

Dr. Megha K. Juvekar, Assistant Professor, Department of Commerce, Nirmala Memorial
Foundation College of Commerce and Science
Ms. Ridhisha Tarkari, Research Scholar

ABSTRACT

This study explains cloud kitchen and its various model, in which entrepreneurs can take up business. The researcher states the market of cloud kitchen in India. The market study of cloud kitchen shows the profit, cloud kitchen has generated and is estimated to generate. The researcher analysis the factors determining the upward growth trajectory of cloud kitchen with the help of PESTEL analysis. With direct competition with aggregators, new players are expanding the overall market. It fairly seems possible that in the future even lower-end traditional restaurants also will migrate to new norms and methods and the new entrepreneurs who want to start the business can consider cloud kitchen an option. Cloud kitchen hence seems viable option for its enhanced efficiency in reach of customers, costs, time, ease, and regulated operations.

Keywords: Cloud kitchen, delivery only, models, growth

INTRODUCTION

The food industry has experienced several technical advancements due to increasing competitiveness and ever-evolving technology. One such idea that recently sneaked into the food industry and swept the world restaurant scene by storm is Cloud Kitchen. According to reports, the cloud kitchen concept is one of the fastest growing segment in the restaurant industry and is regarded as the more intelligent restaurant operation method.

A cloud kitchen utilizes a commercial kitchen for the purpose of preparing food for delivery or takeout only, with no dine-in customers. Cloud kitchens enable restaurateurs to expand an existing restaurant or start a virtual brand at minimal cost. This provides restaurateurs with the opportunity to scale, explore new markets, or trial new concepts. Many restaurants use cloud kitchens as an experimental space, optimizing staff and inventory while testing new ideas.

Customers order online on food delivery apps (such as Grubhub, Doordash, etc.) or directly from the virtual restaurant via their own app, website, or telephone number. The food is prepared in production kitchens (aka “ghost kitchen”) from which it is collected by drivers and taken to customers. The model allows one or more virtual restaurants to operate from a delivery-optimized kitchen without the overheads of a dining room or front-of-house staff.

This business model allows restaurants to diversify and expand their customer base, while cutting back the two biggest operational costs—rent and labor. With low overhead and only kitchen staff required, businesses can minimize costs and maximize orders. Being delivery-only, cloud kitchens do not need to create an experiential dine-in experience for customers. They do not have to worry about high rental costs, large capital investments, restaurant interiors, guest facilities, and front of house staff.

Since customer acquisition is achieved through digital platforms, cloud kitchens heavily invest in technology that leverages the entire business operation. Apart from technology, major investments can also include well-equipped kitchen infrastructure and trained manpower, such as chefs and delivery drivers. Some cloud restaurants rely on their own delivery fleet to personalize their service, while others leverage aggregators for delivery.

MARKET OF CLOUD KITCHEN

The global cloud kitchen market size grew from \$56.67 billion in 2022 to \$62.44 billion in 2023 at a compound annual growth rate (CAGR) of 10.2%. The cloud kitchen market size is expected to grow to \$92.52 billion in 2027 at a CAGR of 10.3%.

The cloud kitchen market includes revenues earned by entities by providing food delivery services, accepting online orders, payment processing services. The market value includes the value of related goods sold by the service provider or included within the service offering. Only goods and services traded between entities or sold to end consumers are included. The market value is defined as the revenues that enterprises gain from the sale of goods and/or services within the specified market and geography through sales, grants, or donations in terms of the currency (in USD, unless otherwise specified).

The independent cloud kitchen segment held the largest revenue share in 2020, accounting for around 60% of the overall market. The trend is expected to continue over the forecast period, thanks to the rising number of standalone brands serving customers from a single location. Independent cloud kitchens primarily target consumers that prefer a single cuisine type and largely depend on third-party channels for delivery. The increasing consumer preference for international cuisines, fast foods, and online ordering is expected to drive the growth of the segment.

