

To Study the Awareness and Emerging Concept of Dark Kitchen from Customer's Perspective

Authors

Mr. Shailendra P. Darekar¹

Assistant Professor, AISSMS College of HMCT, Pune

Dr. Kiran M. Shende²

Associate Professor, AISSMS College of HMCT, Pune

Mr. Hammad Shaikh³

Student Final year BHMCT, AISSMS College of HMCT, Pune

ABSTRACT

Dark kitchen is an emerging trend in hospitality industry. The world is evolving by means of the e-commerce trade and hospitality industry is not an exception to this. The concept of "Dark kitchen" includes the provision of foods through takeaways and home deliveries. This process is operated completely by using e-commerce. The vendor is available on the customers phone or screen and could be contacted through mobile apps and online portals. The process of communicating the available food menu, taking orders, tracking service and delivery happens in a virtual environment. This conversation is mainly monitored across the screens. In case of any need of personal contact, there is also a facility of communication through phone calls. This is mainly to resolve any specific query that the customer might have. It mainly caters the crowd, who would want services at doorstep or for to whom, time and travel is a matter of concern and inconvenience.

This study had focused upon the customer's perspective towards online food ordering from a dark kitchen and its acceptance in the emerging market conditions.

The study was based on the information and data collected through a structured questionnaire from 100 customers using dark kitchens for ordering food.

Keywords: Take away outlets, Food Deliveries, Dark Kitchens.

INTRODUCTION

"I won't be impressed with technology until I can download food"

Well now there is a way to download food, confused? As we know that the e-commerce have introduced online food ordering in hospitality industry, as now one can download the food on finger tips.

A Dark kitchen refers to food that is prepared at separate takeaway premises rather than a restaurant. As compared to a usual takeaway format, orders are placed online, without the option for the public to enter the premises as the same would be delivered at their doorstep.

The consumers aren't aware of the location of these kitchens where the food is made. This has rightly given rise to the name 'dark kitchens'. As more food businesses choose to operate out of dark kitchens, the outlet has to hold to the same level of standards as restaurants.

The Rise of Dark Kitchens

With a rapid increase in online food ordering in the industry there was need to deliver food super-fast and cost-effective as compared to the restaurants. The restaurants are already engaged in their dining and have huge loads on the kitchen which leads to delay in food delivery. The restaurant also have many overheads like bigger investment, wages, ambience etc. leading to the automatic rise in food cost. This is where the emergence of dark kitchen concept was observed as it has very less investment, low operating cost and fast delivery services.

The pros of using dark kitchens

Lower costs: The operator does not have to worry about rent, shop-fitting or design, or other property-related costs with dark kitchens as compared to restaurants where, highly sought-after locations with high footfall and top-class staff are expensive to find and keep. The cost is involuntarily lowered, if the operator doesn't have to accommodate diners, employ waiters, or invest in decorative furnishings, resulting in fewer costs.

New channels to market: Dark kitchens can be seen as an opportunity to expand via delivery to areas without incurring the costs of a fully-functioning restaurant. Such ventures are mutually profitable to the vendor as well as the customer.

The cons of using dark kitchens

A loss of control and consistency: Even if you man the dark kitchen with your own staff, the logistics involved in delivery can affect the quality of the food that your customers end up eating. You may grow top line, but you need to consider if delivery will impact the quality and consistency of the food delivered.

Decreasing your brand value: Modern diners are willing to pay a premium for a brand that they recognize and value, but what if you remove the actual on-site guest experience that helps to create that brand? As, customers never come into one of your restaurants as per the dark kitchen concept, there is no impact on their understanding of what you offer with relevance to a brand.

