

OPERATIONS MANAGENT PROJECT

Group 2:

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OBJECTIVE:

A comparative study of the inventory, supply, and operational decisions between a tiny retail shop (or Kirana store), and a large retail outlet.

Tiny Shop: Bakerlys (Home Bakery, Mumbai)

Large Shop: KK Chaap Express (QSR Joint, Gurgram)

QUESTIONS	KK CHAAP EXPRESS	BAKERLYS
Introduction	QSR joint selling Indian and Chinese cuisine. Specialises and known for their Indian Chaaps	Home bakery specialising in custom cakes, desserts and cookies
Years of existence	12 years	2 years
Number of employees	12	NA
Average Revenue per day	Rs. 40,000	Rs. 2,000
Rental Cost	Rs. 1,50,000	NA
Cuisine	Indian and Chinese	Desserts
Total monthly salary of employees	1,20,000	NA
Best selling items	Afghani Chaap, Tandoori Chaap, Malai Chaap	Chocolate Cake, Biscoff Cookies
How is the raw material purchased?	Daily from the market	Monthly basis as per requirement

Least selling item	Veg Noodles and Manchurian	Butterscotch Cake
Mode of selling	Retail, pickups & delivery	Delivery and pick ups
Number of outlets	1	1
Number of skus	400	25
Monthly Electricity bill	9,000	NA

INSIGHTS:

1. Food Preparation: Orders for **Bakerlys** are taken on a pre order basis, therefore the **preparation is done as per every order** and leads to no/ minimum wastage. Whereas for **KK Chaap Express food preparation is done in advance** where the inventory is already procured and cooked and sold on on the spot order basis. Hence leading to some wastage.
2. Postponement strategy: Postponement Strategy is **frequently used with Indian food retailers like KK Chap Express.**

They prepare plain Soya Chaaps, momos etc. without any flavour before hand and as and when order comes they add flavours, masala and sauces to it and give the final shape. This **reduces their turnaround time** and this benefits both. the vendor, as they avoid predicting demand for each of 400 products and the customers, as they receive their order within 10-25 mins.

Whereas, for Home chefs/ bakers such as **Bakerlys** - they **don't follow any postponement strategy** as they don't prepare orders in advance but as soon as they receive it or as per the delivery date.

3. Costs: **KK Chaap Express takes into account every small tiny expense.** From raw materials, to fixed costs such as rent, electricity, salaries, packaging, miscellaneous. **Bakerlys** on the other hand only takes into account the major expenses such as raw materials and packaging. As the owner operates out of home she **does not take into account the operational and fixed costs** such as electricity used by the appliances to cook cake or maid cost to wash utensils or rental cost and therefore miscalculates profit by accounting only for raw material and packaging cost.
4. Seasonality difference: **KK Chaap Express has a similar average demand on weekdays,** but the **demand shoots up by 25% on the weekends.** They also have a seasonality in demand during the lunch hours (12:30pm - 2:30pm) and dinner hours (7pm - 10pm) where their demand shoots up. These hours make up 80% of their sales. During weekends as offices are closed their

demand during lunch time takes a hit but is compensated and exceeded during the evening hours from 5pm to 10pm.

At **Bakerlys**, the seasonality cycle expands during events and festivals such as Mother's day, Wedding season, Christmas, New year's, etc. Therefore the demand cycle has a seasonality of a year where certain days and months have higher demands, and certain days and seasons such as summer would generally have a lower than normal demand as people travel for vacations.

5. Advertising: **KK Chaap Express relies heavily on window shopping customers, in store walk ins, word of mouth** and acquires customers on third party delivery services such as **Swiggy, Zomato by offering high discounts**. For visibility Swiggy & Zomato plays an important role whereas the outlet isn't available on social media platforms yet. Where as being a home baker **Bakerlys relies on word of mouth and social media and repeating customers**. Social media is utmost important for her visibility and promotion.
6. Packaging Materials: Since KK Chaap Express has a varied offering they require various sizes, types of containers, for eg. For Chaap they need an aluminium container, whereas for Manchurian they need a plastic container. They also need wooden cutlery, tape to package, small plastic bags for chutneys, tissue paper and so on. So, the owner purchases this packaging material in bulk and majority of the space in his shop is invested in storing packing materials.