FACTORS DETERMINING THE GROWTH OF CLOUD KITCHEN

PESTEL ANALYSIS:

Political	<p>Government all over the country have created framework or policies to comply with for any company dealing with food related items like cleanliness of kitchen, transporting and storing standards, minimum requirement of laborers to encourage employment also. Tax reforms / policy related to online delivery might also the cloud kitchen industry.</p> <ul style="list-style-type: none"> ● Rise is young and working population ● Rise in literacy
Economical	<p>Inflation rate affects the cloud kitchen as it increases the cost of production basically the cost of raw materials. While ordering through online consumers are giving importance to privacy, security, information quality and payment system's efficiency. The online ordering systems help the consumers to select the product that matches with their expectation by easily comparing with all competitive products</p> <ul style="list-style-type: none"> ● Increases in customer disposable income ● Cost effective in nature ● Tie-ups with online food delivery websites

	<ul style="list-style-type: none"> ☒ Offers/Discounts provided by online delivery services ☒ Payment system efficiency ☒ Impulsive shopping channel
Socio-Cultural	<p>Urbanites with more hectic lifestyles may use delivery services more often. But even urban consumers must balance lifestyle preferences against budget constraints, especially in today's bleak economic climate. The sudden outbreak of the COVID-19 pandemic and the consequent implementation of nationwide lockdowns have prompted restaurateurs to implement a delivery-only model over a dine-in business structure to serve the customers more efficiently</p> <ul style="list-style-type: none"> ☒ Change in taste preferences ☒ Hectic life schedule ☒ Increase in demand for home cooked traditional meal at affordable prices by customers ☒ Influence of COVID-19
Technological	<p>Technology has helped cloud kitchen to roll multiple brands from same kitchen. Technological advancement in terms of packaging food labels, food brands and food production can give competitive edge. Use of artificial intelligence play an increasingly important role in accurately predicting and forecasting orders. Cloud kitchen are using their websites to provide information on calorie intake, allergy nutrition value & promotion. The smart devices are convenient, easy to use and effective. These features help the customers place the food order through online and restaurants can provide better service to their customers</p> <ul style="list-style-type: none"> ● Increase in use of smart phones ● Easy access to the internet

	<ul style="list-style-type: none"> ☒ Technological advancement ☒ Increasing demand for online food delivery services ☒ Information from interactive media
Environmental	<p>The online food industry has adopted a greener strategy because of changing government legislation and convention. Adopting waste management, environmental movements, energy saving measures and children food strategy due to severe quality and safety standards. Adopting more environmentally friendly strategy has resulted in increased customer loyalty and long term development.</p> <ul style="list-style-type: none"> ● Increase in carbon footprint ● Use of ecofriendly packaging
Legal	<p>Food quality and nutrition standards have been influenced by food norms and regulations. The food items should be produced in safe, clean and healthy environment. Packaging, waste management and marketing and law create new demands in the online food industry.</p> <ul style="list-style-type: none"> ☒ Less paper required to start cloud kitchen ☒ Timely customer service- timely delivery, customer query handling, return/ refund policy

OBJECTIVES

1. To understand the concept of Cloud Kitchen and its models.
2. To understand the market of Cloud Kitchen in India
3. To determine the factors responsible for the growth of cloud kitchen with PESTEL analysis
4. To demonstrate the viability of a cloud kitchen-based model by in-depth examination and analysis via case studies

REVIEW OF LITERATURE

Nita Choudhary (2019). in the case study titled “Strategic analysis of cloud kitchen- a case study.” The study explores the world of cloud kitchen in terms of business model, marketing strategies and analysis in terms of customers, competitors, market and environment. The study focuses on the intensity of competition, cloud kitchen service needs to continuously analysis the market position and adapt to market changes with innovative marketing strategies.

Ms.Kinjal Madhukant Gosai , Dr.Deelip Palsapure (2020). in the research paper titled “A Study on Cloud Kitchen as An Emerging Food And Beverage Industry” The purpose of the study is to determine customer perception towards various factors influencing ordering food from cloud kitchens through Online Food Delivery apps. The research also aims at understanding the competition, sustainability and profitability of cloud kitchens in the food and beverage industry through Porter’s Five Force Model. The findings of the study suggest the cloud kitchen industry to be a lucrative segment considering the current business scenario and conveys favorable perception of

