

**TITLE: "THE QUALITATIVE ANALYSIS OF CLOUD KITCHEN EMERGING AS A VIABLE FOOD & BEVERAGE (F&B) ALTERNATIVE POST COVID-19."**

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**ABSTRACT**

Owing to COVID-19 and the subsequent lockdowns almost across the world, restaurants have been taking refuge in food-delivery for survival. Food delivery is considered an essential service and has been fast gaining momentum as people are stuck inside their homes and ordering-in. With the lockdown being extended in almost all parts of the world, the little respite that the F&B industry has received is through the delivery operations. Essential services, which include food delivery, have been allowed to continue operating. This means that restaurants will have to adapt to cater to the dynamic market trends.

The food delivery industry is witnessing a massive growth. Advances in technology have enabled delivery operations with the least manpower possible. In times of crisis, it is already difficult for businesses to cope with the existing competition. However, focusing on delivery operations may be fruitful for restaurateurs. The recent pandemic has further strengthened the food-delivery sector.

Cloud Kitchens, Dark Kitchens, Ghost Kitchens, Virtual Restaurants - whatever you may call them - are delivery-only restaurants that rely on online/telephonic orders placed through online food aggregators and/or the restaurant's website or mobile app. The coming of a replacement age no-dine-in restaurant concept has caught everyone's attention within the restaurant industry. This unique restaurant format lacks physical space, requires no heavy capital investments, operates on minimum restaurant rentals, and depends only on online delivery orders.

**KEYWORDS:** Lockdown, Food delivery, Food & beverage industry, Cloud kitchen, Technology.

## **Objective of the study**

- To study cloud kitchen management.
- To Analyze and give an overview of the cloud kitchen system that enhances the profitability of the Food & Beverage industry.

## **Research Methodology**

Research is undertaken using secondary data comprising of books, newspaper articles, journals, Hospitality trade & business magazines, blogs.

Some of the suggested strategies of implementing cloud kitchen business are - how does a cloud kitchen work in general, cloud kitchen setup including location, design menu, licenses, choosing right types of equipment, hiring staff and how to grow cloud kitchen business with the help of online marketing food aggregators, social media, search engine optimization, loyalty programs, and SMS & email. As well as how technology is helping cloud kitchen to improve business profitability.

## **INTRODUCTION**

As the demand for food delivery continues to rise, cloud kitchen is becoming a popular option when it comes to opening a new restaurant business. The global COVID-19 pandemic and the subsequent lockdowns imposed by most of the nations led to restaurants being closed off. However, even during the lockdowns, food delivery continued in full swing.

To keep up with the changing times, restaurants switched to delivery-only operations, turning themselves into potential cloud kitchens to make up for the lost footfall. While online food delivery and the cloud kitchen business were steadily gaining popularity even before COVID-19, its relevance has skyrocketed in the current situation. The cloud kitchen business model is now being seen as the best way to survive the pandemic and keep the business afloat.

The online food delivery model incorporates social-distancing guidelines, which further led to an increase in the prominence of cloud kitchens. Restaurants have introduced Contactless Delivery, wherein the delivery executive delivers the food order without any physical contact with the

customer. By ensuring proper safety standards, cloud kitchens can ensure hygienic and safe food delivery.

A cloud kitchen acts as a food production unit where orders are prepared, packaged, and dispatched from. The location and the property are the biggest discerning factors between a cloud kitchen and a traditional dine-in restaurant. Since there is no Front-of-the-House, the cost involved in the interiors and wait staff is eliminated. You can open a cloud kitchen at one-third of the cost and time taken to open a traditional dine-in restaurant. In fact, the only major cost center for a virtual restaurant is establishing a strong delivery network and investing in high-quality packaging.

Typically the virtual restaurants receive online orders via,

- Third-party food aggregators where the aggregator platforms control the entire delivery operations.
- Online ordering website or mobile app. The cloud kitchen operators handle the whole logistics by establishing its own delivery fleet or outsourcing to a third party.
- Call-center panel; once the customers place an order, the Call-Center panel routes the orders to the respective brand and outlet.

## **HOW DOES A CLOUD KITCHEN WORK IN GENERAL**

1. Customers place their orders via website/mobile app, hotline numbers, online aggregator platforms such as Zomato, Swiggy, Foodpanda, UberEats, etc. The cloud kitchen outlets directly receive the order together with the customer details.

2. The cloud kitchen POS pushes the orders directly to the kitchen staff. In the case of several brands, the kitchen staff receives brand-specific order details. The Kitchen Display System is helpful as it displays orders along with the recipe requirements on a screen. This enables your staff to keep track of all the orders that have to be prepared.

