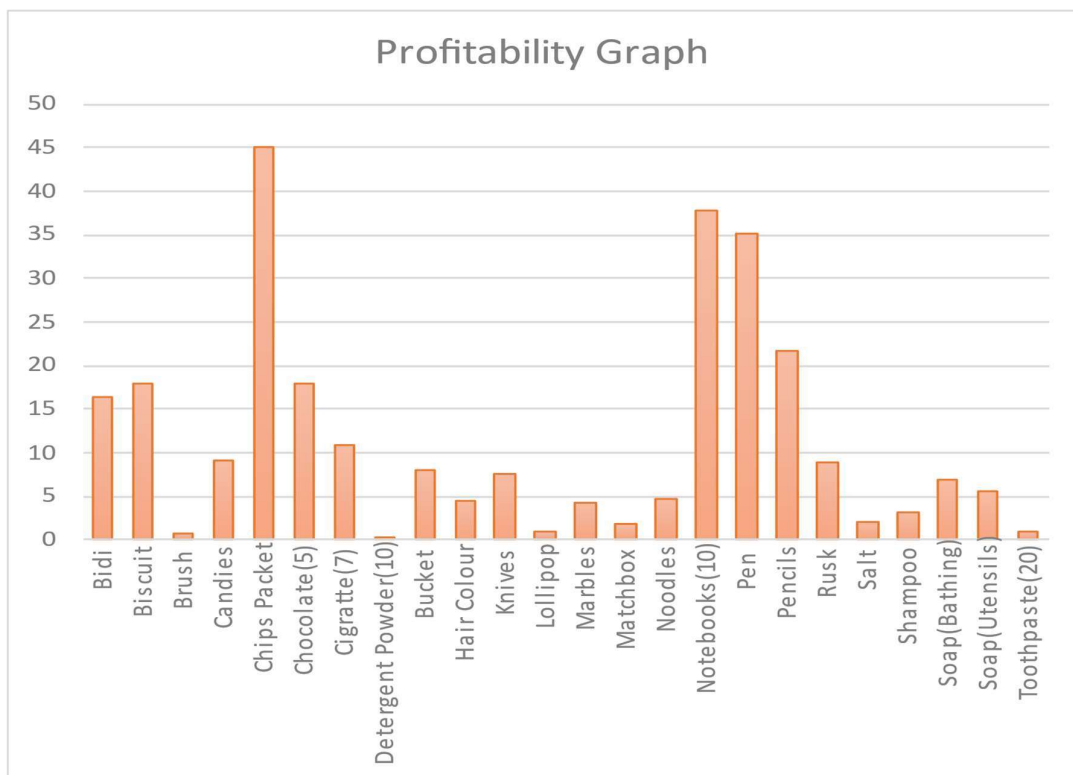
Based on the above graph, it is easy to identify low-profitable and high-profitable items. These combos could be sold for a consolidated price (Price lower than cumulative price of 2 items but higher than price of individual item) or as Item1(L) free with Item2. (H)

1. Notebooks(H) and pencils(L)
   (ex. 1 pencil free at purchase of 2 notebooks.)
2. Chips(H) and Candies(L)
   (ex. 1 Candy free with low-selling brand/flavor of chips)
3. Biscuits(H) and marbles(L)
   (ex. Consolidated price)
4. Toothpaste(L) and Brush(L)
   (ex. Consolidated price)

Other than these, the store could also venture into having more seasonal items, especially ones that would interest the school and college students.
This can include Friendship bands, flowers, Holi colors, water gun etc.

Metadata

➢ Data in above graph is collected for a time period of **1 month** by tracking sales of selected that were both, visibly fast moving and visibly slow-moving.
➢ And the data is given by the owner **verbally, and through unorganized bookkeeping** as they don't maintain any official records of sales
➢ Link to dataset: https://docs.google.com/spreadsheets/d/1mGPXVcIT7UWh_0GwHO1r naSaZHE5VLO25PDcsVCDqhk/edit?usp=sharing

Descriptive Statistics

➢ **Most profitable:** Chips packets at approx. 45rs profit at the end of a month. This can be accounted to high volume sales, with standard profit percentage.
➢ **Least profitable:** Marbles at 0.375rs profit at the end of a month. This can be accounted to the sale price being only 0.25rs/unit, and also decreased sales in recent times,
➢ **Mean profit for individual items:** 11.36rs.
➢ **Standard deviation:** 12.42rs

Invcentory management is another problem due to a small shop area with a lack of any extra storage place or location.

