

“A Study of importance of kitchen designing in standalone restaurants”

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ABSTRACT-

The success of any restaurant primarily depends upon the popularity of its food and the efficiency of its service. Therefore, one should not undermine the importance of role of the kitchen in the success story of any food & beverage service outlet. With the escalating cost and capital expenditure spent on frontline areas, it becomes a challenge to allocate sufficient funds to the kitchen facility and therefore efficient kitchen planning and designing lies low on the priority list.

This study aimed studying the importance of kitchen designing in restaurants along with analyzing various factors that influence the designing process. In an effort to do so, a sample survey in the form of a questionnaire and interviews was conducted from restaurant owners and senior managers to understand their views on the topic.

The findings of his research states that well designed kitchens helps in saving operational cost and time and is important for creating a well organized work place for commercial food production. It also enhances the work efficiency of the staff and production output. “Structural limitations” and “Availability of budget” are the influencing factors that have the maximum impact on kitchen designing.

Key Words: “Restaurants”, “Kitchen Designing”, “Kitchen Planning”, “Commercial Kitchens”

I. INTRODUCTION

The success of any restaurant primarily depends upon the popularity of its food and the efficiency of its service. Therefore, one should not undermine the importance of role of the kitchen in the success story of any food & beverage service outlet. In spite of this fact, it is commonly observed that a foolproof kitchen facility is not a prime priority of restaurant owners.

Due to the challenges of capital investments for restaurant business, high priority is given to expenditure towards front line areas which are visible to the guests such as entrance lobby, restaurant seating. With an intention to please the guest and give them a cozy and comfortable feel, a lot of amount is spent of décor, furniture and furnishings. With the escalating cost and capital expenditure spent on these areas, it becomes a challenge to allocate sufficient funds to the kitchen facility and therefore efficient kitchen planning and designing lies low on the priority list. Moreover, the restaurant owners are keen on maximizing the guest seating capacity to generate more revenue and the resultant of which is very little space allocation for kitchen operations.

In view of this practice, it is important to educate the restaurant owners on the importance of kitchen designing and to shift their focus on creating an efficient and suitable kitchen facility to support the business of the restaurant.

This study aims at studying the importance of kitchen designing in restaurants along with analyzing various factors that influence the designing process.

II. LITERATURE REVIEW

1. Marlene Affeld (June 2016) highlighted importance of kitchen equipments. She suggested that “Kitchen design plans consider vital points such as space requirements, equipment and budget. While designing kitchen, one must prepare the detailed list or menu of all food to be prepared in the kitchen. Followed by this, a detail method of food storage and preparation should also be made.”
2. Unilever Food Solutions company (2016), in their newsletter, talked about important of menu engineering while designing the restaurant kitchen. It stated that a well-engineered menu is a great aid in driving sales in profitable dishes. While all menus help diners decide what to order, a well-engineered menu can guide diners to pick out the more profitable dishes on offer.
3. ACME, kitchen consultancy company, on their website (September 2015) mentioned about importance of hiring consultant. It is important to hire a reputable and professional company to help in the design and installation of your commercial kitchen. Check out

their qualifications and accreditations, take a look at their past commercial kitchen design projects and take a look at their client portfolio. A good consultant will use latest technology (AUTO CAD) for layout of a kitchen. Hiring consultant will help to speed up work and improve productivity of your kitchen.

