Kolazione (Run)

Market Research internship

Cloud kitchens, also known as virtual kitchens or dark kitchens, are commercial kitchens that are designed to prepare food for delivery or takeaway. They don't have a dining area or seating arrangement for customers. Instead, they focus on fulfilling orders placed online or through food delivery apps. The following are some of the most common types of cloud kitchen business models:

- Single brand cloud kitchen: This type of cloud kitchen focuses on preparing food for a single brand or concept. For example, a cloud kitchen might only prepare and deliver pizza, or they might only offer vegan cuisine. The advantage of this model is that it allows for a high degree of specialization, which can help to build a strong reputation for a particular type of food. However, it may limit the potential customer base and may require a higher initial investment to establish the brand.
- 2. Multi-brand cloud kitchen: This type of cloud kitchen prepares food for multiple brands or concepts. For example, they might offer several different types of cuisine, such as Chinese, Indian, and Italian. This model allows for a larger potential customer base, as it caters to a wider range of tastes and preferences. However, it may be more challenging to maintain consistent quality across multiple brands.
- 3. **Franchise cloud kitchen:** This type of cloud kitchen operates as a franchise, where the central kitchen supplies food to multiple franchisees who operate their own delivery-only kitchens in different locations. This model allows for faster expansion and brand recognition, but it may require a higher initial investment to establish the franchise and maintain quality control.
- 4. **Shared kitchen space:** This model allows multiple food businesses to share a single kitchen space, equipment, and staff. This reduces the cost of starting a food business and allows for greater flexibility in terms of menu and branding. However, it may be more challenging to maintain consistency in quality and cleanliness across multiple businesses.

Now, let's look at the costs associated with each type of cloud kitchen business model. The cost of starting a cloud kitchen can vary depending on several factors, including the size of the kitchen, equipment, and location. In general, the costs can be broken down into three categories:

- 1. **Fixed costs:** These are the costs that don't change based on the volume of food being prepared or sold. Examples include rent, equipment, and licensing fees. For a single-brand cloud kitchen, the fixed costs may range from \$50,000 to \$200,000, while for a multi-brand cloud kitchen, it may range from \$150,000 to \$500,000. The cost of a franchise cloud kitchen may range from \$100,000 to \$1,000,000, depending on the brand and level of support provided.
- 2. **Variable costs:** These are the costs that vary based on the volume of food being prepared or sold. Examples include the cost of ingredients, packaging, and labor. The variable costs may range from 25% to 40% of the revenue generated.

3. **Marketing and advertising costs:** These are the costs associated with promoting the cloud kitchen brand and attracting customers. The cost may vary depending on the marketing strategy and the target market.

In conclusion, the cost of starting a cloud kitchen business can vary depending on the type of business model, size of the kitchen, equipment, and location. While a single-brand cloud kitchen may require a lower initial investment, a multi-brand or franchise cloud kitchen may provide a larger potential customer base. It's essential to carefully consider the costs and benefits of each model before making a decision.

Commercial kitchens that specialise in preparing food for delivery or takeout are called cloud kitchens. A dining space or seating arrangement is not available. Instead, they prioritise taking care of customers who order from their website or mobile app. Most often encountered models for running a cloud-based kitchen are listed below.

- First, there is the single-brand cloud kitchen, which caters exclusively to one company's products.
 As an illustration, a cloud kitchen may just serve pizza for delivery. The success of a niche cuisine can be bolstered by adopting this strategy, which allows for extensive specialisation. Yet, it may necessitate a larger preliminary expenditure to establish the brand's credibility and may restrict the prospective client base.
- With a multi-brand cloud kitchen, for example, food is prepared for more than one restaurant chain or restaurant concept. They might have Chinese, Indian, and Italian dishes, to name a few examples. Because it accommodates a wider variety of consumers' tastes, this approach has the potential to bring in more revenue. Yet, it may be more difficult to keep quality stable across different brands.
- Thirdly, there is the franchise cloud kitchen, in which a single central kitchen serves as the supplier for several franchisees who each run their own delivery-only restaurants in various locations. This business structure facilitates rapid growth and name recognition at the expense of somewhat greater startup costs in order to build the franchise and keep quality under wraps.
- Having many eateries share a single commercial kitchen saves money by pooling resources
 including space, equipment, and labour. This lowers the barrier to entry for new restaurants and
 gives owners more leeway in the kitchen and with their brand. Yet, it could be trickier to ensure
 quality and sanitation across several establishments.
 - Let's have a look at the prices of the various cloud kitchen models. Many factors, such as kitchen size, equipment, and location, might affect the initial investment required to launch a cloud kitchen. The overall price tag can be divided into three groups:
- First, there are fixed costs, which don't alter no matter how much food is made or sold. Rental, hardware, and permit costs are just a few examples. The up-front investment for a single-brand cloud kitchen can be between \$50,000 and \$200,000, while that for a multi-brand cloud kitchen can be between \$150,000 and \$500,000. Based on the name recognition and quality of service offered, the price of a franchise cloud kitchen might be anywhere from \$100,000 to \$1,000,000.
- Third, we have marketing and advertising, or the money spent to get the word out there about Cloud Kitchen and bring in new consumers. It all comes down to marketing strategy and who you're trying to reach with your product.

In conclusion, the initial investment required to launch a cloud kitchen business might differ widely across different business models, kitchen sizes, equipment choices, and geographic regions. A multi-brand or franchise cloud kitchen could have a wider customer base but may require a larger initial investment than a cloud kitchen serving only one brand. You should weigh the advantages and disadvantages of each model thoroughly before making a choice.

Table 1: Estimated costs of a virtual restaurant model

Expense	Estimated Cost
Rent	\$2,000 - \$10,000/month
Equipment	\$50,000 - \$100,000
Labor	\$15,000 - \$30,000/month
Ingredients	\$5,000 - \$15,000/month
Packaging	\$1,000 - \$5,000/month
Marketing	\$2,000 - \$10,000/month
Delivery	\$2,000 - \$5,000/month

Table 2: Estimated costs of a shared kitchen model

Expense	Estimated Cost
Rent	\$500 - \$3,000/month
Equipment	\$20,000 - \$50,000
Labor	\$10,000 - \$20,000/month
Maintenance	\$2,000 - \$5,000/month

Table 3: Estimated costs of a delivery-only model

Expense	Estimated Cost
Rent	\$2,000 - \$10,000/month
Equipment	\$50,000 - \$100,000
Labor	\$10,000 - \$20,000/month
Ingredients	\$5,000 - \$15,000/month
Packaging	\$1,000 - \$5,000/month

Sources:

- "The economics of cloud kitchens: A comprehensive guide" by Siddharth Shankar, published on YourStory.com (https://yourstory.com/2020/07/economics-cloud-kitchens-comprehensive-guide)
- "The economics of ghost kitchens" by Nell Lewis, published on Raconteur.net
 (https://www.raconteur.net/business-innovation/the-economics-of-ghost-kitchens/)

Regards
Sairam Nayak Kunsoth
sairam20@iitk.ac.in
3rd year UG, Mathematics and Scientific Computing
IIT Kanpur