

FOODSERVICE FACILITIES PLANNING

THIRD EDITION



EDWARD A. KAZARIAN, Ph.D.

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Third Edition

Edward A. Kazarian Ph.D.

Professor Emeritus
School of Hotel, Restaurant and
Institutional Management
Michigan State University
East Lansing, Michigan



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Preface

The planning of foodservice facilities has become very complex with the increased competitiveness of the foodservice industry. Successful design can be attained only when all aspects of the foodservice operation have been evaluated and planned for accordingly. The menu offerings, arrangement of the dining areas, kitchen floor plan, and a myriad other details have to be effectively blended to create a facility that can achieve the goals of the owner or operator.

Within the relatively few years since the original edition of this text was published, several changes affecting the foodservice industry have taken place. Changes in consumer attitudes, consumer behavior, labor costs, energy costs, regulatory considerations, and the general business environment have created new and challenging problems for foodservice planners and designers.

Today's foodservice consumer shows a greater awareness of economic value and sanitary requirements and demands quality food at a reasonable price. These changing consumer characteristics require foodservice designs that can quickly adapt to new menu items, new methods of service, different atmospheres, or new operating procedures. A greater emphasis has to be placed on the marketing function as it relates to planning new facilities or in remodeling existing facilities.

Increasing labor costs have to be offset by increasing labor productivity through improved workplaces, working conditions, and using modern labor saving equipment. New approaches to planning are also needed in order to minimize energy costs and to meet the ever-increasing regulatory requirements imposed on the foodservice industry. Environmental concerns regarding air pollution, litter, traffic, signs, and waste disposal will continue to influence the planning function in the future.

These considerations place a greater emphasis on foodservice plan-

ning as a prerequisite to the success of foodservice operations. Only those facilities that are planned for flexibility, labor productivity, efficient use of energy, and managed accordingly will survive the competitive environment of the foodservice industry.

It is with these concepts in mind that this text was revised and expanded.

EDWARD A. KAZARIAN

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Introduction to Foodservice Facilities Planning

Foodservice facilities vary from the simplest limited-menu snack bar to the multifaceted hotel foodservice that may involve public dining rooms, employee dining rooms, cafeterias, banquet service, and room service. Each type of foodservice facility is characterized by unique traits in the meals offered, type of service, operational methods, marketing approach, customers served, and atmosphere or ambience.

The foodservice industry has experienced tremendous growth and change in the last few years, which have created a need for foodservice facilities capable of providing the variety of meals prepared by different preparation techniques that will satisfy the changing desires of customers.

Each foodservice facility may be planned to meet different objectives. For example, the objective for a fast food facility may stress the speed of service, whereas the hospital foodservice has to stress the nutritional and therapeutic values of food. These variations indicate the complexity of planning foodservice facilities. However, there is one characteristic common to all foodservice facilities. Each is involved in the production and sale or distribution of meals. This common characteristic requires that foodservice facilities be planned for technologically modern production techniques and operated by modern management concepts.

The planning of foodservice facilities is usually a continuous process for those individuals and organizations engaged in the foodservice industry. The planning involved may be quite simple, as in the case of rearranging tables and chairs in an existing dining room or replacing equipment in production areas. In other cases, the planning may

be a very complex problem such as the development of a completely new foodservice facility, which may involve considerations of land, building design, financing, management policies, and operating procedures. Regardless of the complexity of the project, satisfactory results can be obtained only when the planning is guided by the basic concepts and objectives of design and layout.

DESIGN AND LAYOUT

The terms "design" and "layout" are sometimes confused and should be clarified to simplify further discussion. Design refers to the broad function of developing the entire foodservice facility, including the original concepts of operation, site selection, menu development, equipment requirements, and all the other pertinent planning functions that are necessary to develop the concept into a structural and operational reality.

Layout is a more limited function of the planning process that deals with the arrangement of the physical facilities for the foodservice operation. Layout is one of the many tasks that have to be accomplished in the overall design of the facility. It is one of the most important aspects of design because it dictates to a great extent the operational efficiency of the facility.

The entire design of a foodservice facility includes many functions that are related to the layout function, as well as being related to each other. Some of these design functions can be identified as

- conceptualization of the proposed project
- market studies of a particular area or perhaps finding a suitable location
- financial planning
- location and site considerations
- determining the overall size of the facility
- feasibility studies
- menu development
- merchandising
- service considerations
- development of the dining atmosphere
- organization
- pricing considerations
- food preparation and production techniques

selection of materials and methods of construction
layout of equipment, workplaces, and aisles

The design functions identified emphasize the importance of correlating the design and layout of the physical facilities with the operational characteristics of the foodservice facility. It is common to discuss and evaluate such areas as marketing, menus, labor availability, atmosphere, sales, and many others during the planning process.

The order of the functions is not intended to signify the sequence in which they are performed or their importance. For certain projects, some of these functions are very important to the successful planning of the facility; yet these functions may not be so significant in other types of projects. For example, the layout function for a drive-in chain that uses basically the same arrangements of equipment and spaces becomes a minor part of design after the first one is planned. In this case, location and site analysis or merchandising may be the more important design functions for the chain. On the other hand, the layout function for an institutional foodservice facility is very important because of its bearing on construction and operational costs. Food facility planners must sense the importance of the various design functions for each type of project and concentrate their efforts on the most relevant ones.