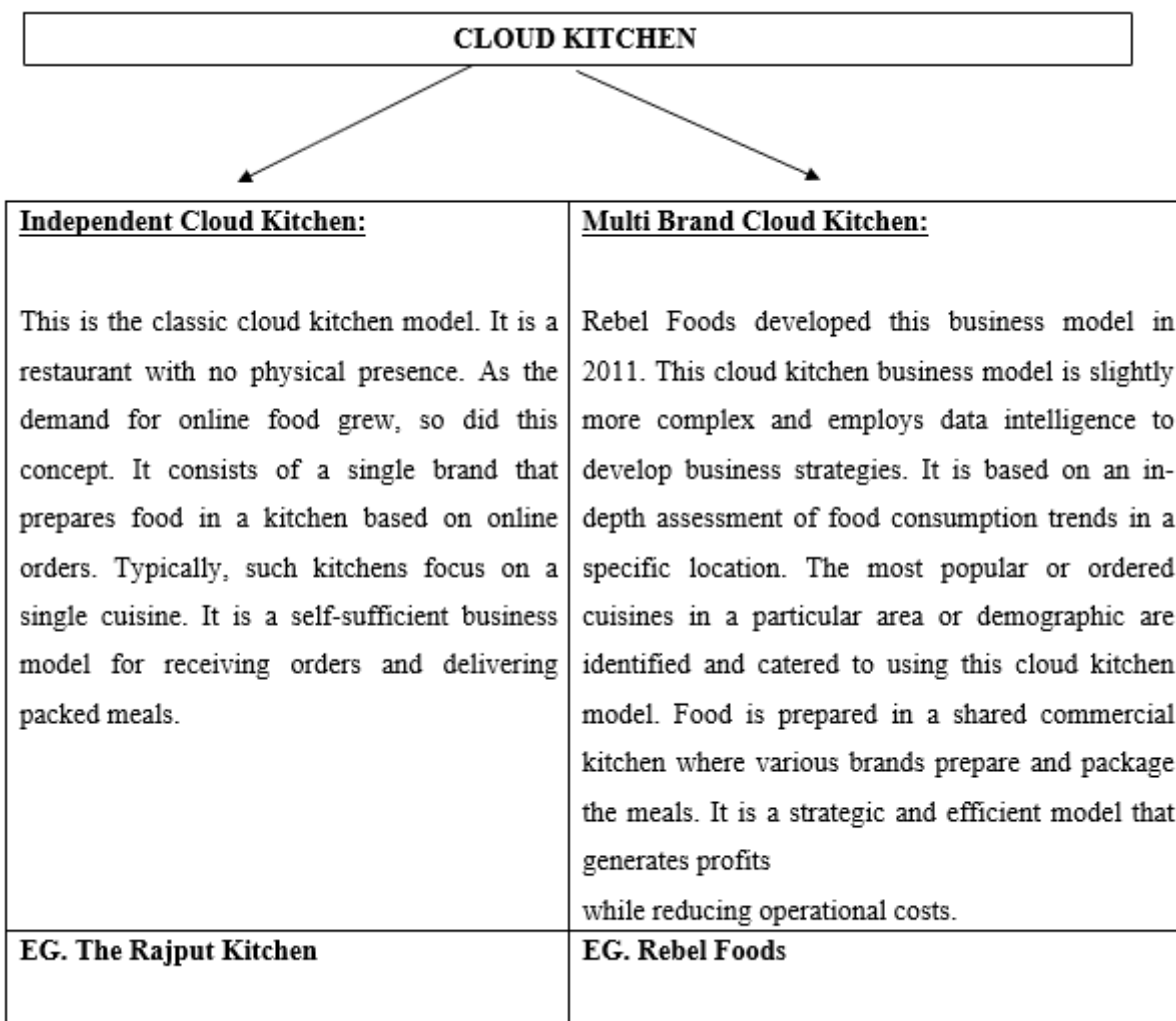
Twinkle Beniwal, Dr Vidhu K Mathur (2021). in the research paper titled “Multi-Brand cloud kitchen: An Efficient route”. This study examines that Cloud Kitchens are more efficient than traditional dine-in restaurants as they are customized for delivery only operations and it is also possible for cloud kitchen to run multiple brands at one location which is impossible for a restaurant



Dr Arun Sherkar, Dr Mayola Fernandes, Dr Seema Zagade (2021). in the research paper titled “Rise of cloud kitchen amidst the Covid-19 Pandemic” studies the concept of cloud Kitchen. The purpose of this study is to ascertain the preference of cloud kitchens over restaurants during the pandemic. The Research focuses on the factor of hygiene and safety as a priority and how changing sales strategy can further establish the vitality of cloud kitchens overall.