Market acceptance:

India has diverse range of customers who order food from different perspectives, such as cuisine, religion, time, pricing, discount and many more. To study the behaviour of the customer and what motivates them to order food is important to know before investing in a dark kitchen. For example “if the location of a dark kitchen is in an area where the customers are more religious a kitchen serving beef and pork will not succeed whereas if the outlet is situated near IT parks; serving single portion meals will get a huge response as compared to the outlet serving ala-cart for more than single person”

LITERATURE REVIEW

1. The role of attitudes, subjective norm, perceived control and habit in the consumption of ready meals and takeaways, had examined a planned behaviour of consumption of ready meals and purchases from takeaway. The attitudinal food products were best at behavioural intention. The food takeaway staff should have good knowledge about the customer's food allergies. There were many misunderstanding between the customers and the outlets. There was confusion about allergies such as lactose intolerance, gluten etc. some customers didn't inform them about their allergies which resulted in delivery of food that was allergic and further made a negative impact on the restaurant reviews. The study says that the outlet later started tele-calling the customer to confirm any specific allergies or special requirements by them. The paper also mentions that the restaurant managers and owners should make aware the concerned staff about the food allergies.
2. Consumer perceptions of food safety had explained and investigated the understanding of public perception of hygiene standard in eating places and their knowledge of inspection system. According to them, services received through tele-orders were found to be alarming experiences of food poisoning, and a widely spread belief that eating from such places may have resulted in illness; yet people continue to eat out and purchase takeaways regularly. Every serve has claimed that the food hygiene was most important for them. Assessment of hygiene was mainly based on aesthetics.
3. The impact of hot food takeaways near schools on obesity: a systematic review of the evidence, had explained that the obesity is the greatest health issue for this generation. As the outlets near schools provide food at a lower price make it affordable for the non-earning customers it has impacted a lot on their health. They have claimed that their study compares anthropometric measures with geographical location of food takeaways to find correlation between environment and students' obesity. They have proved and have good evidence of food takeaways in deprived areas, students spent time in deprived neighbourhoods' tent to eat more fast food and have higher BMIs.
4. Characterizing food environment exposure at home, at work, and along commuting journeys using data on adults, had explained socio-ecological models of behaviours and suggested that dietary behaviours are potentially shaped by exposure to the food environment. They have proven that on

an average work and communicating environment each contributes to food-scapes equally to residential neighbourhoods.

5. Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight. had examined the association between environmental exposure of take ways food outlets, takeaway food consumption, and body weight, while accounting for home, work place etc. according to them Exposure to takeaway food outlets in home, work, and commuting environments combined was associated with marginally higher consumption of takeaway food, greater body mass index, and greater odds of obesity. Government strategies to promote healthier diets through planning restrictions for takeaway food could be most effective if focused around the workplace.
6. The challenges of interventions to promote healthier food in independent takeaways, studied about the food available from takeaways, pubs and restaurants particularly that are sold by independent outlets, is unhealthy and its consumption is increasing. These food outlets are therefore important potential targets for interventions to improve diet and thus prevent diet related chronic diseases. Participants emphasized independent takeaways as particularly challenging, but worthwhile intervention targets. Participants perceived that interventions need to take account of the potentially challenging operating environment, particularly the primacy of the profit motive.
7. Takeaway food and health, had said that the takeaways or fat food has been tempting target for the public health. According to them people with ready access to takeaway food will eat more. Take a novel approach to describing food environment exposures. Unlike most research, which considers only the home neighbourhood, this study measured food outlets around the workplace and along commuting routes as well as near the home. The authors even adjusted the commute route “buffer” based on travel mode: because drivers might deviate farther from their route than other commuters, Burgoine and colleagues counted takeaway outlets within 500 m of the route for drivers and only 100 m for pedestrians and cyclists.
8. A study on tam: analysis of customer attitudes in online food ordering system, According the research while ecommerce is rapidly spreading around the world the food industry also began it take its place in the growing areas. They investigated the factors that influence the attitude of internet users towards online food ordering among university students. It uses the Technology Acceptance Model as a theoretical grounding to study adoption of using the Web environment for ordering food. Trust, Innovativeness and External Influences are added to the model as main factors that influence internet users’ attitudes.
9. Technology at the dinner table: Ordering food online through mobile apps, Journal of Retailing and Consumer Services, the study says that online food delivery aggregation is expanding choice and convenience allowing customers to order from a wide range of restaurants with a single tap. The take away outlets are going through a drastic change as increase in demand of the food deliveries at home or work place. According to him the outlets now have a wider range of customers to deliver and increase their business.
10. Consumers’ satisfaction towards digital food ordering had explained association between demographical characteristics and overall satisfaction, to analyze the multiple response on the preference of digital food service portal, to identify the reason for using mobile application to order foods online, to rank the foods preferred on digital food ordering, to find out the best predicting factor that influences to choose digital food portal services.

