

RISE OF CLOUD KITCHENS AMIDST THE COVID 19 PANDEMIC

Dr. Arun Sherkar

Associate Professor, AISSMS College of Hotel Management and Catering Technology, Pune.

Dr. Mayola Fernandes

Assistant Professor, AISSMS College of Hotel Management and Catering Technology, Pune.

Dr. Seema Zagade

Professor, Maharashtra State Institute of Hotel Management and Catering Technology, Pune

Abstract

With the onset of the Covid 19 pandemic and normal life thus coming to a halt, the concept of cloud kitchen gained momentum. The purpose of this study is to ascertain the preference of cloud kitchens over restaurants during the pandemic. Food delivery globally has been experiencing massive growth, alongside rapid advancement in technology has given a further push to cloud kitchens. Additionally, the factor of hygiene and safety as a priority and changing sales strategy can further establish the vitality of cloud kitchens overall.

Keywords: Life in lockdown, cloud kitchens, ghost kitchens.

Introduction

The concept of cloud kitchen is not a fairly new phenomenon, but has a high amount of investment that has steadily increased over the years. Pre pandemic, food orders and delivery were managed by synchronous modes of communication like over the phone, personal references, advertisements and flyers in local newspaper and online food applications. (Kitchens et al., 2021) As technology took over, the operations were mainly managed online, which provided an opportunity to anyone having a kitchen facility could cater to the demand through websites, online applications and food delivery partners.

The virus that took the globe in its grasp since its inception in early 2020 and the subsequent lockdown measures have seen a substantial shift in demand, from in-restaurant dining towards home-delivered food. Cloud kitchens have been key to facilitating this move.

Cloud Kitchens:

Cloud kitchens are also referred to as ghost kitchens or virtual kitchens. Cloud kitchens by its virtue could be explained as a restaurant that does not have the capability of dine-in. It denotes a place where food is prepared and delivered at the door step by taking orders via calls and online ordering platforms. They do not primarily cater to dine-in services but are mainly into food preparation and delivery or liaise with food ordering portals such as Swiggy, Zomato, dine-in, in India (*Times of India*). Cloud kitchens offer varied meal plans, ranging from local, Indian specialties to global and even haute cuisine.

Impacts of the change from restaurants to cloud kitchens

Making Hygiene and Safety a Priority

With maintenance costs further reduced, cloud kitchens have been investing more to ensure the hygiene and quality of the food and packaging, since the beginning of the pandemic (*India Today*). Kitchens are equipped with infrastructure and the staff is well trained to follow the guidelines provided by the governing authorities. Daily temperature checks for kitchen staff and delivery staff along with regular cleaning, and sanitization of equipment and workstations is undertaken to ensure that the food is not contaminated in any manner. In order to meet the timely and systematic delivery to the customers, cloud kitchens make use of FSAs or their own employees for a personalised touch. This coupled with the advent of contactless delivery has enhanced the safety not only of customers, but staff as well.

Suitable Conditions

The restrictions on dine-in facilities for restaurants have completely changed in favor of food delivery (Gosai & Palsapure, 2020). Customers are heavily relying on food delivery apps for their needs. This is a growing opportunity for cloud kitchens, which can further expand to combine variations like standalone restaurants, multi-brand kitchens, or kitchens where restaurants can have the whole thing outsourced. The pandemic environment provides for a perfect opening to increase the market share of the Food and Beverage industry by making informed decisions taking into account the choices and needs of the customers. They can easily familiarize to changing customer preferences, which can lead to the rapid growth of cloud kitchens.

A Change in the Sales Strategy

The universal strategy of offering coupons and discount codes is being changed with the assurance of the delivery of hygienic and safe food. In the current Covid-19 fright, customers look for the trust that can be guaranteed by restaurants if they can guarantee them that the food is made in the most hygienic conditions and is delivered to them with no scope for infection. Customers do not falter in paying the extra amount if brands can ascertain to them that their safety needs are the first priority of the restaurants and delivery agents (Jones, 2020).