Most of the inventory is on the shelf itself. This frequently causes problems like-

1. Damaging of goods,
2. Items still being on shelf past the expiry date
3. Difficulty in keeping count of sold items

A possible solution has been identified, that can be implemented in one of 2 ways:

Method 1: Seek a closer supplier

A closer supplier would result in less travel costs, which would allow the store owner to make more frequent trips and stock up on only limited inventory at a time. The challenge with this solution is to, however find a supplier that offers prices that are comparable to the current supplier.

For this analysis, the items taken into consideration were decided on 2 factors:

1. Life span (perishable/ easily spoilt by moisture/ rots) (relative)
2. Space occupied (relative)

ITEMS	Perishability Rank	Storage space	Score
Toothpaste(20)	4	3	3.5
Chocolate(5)	3	5	4
Noodles	9	1	5
Candies	2	11	6.5
Soap(Bathing)	5	8	6.5
Rusk	1	12	6.5
Biscuit	7	7	7
Detergent Powder(10)	11	4	7.5
Soap(Utensils)	6	9	7.5
Chips Packet	10	6	8

Table 1: Item list for storage and lifespan.

Based on a ranking system, the above 8 items have the lowest life span and occupy the most space at the time.

A closer supplier for these items would greatly reduce the inventory issue.

Finding a new supplier should not be very difficult since most of the items on this list are name-brand items and sold at M.R.P with the exception of rusk and utensil soap, which is sold loose.

METHOD 2: Collaborate with nearby store owners for procurement.

This method can be implemented regardless of if the shopkeeper does not want/cannot find a closer supplier due to probable personal relations with original supplier, inability to find competitive prices, inaccessibility and/or unavailability. (This is being proposed since the shopkeeper expressed concerns about procurement from a new supplier, stating the above reasons.)

There are 3 grocery stores, in the same area that also sell similar items.
None of these stores are very big or have external storage space, and the shop owner has existing good personal relations with all of them.
Currently, all 4 store owners, including that of Tanishka procure inventory from multiple, different suppliers in the main city independently, despite purchasing the same/ similar items.
If the 4 shop owners could collectively reduce their expenses on transport if they agreed on the following conditions:
  1. Common supplier.
  2. Regular, turn-wise schedule for inventory procurement
The benefits of this are 2-pronged:
  1. Higher profit margin on items due to "wholesale price", since the inventory for 4 grocery stores, that is significantly larger will be sold for cheaper.
  2. Less travel costs since each individual store-owner would only have to go to the supplier once in every four turns, when they get all the required inventory altogether

Metadata

  ➢ This data was also given verbally and observed in the shop physically and uploaded into the table.

  ➢ Perishability: Ranking based on the lifespan and likelihood to be affected by moisture/ humidity of each individual item is.

  ➢ Storage space: Ranking based on how much storage space a package good occupies in the store.
  ➢ Score: Determinant of which items should be obtained in less volume, at more frequent intervals to avoid overflowing/wastage of inventory.

Descriptive Statistics-

Most perishable: Rusk
Least Perishable Pencils
Most space-occupying: Packaged noodles
Least space occupying: Cigarette

DETAILED EXPLANATION OF ANALYSIS PROCESS

MEETING WITH OWNER

- To comprehend the business problems.
- Revenue stagnation is a substantial problem due to competition in the local market as well as online stores.
- There is no novelty in products or prices, which limits the customer base significantly.
- Another major problem is inventory management due to the limited space in the shop itself and unorganized bookkeeping, leading to mismanagement and wastage of inventory
- Other subjects discussed were –
  - Lack of any other helpers in the store cause overload of responsibility, work at times
  - The current inventory procurement schedule is tedious.

INDEPENDENT ANALYSIS OF THE MARKET

- ## OTHER STORES
  - There are 3 other grocery stores in the locality of about the same size that largely similar items, for a similar price point.
  - None of them offer home delivery services
  - The 4 stores, including Tanishka are the major suppliers for the everyday needs of people in the locality, with the exception of online stores.