OBJECTIVES OF THE STUDY:

1. To understand the awareness of dark kitchen concept.
2. To study challenges and merits of dark kitchen.
3. To study market acceptance of dark kitchens.

- To understand investment opportunities of dark kitchens.

RESEARCH METHODOLOGY

This was one of the most integral part of study. In order to carry out this research study the insights of the objectives was studied. The parameters pertaining to analysing the emerging trend of dark kitchen were identified and were floated in the form of a questionnaire. This feedback from various targeted respondents / Customers was collected with the help of the survey questionnaire. It was circulated amongst mixed samples of various consumers using online portals or Mobile Apps for ordering their food. This survey was specifically carried out to evaluate and fulfil the set objectives for the study.

Type of Research: A descriptive form of research was used to study the various parameters pertaining to dark kitchen operations and how they are adopted by various users. This also includes surveys and fact finding enquiries in different manner.

Methods of Data Collection

Primary data - was collected from the mixed sample of various consumers using portals for ordering food, Primary data was collected through survey in the following ways:

- Personal Interviews:** The answer was sought to a set of pre-conceived questions through personal interviews and the data was collected in a structured way.
- Questionnaires:** Considering the Reviews, and the additional inputs, one questionnaire was prepared and distributed to various respondents.
- By observation:** The data was collected by observing the non verbal behavior to understand dynamic behavioral process.

Secondary data – was collected from published / unpublished literature on pertaining to the topic and how the concept is now emerging in the current market scenario and also the latest references available from the journals, newspapers, research publications and magazines, past records and other relevant sources available online.

Questionnaire – Design and implementation: The questionnaire design was done with the aid of experts in statistical techniques and taking into account the depth needs & objectives of the study. The questionnaire was administered to the sample population and sample size.

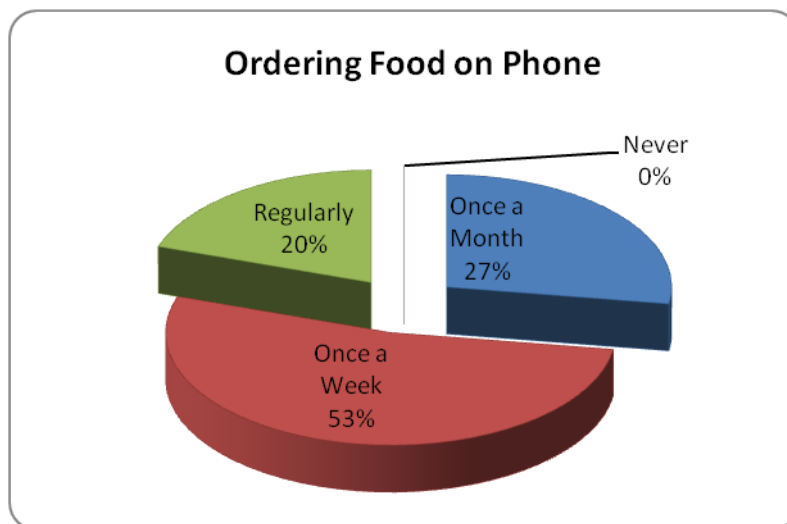
Sampling Techniques: To conduct this study different customer were selected who are using online portals or mobile apps for ordering their food, to achieve the minimum sample requirement a total of 150 questionnaires were distributed and in return 100 responses were received.

DATA ANALYSIS & INTERPRETATION

The data collected was analyzed using basic and advanced analytical tools. This also includes the detailed analysis of the data which was conducted with the purpose of attaining the set objectives of the research. Mentioned below is the analysis which is presented graphically and in tabulated form for better interpretation. The Interpretation of the collected data was done by drawing inferences from the collected facts after the analysis of the study.