The design and layout of the workplaces, departments, storage areas, aisles, and other facilities should reflect the operational characteristics of the organization. Similarly, the existing facilities dictate to a great extent the operational characteristics of the foodservice enterprise. It is difficult to separate the concepts of design and layout of physical areas and facilities from the basic concepts of good operational procedures and policies. For example, one planning concept is to simplify the production of food items appearing on the menu. This concept is also a basis for the development of work procedures and training programs for employees. Another concept is to create a physical atmosphere that will attract and retain customers. The same concept is used to develop the merchandising aspects of the operation for purpose of generating sales. Thus it is easily seen that both planning and managing of a particular foodservice facility are guided by many identical concepts.

In reality, it would be impossible to plan a well-designed facility without a fundamental understanding of basic operational and management principles as they relate to foodservice operations. Since there is such a close relationship between the physical facilities and the operation of the foodservice, it is desirable for management personnel

to understand the principles of planning, so that the functioning of the operation can be directed as conceived by the designer. Good management is obviously the key to the successful operation of a foodservice facility regardless of the physical facilities, since good management can overcome poor design and layout to a certain extent. However, a well-planned facility not only simplifies the management of the operation but largely determines the success of the project.

PLANNING

Characteristics

The planning of foodservice facilities is characterized by some design and layout problems that are not commonly encountered in other types of planning projects. This uniqueness is partially caused by the great variety of foodservice operational concepts that may be used; the variety of customers and users to be served; the material choices available; the production methods possible; and the characteristics of the finished menu items. The fact that a typical foodservice facility is involved in the production, sales, and service of a highly perishable commodity to individuals who must be attracted and pleased contributes to these special problems of design and layout.

One specific problem that the food facility planner faces is the customer or user demand for foodservice at limited periods of time, which results in peak periods of activity in the facility. These peak periods are obviously the normal meal hours, and the planner must develop a design that will handle these periods with a minimum of effort and confusion. This problem is further compounded by having to plan for different menu items for each meal period during the day, and in some instances even a different type of service for different meal periods.

A related problem that must be solved by the food facility planner is that of efficiently and economically processing and producing all the various food items appearing on the menu in the quantities required. This is especially critical for those operations that have daily menu changes. Some food items on the menu may involve several different raw ingredients or materials that may be available in a variety of forms such as fresh, canned, frozen, or dried. The use of different forms of ingredients or materials will require different design decisions.

In addition to considering the menu items, beverages, and raw food

ingredients involved, the planner is also faced with the design and layout of areas for processing nonfood items such as china, glasses, silverware, utensils, and linen, to name a few.

Food facility planning involves designing a system that will maintain the quality of the food items produced. Because of the perishability of many foods, the planner must be sure that appearance, taste, and palatability are not affected by the choice of process or equipment. This is especially critical when prepared foods must be held for a period of time before they are consumed. The design of holding systems for maintaining the desired temperature and moisture content of prepared foods is very important for cafeterias, banquet service, and catering operations.

The importance of good planning for foodservice facilities cannot be emphasized enough. Each new project that involves planning to any extent represents an investment in the physical structure, the equipment, the furnishings, and, most important, the continuing cost of the management and labor required to operate and maintain the facility. The result of poor planning is reflected daily in high costs for labor and maintenance and in poor worker morale.

A well-planned facility is developed by utilizing the basic principles from many areas of knowledge. The concepts of work analysis, time and motion studies, human engineering, management, economics, psychology, materials handling, and many other fields can be used advantageously to help plan a foodservice facility that will meet the objectives of the investors and operators.

In general terms, some of the identifiable characteristics of a well-planned foodservice facility include the following:

- minimum investment in buildings, furnishings, and equipment
- aesthetic appeal to customers and workers (pleasant dining and working areas)
- maximum profit and return on investment
- simplified production processes for food and nonfood items
- efficient flow of materials and equipment that may have to be moved about
- minimum employee travel
- safe working areas
- minimum waste of time, labor, and materials
- sanitary conditions in all areas of the facility
- minimum manpower requirements
- low maintenance costs
- ease of supervision and management

Much careful thought and planning are involved in developing a design that will meet the indicated criteria. This necessitates extra time spent in conferences, meetings, and research, and on the drawing board. The extra time spent in ironing out the problems of a new plan is probably the least costly investment of the entire project. Many of the characteristics of good design may also be considered as objectives of planning and will be discussed in detail later in this chapter.

Scope

The planning of foodservice facilities involves considerations of many diverse types of projects dealing with the development and arrangement of spaces, equipment, and work areas. The most complex situation is the planning required for the development of an entirely new facility. This type of project requires planners to utilize both their operational knowledge of the foodservice industry and their knowledge of the physical planning aspects as related to the facility. Planning a new facility may involve considerations of location and site selection that may not be involved in other types of projects. If the site is a variable in the planning of a new operation, the planner has an opportunity to do a thorough analysis of the potential market that will produce better decisions and ensure a successful operation.

The planning of a new facility also enables the planner to make the greatest use of new food products, new processing techniques, and new equipment. A more flexible operation can be planned if anticipated changes in products, market, or equipment are considered in the design. Planning a new facility also enables the planner to develop new and interesting concepts of foodservice merchandising more easily than one working within the restraints of an existing building or operation. Another aspect of planning a new facility is that it gives the designer the greatest freedom to make decisions regarding the operating characteristics and management policies that should be incorporated into day-to-day operation.

Although planning a new facility is complex, it is a desirable situation because of the many options available to the planner. Other types of projects usually have some type of restriction that the planner has to work around in order to arrive at a practical solution. These restrictions may take the form of existing buildings, which have walls, columns, and space limitations that have to be contended with. For example, remodeling of an existing facility is usually done within the confines of the exterior walls for purposes of economy and simplicity. Modernizing is required primarily because of the need for new or