4. Target catering Equipment Company (September 2013), on their website blog, posted by target admin, has mentioned the relation between kitchen designing and revenue generation. A poorly designed kitchen will lead to disorganization and delays in service. You'll get through fewer covers during service which will ultimately affect the profit margin of your restaurant business. A kitchen should be designed to make service flow smooth and quick, enabling your chefs to keep up with the demands of the covers.
5. Culinary depot services company (2012), on their website blog, explained relations between kitchen designing and menu planning. According to the information provided on their website they mentioned that there are certain parameters for kitchen designing such as –a) Establish the concept and menu of your restaurant and then tailor the design of your kitchen accordingly, b) The type and variety of foods served will dictate the sort of culinary equipment in your kitchen and, subsequently, how you place it.
6. Ram Vital Rao, Hotel & Restaurant consultant, FHRAI magazine (June 2012), stated that the kitchen equipment production processes have vastly improved and new technology, added to cooking process, has helped chefs turn out more healthy and visually appealing dishes. Some hotel brands are literally bringing the kitchen as a part of the restaurant. Kitchens are becoming smaller with the advent of automation and multi-skilled employees, saving on built-up spaces. Similarly, the basic Processes of meat, fish and vegetable production are being outsourced so again employee manning levels are lesser. Therefore, space is saved from the construction point of view and also from the operations Overheads.
7. Imtiaz Mistry, Hotel & Restaurant consultant, FHRAI magazine (June 2012), stated that Kitchens have to be designed with HACCP guidelines. Increasing importance is being given to the MEP services installed in kitchens, such as plumbing & drainage, electrical, lighting and exhaust systems. Labour saving kitchen devices and appliances, once a luxury, are a necessity today. A lot of custom fabricated equipment will be made for hotels and restaurant Induction cooking is making its inroads everywhere. It will soon be used for bulk or quantity cooking, replacing our traditional bulk cooking ranges. Adequate space should be allocated at the project planning stage for the kitchen and ancillary areas, through their architects, to allow for proper planning. Mr. Mistry also recommend engaging the services of a food/kitchen consultant, rather than trying to economies and instead of using a vendor for planning.

8. Mohini Sethi and Surjeet Malhan in their book “catering management (2011)”, mentioned different important points on kitchen space, storage space and equipment management. They stated that in the process of designing kitchens, it is vital to make provision for fire-fighting equipment at convenient points with reference to work areas such as cooking areas. Kitchen designing is based on location of your kitchen, structural details, layout, storage space and general maintenance.
9. Larr Simpson in her book (2009), Commercial Kitchen Hood Application Guide, mentioned about the importance of properly designed kitchen. In her article she stated that Excess heat and humidity, as well as deposits of grease particles on cooking and food preparation surfaces, can lead to the development of food-borne pathogens or allergens. Prolonged exposure to smoke can result in breathing-related disorders such as chronic obstructive pulmonary disease (COPD)
10. Ronald Lee in his book “The everything guide to starting & running restaurant 2005”, stated that - the amount of space you need for your kitchen depends on three factors – size of equipment, the amount of work space needed to perform tasks and the kinds of food you will be storing. There is no single formula that tells you what percentage of your total space your kitchen should occupy. Some restaurant experts believe that your kitchen should be no less than 30% of your total space, excluding store rooms, lockers rooms and other back of the house facilities. However your menu ultimately dictates the needs of your kitchen and the amount of space required to accomplish the various tasks.

III. OBJECTIVES OF THE STUDY

1. To study the importance of kitchen designing for restaurant operations.
2. To identify the factors affecting kitchen designing.
3. To analyze the impact of various factors on kitchen designing.

IV. LIMITATIONS OF THE STUDY

1. This study is purely based on the information given by the owners and senior managers of sample restaurants.
2. The study is conducted in the current scenario and the opinions, perception and expectations of the respondents may differ with time.
3. The study does not differentiate respondents on basis of their demographic factors which may have an influence of their perception thereby identifying scope for further research.

V. RESEARCH METHODOLOGY

The data required for the research was collected using the following techniques:

- **Personal Interviews:** The researcher conducted personal interviews with owners and managers of reputed restaurants to get an insight on the problem under study.
- **Questionnaire:** A questionnaire bearing straight forward and relevant questions was drafted and handed over to the sample to obtain their responses.

VI. DISCUSSIONS ,FINDINGS & CONCLUSIONS

6.1. Discussions

6.1.1. Significance of kitchen designing:

6.1.1.1. Saving cost and time of operations:

Well-designed restaurant kitchen is integral to efficient, safe and profitable food preparation. A restaurant kitchen designed to consider ergonomics will be appreciated by the owner, chef and kitchen workers. The fewer steps required to complete a task, the better. Careful, considered planning in the design of the kitchen will save money and time during the construction phase and increase profitability over the life of the kitchen.

6.1.1.2. Well-organized work space:

Professional kitchen should be about producing great food quickly in a clean environment, streamlining the processes from preparation to plating, and minimizing waste. No matter how talented a chef is, true professionals separate themselves by the way they manage their kitchens. Poorly organized kitchens can become battle of war, but a properly laid out space will run like a well-oiled machine. All the chefs should know their place of work, and there should be a sufficient place for carrying out there day to day activity. Kitchens are often tight and cramped, but laying out a space logically will help any chef put more joy in their cooking.