Table I – Frequency Analysis – Ordering Food on Phone for Delivery or Take Away

Frequency				Total
Once a Month	Once a Week	Regularly	Never	
27	53	20	0	100%

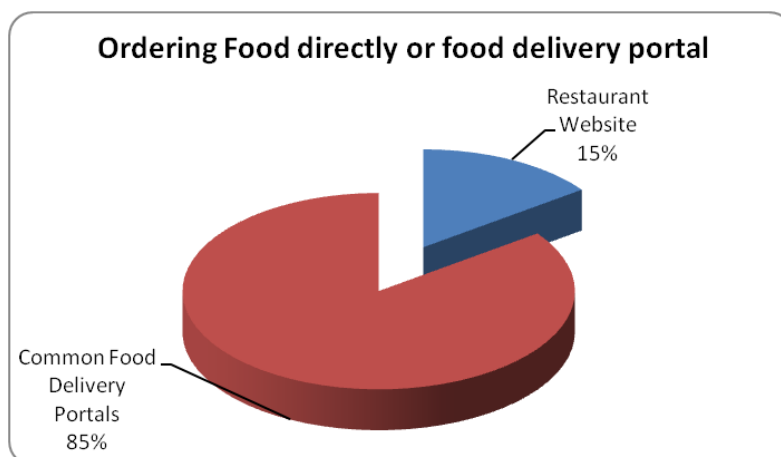


Observation: According to the above chart it can be stated that majority of the respondents i.e. 53% were of an opinion that they order food once a week, however 27% of the respondents were ordering once a month, 20% of the respondents are ordering food on regular basis.

Interpretation: Most of the customers like to order food through online portals as it is convenient and time saving and a user friendly option.

Table II – Frequency Analysis – Ordering Food directly from restaurant website or other common food delivery portal

Frequency		Total
Restaurant Website	Common food delivery portals	
15	85	100%

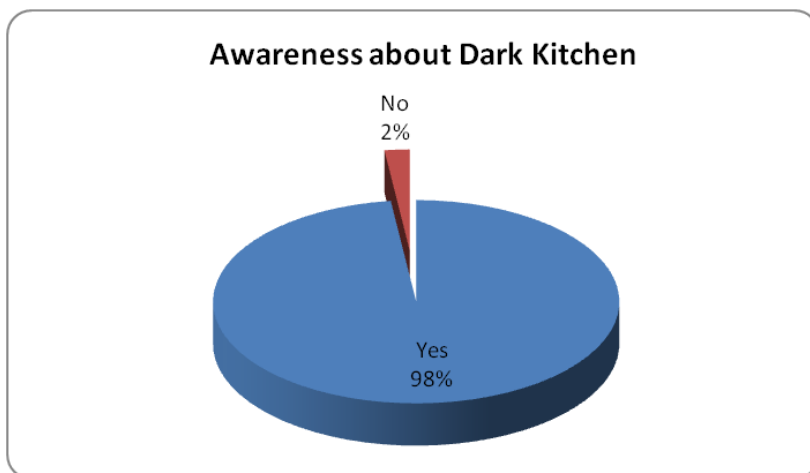


Observation: According to the above chart it can be stated that majority of the respondents i.e. 85% were using common delivery portals and Mobile apps for ordering the food, whereas 15% of the respondents were using restaurant websites for their food ordering.

Interpretation: Most of the customers use common food delivery apps rather than specific restaurant app because they get to choose from a wide variety of options on the app and have a lot more to choose from.