Lower Costs and Better Margins

The Food and Beverage industry has suffered economic losses like most industries during these troubled times, which is only getting worse with eminent lockdowns. Kitchens have to cut down on staff to maintain operations and are therefore preferring the cloud model since it only requires a minimal back-end staff, which is advantageous for both employers and employees in the present conditions (Chavan, 2020). Besides, operating cloud kitchens in the lockdown period is optimal, rather it has higher margins given the severe cost cuts in infrastructure and other dine-in facilities. With these margins they can redirect investments to increasing menus and offer competitive rates, leading to more revenue.

Change in Customer Demands

Cloud kitchens can adapt to change in demands much faster than restaurants that have been switching to online delivery in the face of this pandemic. Cloud kitchens have an edge in providing facilities like better packaging and contactless delivery. With families spending time together in lockdowns, the ordering pattern has shifted towards cost-effective meals (Choudhary, 2019). Healthy and nutritious food have also seen a swell in demand, with people trying to live a healthier lifestyle. Cloud kitchens find it easier in giving in to such demands as compared to other restaurants that will lose out on income if they don't keep up with the changing demands. Food items that were earlier exclusive to the dine-in menu are now added to home delivery menus to attract more customers.

Literature Review

Social media has been used most often in all of the cloud kitchen undertakings. This rise in use of social media has delivered an opportunity for the growth of cloud kitchen and the rise in number of potential customers. Cloud kitchen are known to attract customers for its unique dishes, the taste and quality of food, the variety in the number of fast food items offered and the hassle free availability at the doorstep (Nitesh Chouhan, 2019). The Cloud kitchen concept is cost effective, no fuss and the eminent future is for home delivery food and takeaway with the rise in restrictions put forth by governments for containing the pandemic. Cloud Kitchen enterprises advertise through social media marketing which is less costly as compared to big hoarding and bill boards (Kumar, 2019). Cloud Kitchen as a concept is an emerging trend and modern phenomenon accepted around the globe quite readily. Compared to restaurants and fast food outlets CAGR (compound Annual Growth rate) is very noteworthy for cloud kitchen operations. Multi cuisine restaurants and chain of restaurant have started implementing the concept of cloud kitchen to be in the competition. Takeaway food outlets that don't have the facility of dine-in within the premises, now have an option of setting up cloud kitchens. Cloud kitchen works as food production team with space for food preparation and delivery at doorstep of customers or takeaway by customers (H.M.Moyeenudin, 2020).

Research Methodology

Objectives

- To apprehend the need of cloud kitchens during the lockdown phases of the Covid 19 Pandemic.
- To explore customer preferences of cloud kitchens over restaurants.
- To identify and analyze the limitations of cloud kitchens.

The research involves both primary and secondary data. Specific procedures and techniques used to identify, select, process and analyze information about the topic.

Primary data-The primary data has been collected from people who order food online. A questionnaire was circulated which featured relevant questions for analysis of the topic chosen by me.

Secondary data-The primary data has been collected from the internet from journals, websites, pages, blogs, research papers and social media.

Sample size-The sample size of this research report involves 69 people who have been selected completely based on convenience and relevant to the study.

Sampling method

Random sampling method has been used to collect the data through a medium of questionnaire.

Data Analysis and Data Interpretation/ Findings



Figure 1

83% of the respondents know about cloud kitchens and have responded positively to the question, 17% respondents are unaware about what cloud kitchens are and hence have negatively answered the question.

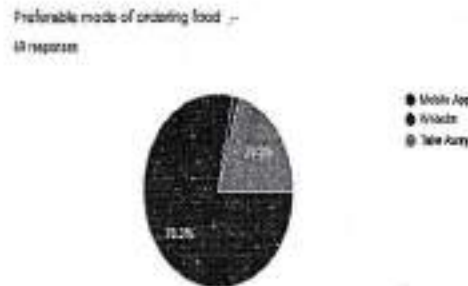


Figure 2

The highest number of participants i.e., 78.3% prefer ordering food through mobile applications. The other 20.3% prefer food take away from their favourite food joints. The remaining 1.4% participants prefer ordering food directly from the restaurants or food joints website.