3. After receiving the orders, the kitchen staff begins food preparation. In the case of multiple brands, a similar chef may prepare food for multiple different brands. Depending upon the number of cuisines or order volume, dark kitchens can also appoint more than one chef, each designated for a certain brand.

4. As soon as the food is prepared, it is packed under proper supervision and procedures. As packaging is crucial in ensuring an excellent delivery service, virtual restaurants emphasize on ensuring that the food is packaged and handled well.

5. The appointed delivery executive reaches the outlet and collects the food parcel to ensure timely food delivery.

There may be different terms that define the delivery-only restaurant business, but the fact remains the same-It's a great business to be in. Considering the growing popularity of food delivery, entrepreneurs may find the delivery-only format very attractive as it requires less capital and provides plenty of opportunities for business growth. All in all, cloud kitchens are here to stay, which makes it the best time to invest in a cloud kitchen/dark kitchen/ghost kitchen business.

## **CLOUD KITCHEN SETUP**

**Opening a Cloud Kitchen:** Opening a cloud kitchen is quite different from opening a traditional dine-in or takeaway restaurant. Here are some points on how you can choose the location, acquire the licenses, decide the menu, choose the right equipment, hire the right staff, etc., for starting a cloud kitchen business.

- a) **Choosing the Right Location:** A cloud kitchen doesn't require a premium location that generates high footfall. Instead, one can operate a cloud kitchen business from a 250-300 Sq Ft space, which brings down the cost significantly. Cloud kitchens can be set up in a variety of locations, such as residential areas, unused parking lots, market backsides, keeping in mind that there is high customer demand. Alternatively, operators can leverage shared kitchen space to cut down on the early investment.
- b) **Deciding the Menu:** The quality of food is perhaps the most critical factor that decides the fate of your cloud kitchen business. A total of 10-15 menu items are ideal for a single brand and standalone cloud kitchens. The menu must be chosen based on the demographics of your audience and specific customer demands. For example, if you are positioning your cloud kitchen in a residential area, it is a good idea to offer family meals.

It is also essential to create a menu that can be easily packaged and travels well. Avoid including fancy items on the menu that require food presentation and turn soggy after being packaged.

- c) **Licenses:** Acquiring proper licenses and certification is mandatory before starting a cloud kitchen. Having the necessary permits and licenses in place would save you from legal hassles. The major licenses required to open a cloud kitchen are FSSAI licenses, GST registration, Food and Safety License, Fire License, No Objection Certificate (NOC), etc.
- d) **Choosing the Right Equipment:** The equipment required in a cloud kitchen depends on the type of cuisine you're planning to offer. However, there is some basic equipment that is common for all commercial kitchens, such as –
- **Cooking Equipments** – Essential cooking equipments includes ovens, electric or gas range, grills, deep fryers, etc.
  - **Refrigeration Equipments** – Refrigeration equipments consists of refrigerators, freezers, ice machines, and beverage dispensers.
  - **Storage Equipments** – Storage equipment includes shelves, food storage containers, drying, and dunnage racks, carts, etc.
  - **Food Preparation Equipments** – Food preparation equipments includes food processors, mixers, and blenders. Small wares such as chef knives, cutting boards, mixing bowls, pans, pots, etc., are also required for preparing food in the cloud kitchen.
  - **The packaging** is another crucial part of running a food delivery business. No matter how good the food is, if it is not packed correctly, it would ruin the entire customer experience and affect your brand's reputation. Invest in excellent packaging material that meets industry standards including high-quality plastic containers, boxes, spoons, etc. to ensure proper packaging of your food.
- e) **Hiring the Right Staff:** Since there is no Front-of-the-House, you don't need a wait staff in a cloud kitchen. You can easily open a cloud kitchen with just 3-5 kitchen staff. You would need at least two cooks for preparing the food and a few helpers for packaging and

cleaning. As the number of orders increases, you can always add more people to your team.

## **GROWING THE CLOUD KITCHEN BUSINESS**

Once your cloud kitchen business is set up and running, you will be looking at how to increase only on online and telephonic food orders, you must spend heavily on marketing your food delivery brand, in the primary days. Without a storefront, display boards, and signage to create a brand recall, online marketing becomes critical.

**Marketing the Cloud Kitchen Business:** It is highly advised to spend on marketing on the online aggregators' app or website, at least in the initial stages, to reach out to potential customers and to create brand awareness. At the same time, you must also work to build organic channels for generating orders.