Table III – Frequency Analysis – Awareness about Dark Kitchen / Takeaway Concept

Frequency		Total
Yes	No	
98	2	100%

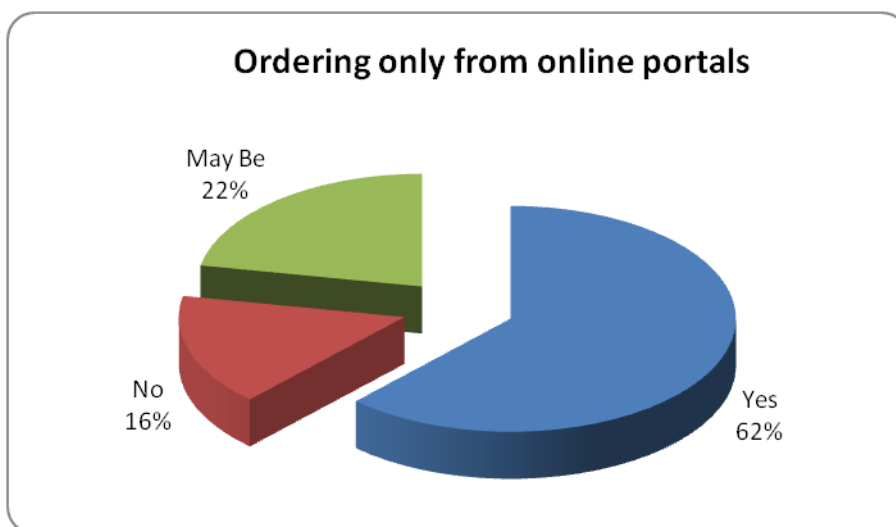


Observation: According to the above chart it can be stated that majority of the respondents i.e. 98% were aware about the concept of a dark kitchen, whereas 02% of the respondents were unaware about the concept.

Interpretation: Most of the customers were aware about the concept of dark kitchen and are also willing to order from the portals / mobile apps.

Table IV – Frequency Analysis – Ordering food from outlet which only serves through online portals

Frequency			Total
Yes	No	May Be	
62	16	22	100%

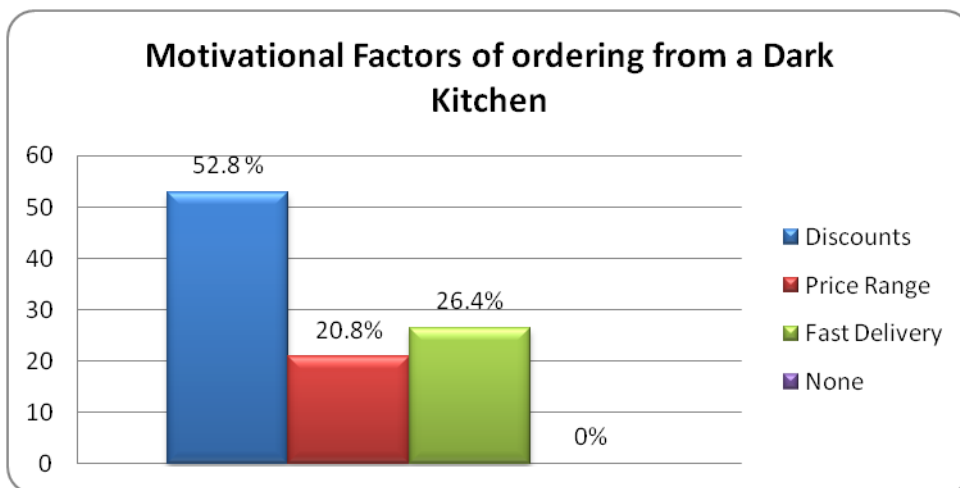


Observation: According to the above chart it can be stated that majority of the respondents i.e. 62% were agreeing to order their food from portals which only serves through online portals, whereas 16% of the respondents were disagreeing with online ordering portals, however there were 22% of the respondents may or may not like to order their food from portals which only serves through online portals.

Interpretation: Most of the customers were willing to order their food through dark kitchens considering the attractive offers given by them.

Table V – Frequency Analysis – Motivational Factors of ordering from a Dark Kitchen

Frequency				Total
Discounts	Price Range	Fast Delivery	None	
52.8	20.8	26.4	0	100%