We also identified that he has a **continuous system of ordering inventory for fast moving items** such as aluminium containers, chutney polyethene's and wooden cutlery and a **periodic system for plastic containers**.

At **Bakerlys**, **branded packaging boxes are used** along with candles, knife, happy birthday & anniversary plastic inserters. We also **got an insight that even if you operate in similar category such as food, but if one food store caters to a niche premium product with high AOV (average order value), their packaging can differ**. For eg. In case of Bakerys where you have a premium and a niche customer base, the customers want beautiful/ premium packaging. Therefore, Bakerys had customised unique printed boxes but in case of KK Chaap Express, where he is catering to a mass market, normal aluminium packaging and corn starch bags work.

7. Wastage: The wastage for both the businesses is very less. But **compared to Bakerlys, KK Chaap Express has more wastage on an everyday basis**. In a bakery, the cake sponge leftovers can be reused to make cakesicles and cake pops which brings the wastage to almost zero. However, in case of the QSR, a paneer, vegetable or chaap that has been boiled, cut and cooked has to be utilised the same day or else it gets wasted due to its perishability.

The shelf life of the finished products is different. A chaap is ready to eat and should be consumed within 3-5 hours of preparation. On the other hand, a cake can last upto 2-3 days from the time of preparation.

8. FSSAI licence: FSSAI registration is a basic licence and it is required for all the FBOs involved in the small scale or large scale food business. **KK Chaap Express has an FSSAI licence** whereas **Bakerlys has not applied for this licence.**
9. Type of review period: **Bakerlys uses raw materials which require a periodic review** since the products are slow moving/average moving. The products such as maida, vegetables, cream etc used by **KK Chaap are fast moving due to high demand and need a continuous review model.**
10. Stockout: There is a **higher probability of stockout at KK Chaap** due the high volatility and demand of its products. For **Bakerlys, since the demand is low, the probability of stockout reduces.** KK Chaap should hence maintain a safety stock in its operations and regularly check the re-order point for all its products.
11. Basis for classification: Based on the revenue generated in both the shops from different SKUs, we used ABC method to classify products. The best-selling product for KK Chaap was the Afghani chaap which was priced at below average, but, was the best seller. Hence, even though the price of Afghani chaap was low, due to the number of orders placed for this product, the total revenue generated for it was the maximum and made it to category A classification. We can **conclude that the classification is a mix of product quality, price and quantity.**
12. Analysis of ABC classification: Chinese chaap should have been removed since it was contributing only 0.6% to the total revenue and was in category C, however, Chinese chaap used the same ingredients as Chinese fried rice. Hence, the shop did not have to make any special preparations for this and could meet the small demand without any extra efforts. Therefore, in spite of a negligible demand, it makes sense to continue with the product.
13. Holding Cost: **The holding cost for KK Chaap is minimal** whereas since **Bakerlys is a home bakery, holding cost does not apply to it.**
14. Scaling: KK Chaap has a better probability to scale up and set up a new stall, whereas it is difficult to scale up Bakerlys because it is solely dependent on the only chef they have.

QUESTIONS:

1. How are the orders placed by the respective outlets?

	KK CHAAP	BAKERLYS
BY CUSTOMERS	Majority of the orders are placed by on spot by walk ins to the restaurant, and some orders on the call for home delivery as well as Swiggy and Zomato	Orders are majorly placed on Whatsapp, phone calls, Instagram and Facebook