RESEARCH METHODOLOGY

The research is totally based on Secondary Data. Secondary data included collecting information about various cloud kitchen and restaurants setup cost, the industry standards, etc from the various portals from the internet, journals, magazines etc.

CASE STUDIES ANALYSIS OF CLOUD KITCHEN



<p>About- The Rajput Kitchen promises to offer the finest food experiences from across the vast historical influence of different Rajput Dynasties, retaining the authenticity of each dish while preparing them using their original traditional methods and recipes in collaboration with some of the oldest known artisans in the from each region.</p> <p>Logo</p>  <ul style="list-style-type: none"> • Name of the owner- Prashasti Singh • Web sitelink: https://www.therajputkitchen.com/ • Contact no- 9372410103 • Location- Bandra West • Social Media Presence- Facebook and Instagram • Online Platform- Swiggy & Zomato <p>Analysis: The following are the highlights of, The Rajput Kitchen</p> <ul style="list-style-type: none"> • Highlighting the history of Rajput Gharana • Pioneer in single cuisine 	<p>Rebel Foods is an Indian online restaurant company which operates 11 cloud kitchen brands including <u>Faasos</u>, Behrouz Biryani and Oven Story. It is the largest cloud kitchen restaurant chain in the world, operating more than 450 cloud kitchens in 10 countries, as of April 2022.</p> <p>Logo</p>  <ul style="list-style-type: none"> • Founders- Jaydeep Barman, Kallol Banerjee • Revenue- 859 crores INR (US\$110 million, FY22) • Subsidiary- Faasos's • Founded- 2011 • Headquarters- Mumbai • Area Served- Worldwide • Subsidies – Smoor • No of employees- 6000 • Online Platform- EatSure, Swiggy & Zomato <p>Analysis: The following are the highlights of, Rebel food</p>
<ul style="list-style-type: none"> • Vocal about regional food • Informative website about the food, owner, location, and its social media presence 	<ul style="list-style-type: none"> ☑ The world's largest chain of internet restaurants ☑ Powered by an operating system for building and scaling brands globally ☑ The right balance between exquisite culinary craftsmanship and technological infrastructure ☑ Outsources its cloud kitchen facility to third- party food and beverage chains such as Wendy's, Natural Ice Cream, Slay Coffee and Anand Sweets through the Rebel Launcher Program, ☑ The company processes orders on its online food ordering platform called <u>EatSure</u>, as well as other online food aggregator and ordering services. ☑ It also sells at its cafeterias, lounges, and kiosks.

LIMITATIONS OF THE STUDY

The study is based on secondary data from various research papers, journals, and books. The PESTEL analysis done to understand the market of cloud kitchen is based on the researchers view point and it may vary individual to individual. Also, the factors responsible for growth of cloud kitchen is based case studies analysis.

FINDINGS

The pandemic has undoubtedly triggered the rise of cloud kitchens, which are also known as ghost restaurants or dark kitchens. According to a report by RedSeer Management Consulting, cloud kitchens are set to be a \$2 billion industry in India by 2024, up from \$400 million in 2019. A favorable outlook for the market is also influenced by other reasons, such as the rapid development of cloud kitchens and strategic alliances between significant businesses to improve ghost kitchen services. The corporate culture, long hours, and lack of interest in cooking at home are all factors that influence the population. In the next five years, more accessible payment alternatives, cloud payments, and secure payment routes will contribute to the expansion of the cloud kitchen industry in India.

CONCLUSION

After reviewing the Secondary data collected via internet, journals, and magazines, with the explanation of the basic factors responsible for the higher profitability of a cloud kitchen in the table above, it is conclusive that, if an entrepreneur goes the cloud kitchen way have a fair share of advantages such as low cost of entry, low overhead cost and low operating cost, The cloud kitchen without any doubt can turn out to be a more profitable venture. Even though there are certain limitations like late delivery, dependence on internet etc. Cloud kitchen is the ultimate need of time over traditional restaurants.

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