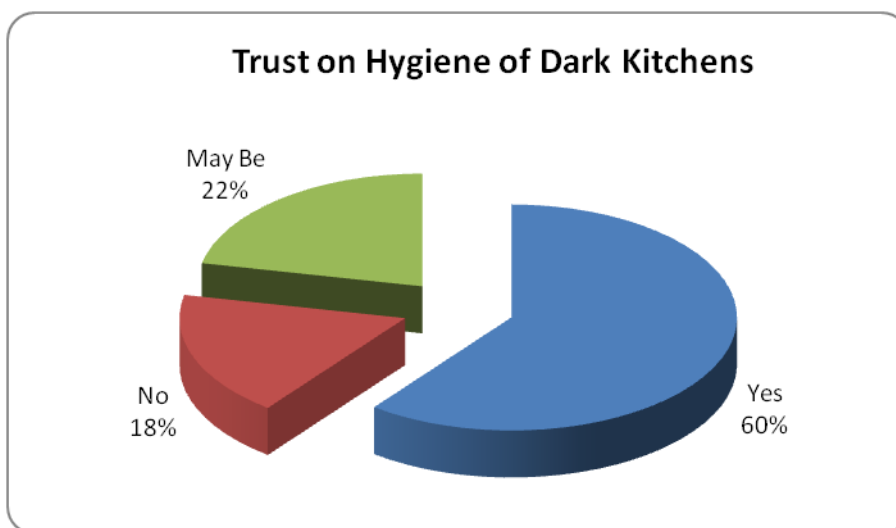


Observation: According to the above chart it can be stated that majority of the respondents i.e. 52.8% were agreeing that discounts offered by dark kitchens are the most favorite motivational factor for ordering, where as 20.8% of the respondents were of an opinion that fast delivery is the second appropriate motivational factor for ordering, however 20.8% of the respondents were of an opinion that price range is the third appropriate motivational factor for ordering also there were nil agreement observed for the fourth option none of the above.

Interpretation: Most of the customers were attracted towards discounts; fast delivery and price range offered by the dark kitchens was the most liked motivational factors for ordering.

Table VI – Frequency Analysis – Trust on Hygiene and Quality / Standards provided by Dark Kitchens

Frequency			Total
Yes	No	May Be	
60	18	22	100%

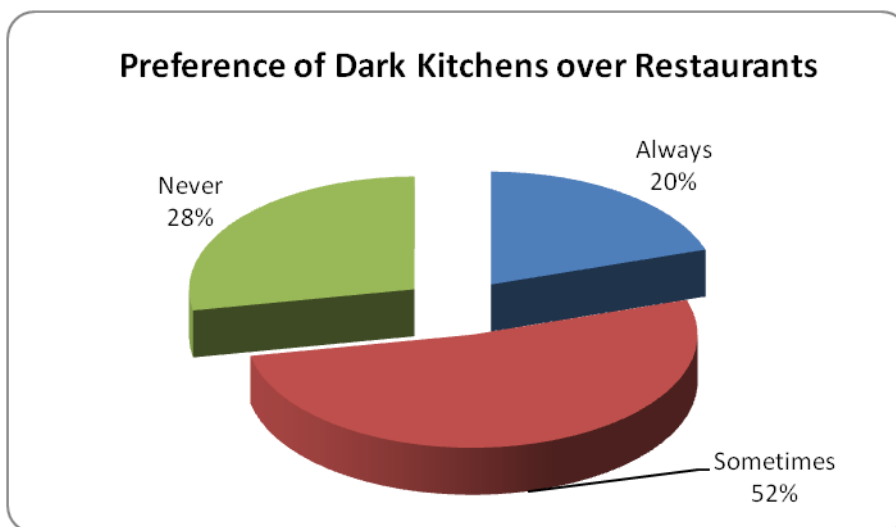


Observation: According to the above chart it can be stated that majority of the respondents i.e. 60% were trusting the hygiene and quality standards provided by the dark kitchens, whereas the percentage of respondents who were not trusting the hygiene and quality standards were 18%, however 22% of the respondents were found to be neutral about the hygiene and quality standards provided by dark kitchens.

Interpretation: Most of the customers were found to be agreeing about the hygiene and quality standards provided by dark kitchens.

Table VII – Frequency Analysis – Preference of Dark Kitchens over Restaurants for ordering food