Figure 3

Majorly participants prefer ordering food from restaurants. According to the data collected 73.9% of the participants order food from restaurants. Participants do order food from cloud kitchens but they are comparatively less in number. From the data there are 26.1% of the participants who order food do so from cloud kitchens.



Figure 4

Looking at the responses above 55% of the participants prefer ordering food from restaurants because of their liking for a particular cuisine and because the restaurant food is according to their personal preferences for taste. 37% of the participants order food from restaurants because they trust the brand and the quality, taste and quantity of food they serve. The remaining 19% of the people order food from restaurants because they have been visiting a particular restaurant for quite a long time and are loyal customers.

What according to you are the reasons for people's inclination towards ordering from cloud kitchens?

59 responses

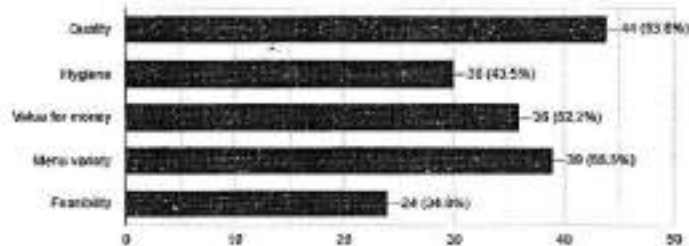


Figure 5

The major reasons why participants order food from cloud kitchens is because of the quality of food they serve, menu variety and value for money. Hygiene and feasibility are other reasons why participants prefer ordering food from cloud kitchens.

Do you feel that in the past year cloud kitchens have gained popularity over restaurants when it comes to ordering food?

59 responses



Figure 6

From the above data it is analyzed that cloud kitchens have gained popularity over restaurants when it comes to ordering food online. 79% participants agree to the question and responded positively. The remaining 21% participants responded negatively and saying restaurants still overpower cloud kitchens when it comes to ordering food online.

What according to you are the limitations faced by cloud kitchens?

59 responses

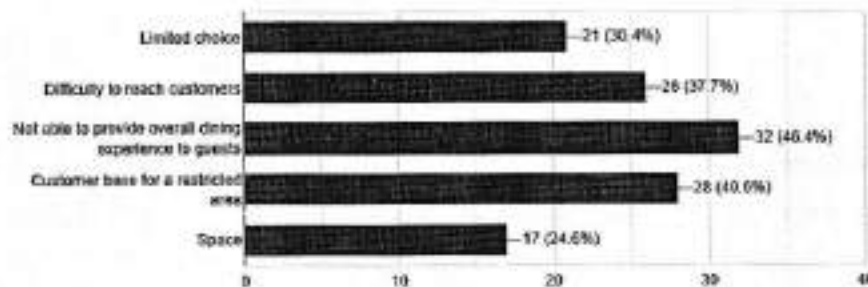


Figure 7

According to the responses received the major limitations for a cloud kitchen are that they are not able

to provide an overall dining experience to guests and they have a customer base for a restricted area. Other limitations according to respondents are that cloud kitchens face difficulty to reach customers, they offer limited choices of menu and it is difficult for them to find a space required to start a cloud kitchen.