6.1.1.3. Improving the staff work efficiency:

Kitchen environments are always fast-paced and require the utmost efficiency. This is because customer service and the success of the restaurant are heavily built around the flow with which a kitchen operates -- customers placing orders, orders being prepared and then delivered to customers. Improving your production and staff efficiency starts with the layout and design of your commercial kitchen. Your kitchen setup affects everything from staff efficiency to utility costs, so you'll want to take the time to create an effective layout in order for things to operate as smoothly as possible. An ergonomically designed commercial kitchen is one where employees can stand in one spot and do all of their work with minimal bending, reaching, walking or turning. Ergonomics can also reduce the amount of injuries, discomfort and fatigue in the kitchen.

6.1.1.4. Well-designed Kitchen helps in increasing production output:

Planning a kitchen and arranging work areas to minimize operating costs and maximize productivity is an important activity. Planning a kitchen involves both design and layout components as well as consideration of flow principles. Flow, the movement of product or people in an operation, should be an important consideration in the planning process as well. Whether building or remodeling a kitchen, great design must not only look good on paper, but the kitchen must function efficiently and productively. An excellent kitchen design and layout will increase kitchen productivity and flow resulting. Well-designed kitchen decreased operating costs, increased employee morale & employee safety.

6.1.2. Factors affecting kitchen designing:**6.1.2.1. Availability of space:**

A small kitchen will leave you struggling for space; you will be unable to provide smooth work flow. It is important that your staff have the ability to move around your commercial kitchen with ease without bumping into equipment or fixtures. When your staff are handling an increased amount of orders, they need to be able to get in and out of the kitchen as quickly as possible. Ergonomics within the kitchen will enable staff to be more efficient.

6.1.2.2. Availability of budget:

While designing kitchen for restaurant most of the time the owner give limited fund for kitchen area compare to restaurant area. Always have an accurate budget plan to enable you to complete your project successfully; this will be a key indicator for your kitchen designer to be able to work around. Correct segregation of your kitchen designing budget will give better output.

6.1.2.3. Characteristics of operations:

The vital part while designing is on what type of operation you are doing, whether it's a fine dining restaurant, casual dining or quick service. Outside of ergonomic and energy-efficient designs, operators can choose from several kitchen configurations. If a restaurant produces a lot of the same foods, like burgers or pizza, the assembly line format might be a good option. When a kitchen is carefully crafted to function smoothly, the food created in it will be that much more wonderful.

6.1.2.4. Volume of operations:

Starting a new restaurant, you have to begin with solid business plan. A good business plan includes sales forecast, menu planning, and kitchen planning according to volume of production. The kitchen designing also depend on how much allocation you have done for kitchen production area.

6.1.2.5. Skill level of labour:

While designing kitchen you have to consider the skill level of staff you are going to recruit. The staff should able to operate the equipment's which you select during

planning. Staff should be flexible to work, easily trained and easily replace; this will give advantage while designing kitchen.