Frequency			Total
Always	Sometimes	Never	
20	52	28	100%

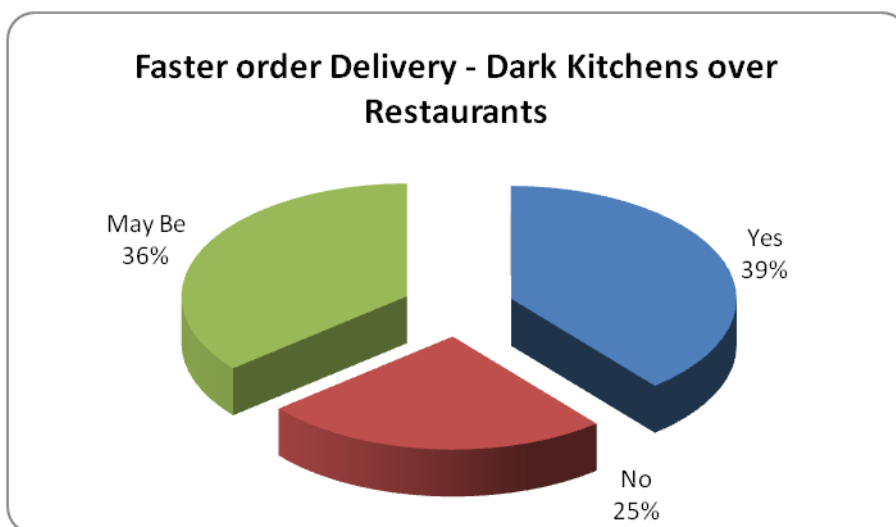


Observation: According to the above chart it can be stated that majority of the respondents i.e. 52% from the total population were sometimes preferring the dark kitchen over a standalone restaurant, whereas 20% of the respondents were found to be always preferring the dark kitchen and 28% of the respondent would never like to prefer a dark kitchen over a restaurant.

Interpretation: Most of the customers were found to be agreeing that ordering food from a dark kitchen instead of a restaurant, not always but sometimes can be preferred. The attraction is based upon the offers offered by the dark kitchens.

Table VIII – Frequency Analysis – Faster order Delivery - Dark Kitchens over Restaurants

Frequency			Total
Yes	No	May Be	
39	25	36	100%



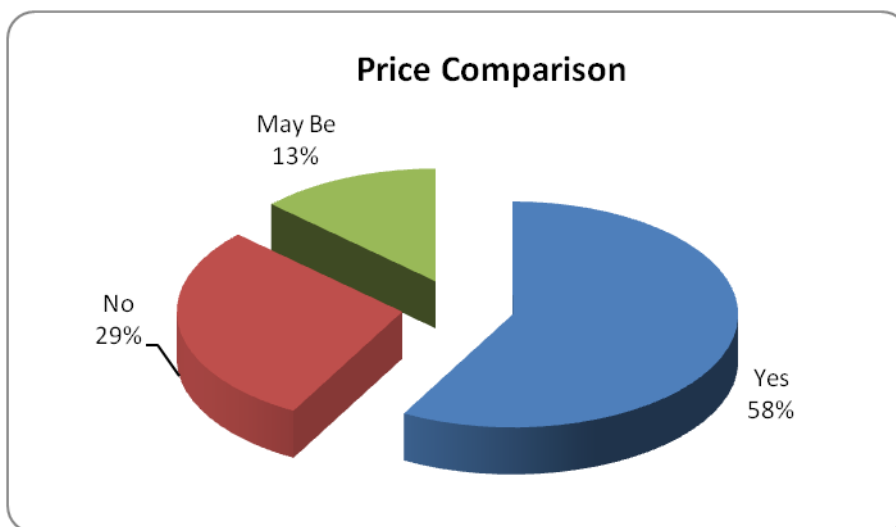
Observation: According to the above chart it can be stated that majority of the respondents i.e. 39% were of an opinion that food deliveries of a dark kitchen are faster than the restaurant deliveries, whereas 25%

of the respondents are disagreeing about the fact, however 36% of the respondents preferred to be neutral about the delivery comparison.

Interpretation: Most of the customers were found to be agreeing that the food deliveries given by the dark kitchens are faster than a restaurant delivery.