Why do we need more cloud kitchens?
69 responses

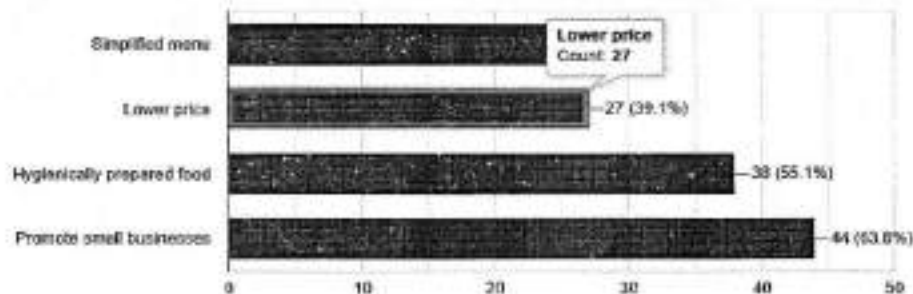


Figure 8

According to the responses there is a need for more cloud kitchens so as to promote small business in the city. 63% people say so 55% people say that cloud kitchens prepare food hygienically hence there is a need for more cloud kitchens. 34% participants say that cloud kitchens serve simplified menus. Simple and wholesome ingredients with no complexity is the main reason we need more cloud kitchens. Cloud kitchens have comparatively lower prices than restaurants as they have low operational costs. 39% participants have responded for lower costs.

Conclusion

To conclude, cloud kitchens are a new concept which do not have a physical dining area but prepare food and deliver it through online delivery applications to their customers. Cloud kitchens have become popular during the pandemic as people had no dining options available. Cloud kitchens serve food with good quality, taste and that too at a reasonable price. Cloud kitchens have lower operational costs, lesser number of staff required, no restriction of space, no dining area to maintain and hence can offer products of the same quality but at a lower price than that of restaurants.

Setting aside all the odds cloud kitchens have emerged to be a tough competition for the restaurant business in the world and in India. They have made a space for themselves in the market and are serving customers. All this to the extent that restaurants started following their business model during the pandemic to vail away their daily operating expenses and earn minimum profits. This shows that every difficult time gives us an opportunity to upgrade and innovate ourselves and the one who changes with the time is sure to sustain in any given situation.

Suggestions

- A limited choice of menu is a concern with customers, entrepreneurs can add menu variety for more customer satisfaction

- Since the customers have no access to kitchens there is a concern on the hygiene, entrepreneurs need to give customers the assurance of quality and hygiene, through ways of packaging and use of non-reusable containers, and vacuum packaging as this is need of the pandemic.
- Feedback from customers are important and implementing them gives an assurance to them and increases profitability.

References:

1. Chavan, S. (2020). The Qualitative Analysis Of Cloud Kitchen Emerging As A Viable Food & Beverage (F&B) Alternative Post COVID-19. *International Journal of Analytical and Experimental Modal Analysis*, XII(TX), 463–471.
2. Choudhary, N. (2019). Strategic Analysis of Cloud Kitchen – A Case Study. *Management Today*, 9(3), 184–190. <https://doi.org/10.11127/gmt.2019.09.05>
3. Gosai, M. K., & Palsapure, D. (n.d.). A Study on Cloud Kitchens As An Emerging Food And Beverage Industry. 36–48.
4. H.M.Moyeenudin, R. A. (2020). A Research on Cloud Kitchen Prerequisites and Branding Strategies. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 983-987.
5. India Today. (n.d.). <https://www.indiatoday.in/coronavirus-outbreak/story/restaurant-sector-losses-covid19-coronavirus-lockdown-curbs-maharashtra-delhi-1788308-2021-04-07>
6. Jones, L. Y. and G. (2020). Harvard Business School. <https://hbswk.hbs.edu/item/coronavirus-careers-cloud-kitchens-are-now-serving>
7. Kitchens, H., Big, N., & Trend, C. (2021). Why 'Host Kitchens' are the Next Big COVID Trend. April, 1–10.
8. Kumar, P. R. (2019). Cloud kitchen: A Rising Stone for the Food Service Industry. Retrieved from www.entrepreneur.com: <https://www.entrepreneur.com/article/337569>
9. Nitesh Chouhan, H. V. (2019). Cloud Kitchen Market. Retrieved from www.alliedmarketresearch.com/: <https://www.alliedmarketresearch.com/>
10. Times of india. (n.d.). Retrieved July 4, 2021, from <https://timesofindia.indiatimes.com/city/pune/weekend-restrictions-drive-online-food-orders-at-many-restaurants/articleshow/82010117.cms>