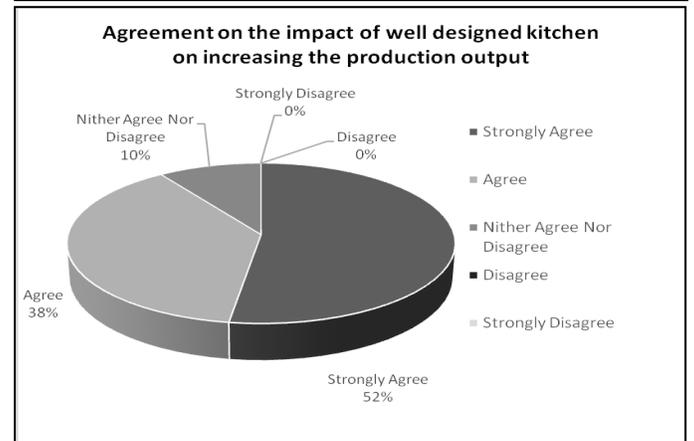
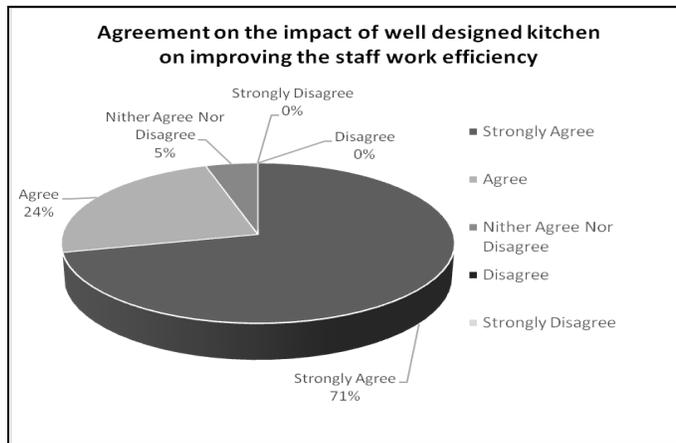
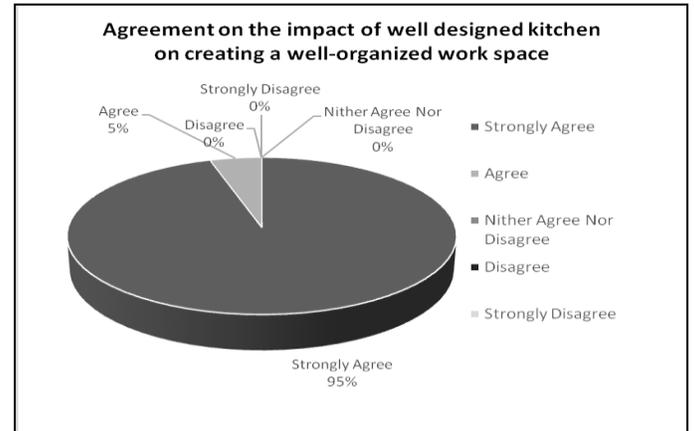
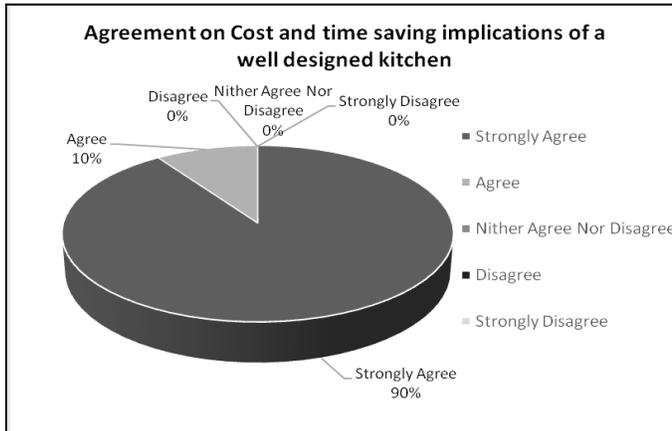
6.1.2.6. Structural limitations:

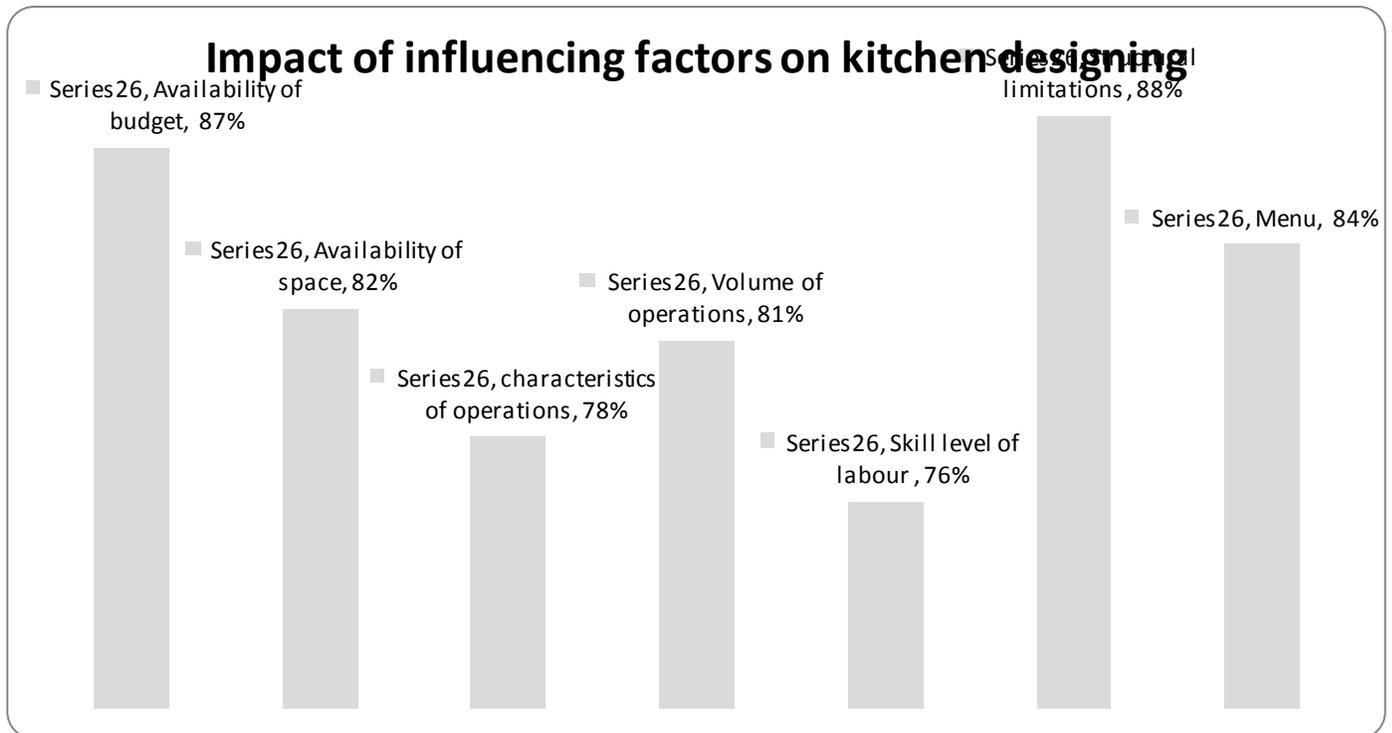
When you start a new restaurant, owners always want to purchase in prime location, so that they can drive maximum sales from it. Now day's city getting cramp, you get structural limitation special planning in kitchen. Forecasted layout of kitchen and budget many time change, so you have to do adjustment in the end. Moreover, structural limitations like positioning of columns, windows, doors ect have an impact on kitchen designing.

6.1.2.7. Menu

Menu plays major part in kitchen designing. A restaurant menu decides, the kitchen equipment's requirement for chefs to deliver the food. When the menu is finalized, chef can decide the kitchen work flow. Kitchen work flow will help to reduce unnecessary equipment's purchase and save your investment in project.

6.2. FINDINGS





6.3. CONCLUSIONS

The findings of the research can be concluded as under:

1. A well designed kitchen helps in saving operational cost and time.
2. A thoughtful design is important for creating a well organized work place for commercial kitchens.
3. A well designed kitchen enhances the work efficiency of the staff and production output.
4. “Structural limitations” and “Availability of budget” are the influencing factors that have the maximum impact on kitchen designing.

VII. SUGGESTIONS & RECOMMENDATIONS

Based on the responses received by the owners and senior managers of sample restaurants, on the importance of kitchen designing in commercial kitchens, the following suggestions & recommendations can be made:

1. It is strongly recommended to anticipate the workflow of the kitchen operations of the restaurant and create a suitable kitchen design on the basis of the same.

2. Based on the operational requirements, all the major kitchen equipment should be identified so as to allocate a suitable space in the kitchen design.
3. The kitchen design should complement the structural characteristics of the allocated such as “Positioning of water inlets”, “Positioning of external drainage system”, “Positioning of windows and doors” etc.
4. An adequate budgetary allocation should be made for designing the kitchen. In case of financial constraints, the kitchen design should be implemented in various phases on the basis of the priority. However, these phases should be accurately planned to avoid difficulties and challenges in the future.
5. For a foolproof and compatible kitchen design, restaurant owners should take help of professional external agencies specialized in commercial kitchen designing.

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