Table IX – Frequency Analysis – Price Comparison of Dark Kitchens over Restaurants

Frequency			Total
Yes	No	May Be	
58	29	13	100%

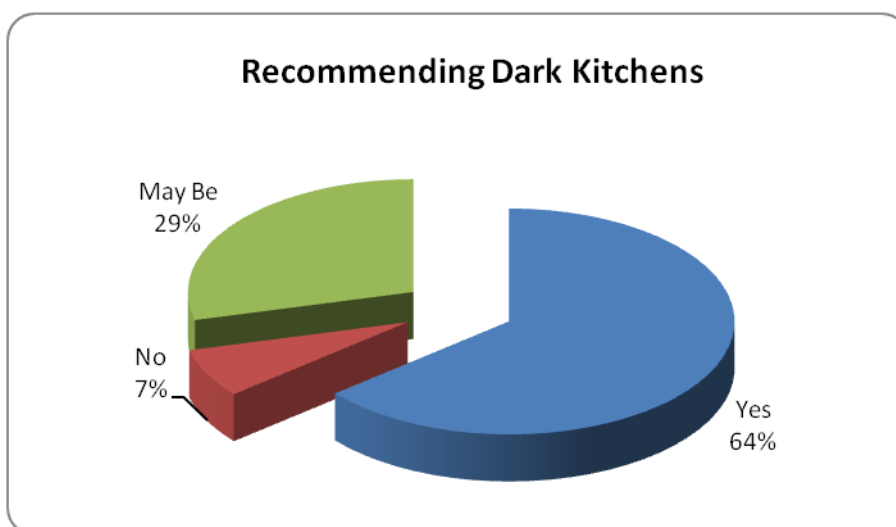


Observation: According to the above chart it can be stated that majority of the respondents i.e. 58% were of an opinion that there is a price difference between dark kitchen and restaurant kitchen, whereas 29% had shown their disagreement, however 13% of the respondents had preferred to stay neutral about the price comparison.

Interpretation: Most of the customers were found to be agreeing that there is a price difference in food sold by a restaurant and a dark kitchen as the other operational costs are less in a dark kitchen.

Table X – Frequency Analysis – Recommending concept of Dark Kitchens

Frequency			Total
Yes	No	May Be	
64	7	29	100%



Observation: According to the above chart it can be stated that majority of the respondents i.e. 64% were ready to recommend the concept of a dark kitchen, whereas 7% of the respondents were not in the favour of recommending, however 29% of the respondents had preferred to stay neutral about recommending a dark kitchen.

Interpretation: Most of the customers were found to be agreeing about recommending the food ordering from a dark kitchen.

OBSERVATIONS AND FINDINGS

It had been observed that, the popularity of the common delivery apps and online portals are gaining popularity on a day to day basis with customers. They are getting more aware about using these apps in a profitable deal. The concept of dark kitchen is getting popularity amongst customers. Below mentioned are some of the findings from the study:

- As per the data analysis outcome most of the customers are very much aware of concept of dark kitchen and online portals for ordering food.
- The awareness on the effective use of the available online portals and apps is widely observed.
- The customers have also shown their willingness to order their food from dark kitchen.
- The customers were more willing to prefer common food delivery apps rather than specific restaurant apps for ordering their food because of the attractive offers on common food delivery apps.
- The motivational factors for customers were discounts; fast delivery and price range offered by the dark kitchens as compared with restaurants.
- There was a good amount of agreement observed amongst customers about the hygiene and quality standards provided by dark kitchens.
- As per the data analysis outcome customers sometimes were ready to prefer dark kitchen food as compared to restaurant food.
- It was found that the food deliveries given by the dark kitchens are faster than a restaurant delivery.
- There was an agreement observed in the price difference between dark kitchen and restaurant, as dark kitchen food was found to be less expensive than the restaurant.
- Most of the customers were found to be agreeing about recommending the food ordering from a dark kitchen.

SUGGESTIONS

- There has to be more awareness and confidence generation amongst customers about the hygiene practices followed in Dark kitchens.
- There has to be more promotional practices adopted to generate more awareness about dark kitchen.
- Dark kitchens should come up with a lot of promotional offers to sustain in the business and grow accordingly.
- Most of the customers prefer going to restaurant and like the entire experience of dining, so dark kitchen will have to come up with strategies to get these customers back.

CONCLUSIONS:

- The concept of a Dark kitchen is gaining its popularity in Pune city.
- There is increase in using food applications to order food by customers. Dark kitchens are more convenient for operation and low in investment as compared to restaurant kitchen.
- The challenge for dark kitchen owners will be to convince customers that their food quality, hygiene and time of service will be as good as restaurants.

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