- a) **Online Marketing with Food Aggregators:** For any new restaurant business, paid marketing is essential to generate business quickly. Promoting your cloud kitchen on third party's online food aggregators is highly recommended. Even though these aggregators charge a higher percentage per order revenue, they provide higher visibility to your restaurant brand. Consider investing in paid marketing to promote your business better.
- b) **Social Media Marketing:** It is always a good idea to focus on social media marketing for your cloud kitchen business right from the beginning. Create your restaurant's page on Facebook, Instagram, and Twitter, and make sure to post enticing pictures of your food, promotions, etc. Use relevant hash tags to connect with your audience. Also, consider running paid ads on social media platforms to reach a broader audience and generate online orders. It is also a good idea to partner with local food bloggers who can review and post about your food.
- c) **Search Engine Optimization:** You must ensure that your online ordering website ranks higher on the search engine pages when a customer searches for it on Google. Use the

right keywords and phrases and ensure that you have a mobile-ready website that is optimized for Search Engines.

- d) **Loyalty Programs and SMS & Email:** It is also important to act on the feedback given by the customers. In the case of negative feedback, investigate into the problem. It is a good idea to apologize and offer a discount or a complimentary item to appease the customer. This would help you build a better relationship with the customer and generate loyalty. Loyal customers eventually turn into evangelists and spread the word-of-mouth, which is hugely beneficial for a cloud kitchen business.

## **TECHNOLOGY NEEDED FOR A CLOUD KITCHEN**

Technology plays a crucial role in streamlining the management of a cloud kitchen business. A virtual restaurant requires an integrated online restaurant ordering system that accepts online orders and speeds up operations.

These are the tech-related requirements to set up your cloud kitchen business.

- a) **Centralized Ordering System:** A POS (Point of sale) system that receives orders from various online food aggregators centrally is a must for any cloud kitchen business. As your cloud kitchen would ideally be listed on multiple online food ordering platforms, manually entering the order details into the POS system is a big hassle. Invest in an integrated POS system that accepts orders from various sources and maintains records of orders received via each platform.
- b) **Online Ordering via Website and/or Mobile App:** While partnering with online food aggregators it is essential that you must build a website or mobile app for accepting orders. Create an online ordering enabled restaurant website and mobile app that is user-friendly and well optimized for customers to order food online with ease. Design your food ordering landing page smartly to gain more online orders.
- c) **Call Center Panel to Receive Telephonic Orders:** If your cloud kitchen receives a high volume of telephonic food orders, consider investing in an integrated Call Center panel. This will streamline all the telephonic orders, and log them directly into the POS. You

can also access the customer details and ordering history, which will prevent the need to ask customer addresses and other information again.

- d) **Integrated Kitchen Display System:** In a fast-paced cloud kitchen, an integrated Kitchen Display System (KDS) is a must-have technological tool to optimize the overall order preparation time. Once the order is received, it gets automatically updated in the KDS. A KDS not only makes the cloud kitchen operations smoother, but also identifies any lags in the order preparation, and further optimizes the preparation time.
- e) **Integrated Delivery System for Food Delivery:** Having an in-house delivery system will help you assign orders to the delivery executive quickly according to their location and availability. You can also track the order status and notify your customers via automatic SMS updates.
- f) **Inventory Management System:** Inventory control is essential for a cloud kitchen to manage stock-in-hand and minimize food wastage. A smart inventory management system will enable you to track daily stock consumption and prompt you to order more stock when needed. It will also help to keep your food costs in check.

## CONCLUSION

It is going to be interesting to see how restaurants react to the market dynamics post COVID-19 pandemic. Even once the restrictions are lifted, customers would likely still be suspicious of going out much and prefer to order-in at home. It is believed that social distancing is going to continue for the rest of 2020 and perhaps well into 2021. Even when the lockdown is lifted, people are still going to be suspicious about going to busy places. In-store sales of restaurants are expected to drop by as much as 50% as per the experts, with delivery business continuing to go on in full swing.

The cloud kitchen business is continually thriving and revolutionizing the way people prepare and consume food. As per the NRAI Food Services Report 2019, in India alone, the cloud

kitchen market is worth INR 928 Crore in 2018-2019. The chain sector dominates this set-up, with a 66% share with the standalone format having a 34% share in the cloud kitchen market space.

Lower risks and investments, reduced operational costs, and a steadily increasing demand for food delivery are making cloud kitchens the most preferred restaurant format in the F&B space.

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