- ## CUSTOMER BASE
  After talking to local people and students in the area, it was observed that:

  - Students are a lot more likely to order from online services due to doorstep delivery, and would be open to purchasing locally if they offered the same services.
  - Locals have good interpersonal relationship with the store-owner and would also be open to the same, as long as cod is still an option.

RESULTS AND FINDINGS

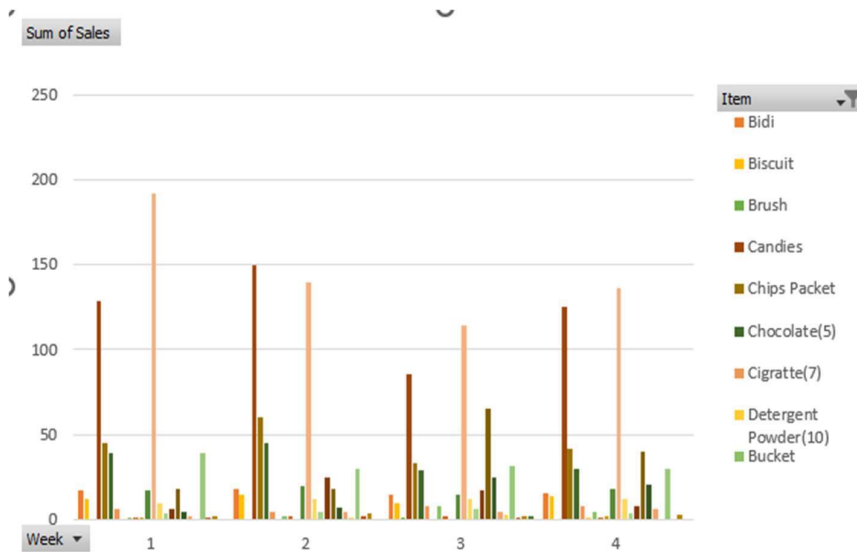**Graph 2: Highest revenue generating items.**
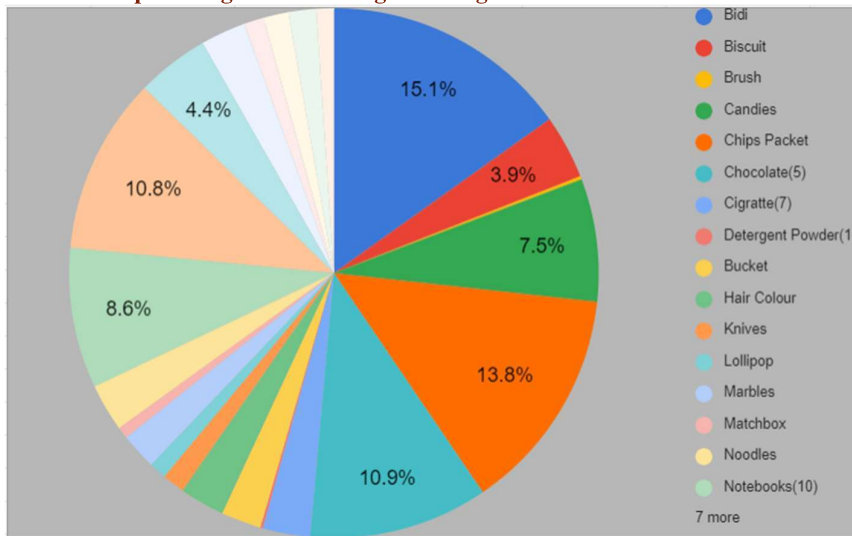
Bidi is the highest revenue generating item but not the most profitable item since the profit margin is low (1rs/unit)

Chips is the second highest revenue generating item as well as the most profitable item, despite having similar profit margin as Bidi due to high-volume sales.

Graph 2: Week wise sales

All the weeks saw similar volume of sales due to lack of any major festivals or holidays, however there is a slight hike in week 2 in the same of candies and chocolates, which can be accounted to Valentine's Day celebrations that week.

All the data was collected and analyzed on Excel and Google sheets.