BY RESTAURANT TO SUPPLIERS	Raw materials such as vegetables and paneer that are perishable in nature are procured daily from the mandis/ market and demand for these products are determined based on sales intuition of last 12 years, For procurement of fast moving inventory like rice , soya , maida etc continuous review ordering is used and for materials such as dry masalas Periodic review ordering is applied & is procured on monthly basis from a specific vendor.	Raw materials like maida , milk powder, essence and cake decoration & packing materials are purchased on a monthly basis therefore continuous ordering is used & for perishable goods like milk , cream etc the bakery uses just in time inventory method by ordering the items on blinkit.
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2. Frequency and quantity of the order placed

	KK CHAAP	BAKERLYS
RAW MATERIALS	Daily (vegetables and paneer) Semi Monthly (salt, rice, flour, sugar, spices)	Monthly / as per requirement (flour, sugar, chocolate, oil)
Packaging	Weekly basis	Semi Annually

3. The basic level of inventory they maintain.

	KK CHAAP	BAKERLYS
RAW MATERIALS & FINAL DELIVERABLES	Final product , vegetables & paneer being pershible inventorized only for 6-8 hours Raw materials like maida , soya , rice and noodles have a minimum order level of 1-2 bag which vary in size for each ingredient being 25kg for rice , 25-50kg for maida , 20 packets for noodles etc. They have to maintain inventory as their orders are made in advance. So they prepare the chaaps and momos	Final product is not inventorized They maintain an inventory of 10kg maida , 2kg milkpowder ,1 kg butter as their constant inventory & since orders are dynamic & on the go , each order is prepared and delivered as per pre committed time..

	without adding particular flavours, masala or sauces so as to maintain a common premix inventory for various upcoming orders.	
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4. Contracts that they have with the suppliers

	KK CHAAP	BAKERLYS
Contracts	<p>There are two types of contracts that are basically made . one is credit based whereas the items that are needed in bulk are bought in credit</p> <p>Whereas in terms of daily procurement of vegetables and edibles they operate on the spot cash payment basis.</p>	They don't have a credit period; all the items are purchased on cash.

5. Demand pattern they see and how they tackle it.

	KK CHAAP	BAKERLYS
Demand Pattern	<p>On weekdays, demand for KK Chaap Express is close to normal, but on weekends, demand increases by 25%. They also experience seasonal variations in demand, with peaks in demand during lunch (12:30-2:30pm) and dinner (7pm-10) hours.</p> <p>Since they are working in the same industry from last 12 years, they are equipped to handle manpower and workforce even if the demand spikes suddenly.</p>	<p>During special occasions and holidays like Mother's Day, wedding season, Christmas, and New Year's, etc., the seasonality cycle lengthens. As a result, the demand cycle is seasonal throughout the year, with some days and months experiencing higher demand and others, like the summer, experiencing lower-than-average demand.</p> <p>Since the model of procurement of materials are based on pre orders, Bakerilys doesn't encourage itself taking order exceeding its capacity. So that they maintain their quality in their service served.</p>

CONCLUSION:

Through our research, we can rightly conclude that even though 2 businesses can belong to the same sector (in this case F&B) their operations, profit margins, and buying patterns can vary to a very large extent.

This is due to various factors such as the size of the venture, customer/ target segment, cuisine type, perishability of the products, packaging, seasonality, location etc.

We also concluded that the bigger the operations, you have more set suppliers from whom the firm was purchasing on a constant credit basis.

Whereas, in the smaller firm, materials were purchased on an ad hoc basis as per the requirement.

Postponement strategy was being used by the bigger vendor as he was dealing with higher volumes, and therefore keeping the same base (in this case the plain Chaap) he could just add the required flavour and spices.

Whereas the smaller vendor was preparing limited items as per order basis, the postponement strategy was not being utilized by her.

The bigger vendor usually kept items ready in advance due to higher order volumes which led to higher wastages. And in case of the small home bakery, there were no wastages as everything was made as per order.

The orders were undertaken also very differently. KK Chaap Express had the majority of customers through in-store walk-ins, whereas Bakerlys undertook orders via calls and social media.

However despite various differences between the two vendors, we also observed some similarities such as, both maintained packaging material in bulk, and both paid the suppliers on credit basis.