

## ON REACHING OPTIMIZATION / RATIONALIZATION IN VOL- UME FOOD SERVICE ORGANIZATIONS

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### SUMMARY

Realizing optimization / rationalization in mass food service institutions is among the vital issues that needs to be emphasized when the efficient management of those operations is in question. In this paper, starting with their most simple definitions, optimization /rationalization concepts were explained via stating objectives of rationalization, and factors that necessitate it. Then brief information was given regarding major types of analyses and techniques affective in applying the above-mentioned concepts in this particular industry. The last section of the study contains research findings obtained from investigation of six operations which were selected from the Greater İzmir area.

### I. INTRODUCTION

Today, development of food service operations in a country may be regarded as an indicator of that country's industrial advancement. These particular services may also be one of the main factors in stimulating social and economic growth.

In general, the utilization of modern food service technology or equipment is quite low in our country. Due to this, production capacities tend to be lower than those of industrialized nations. Also, poor maintenance of the prevailing equipment often causes significant problems at the operational levels.

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In this article, sought to discover how management in volume feeding institutions can control waste and costs. This is a new field of study in Turkey which can have a significant impact on the country's future. Factors such as the development of domestic and foreign tourism, increasing number of public and private sectors' recreational facilities, booming industrialization and urbanization, expansion of the younger portion of the population at school and college age, provision of at least one meal a day in industrial plants and other places of work, improvement of health and social welfare services,.... all have been fostering the tendency to enlarge the need for volume foodservice systems.

The purpose of this study is to develop a system geared towards production of quality meals through minimization of food waste and keeping other relevant cost factors at an optimum / rational level.

Economizing via reduction of food waste and lowering operational costs are the main issues affecting profitability / survivability of a food service operation. These important, but often the most neglected issues are the main problems discussed.

Due to the limitations of our resources, it was not possible to consider all the food production stage in detail. Nevertheless, emphasis was placed upon those deficiencies most deeply felt in our country at large.

## II. THE CONCEPT OF OPTIMIZATION

The objective of volume food service is to increase attendance at schools, touristic establishments, health institutions, factories and other similar facilities, by meeting nutritional expectations of those served (UNFAO, 1982 1). Technological developments, change in tastes, and society's transformation from traditional agricultural state to modern industrialized state have steadily aroused the demand for this service.

Optimization, within its general context, means to bring something to the best and / or most favorable condition for a particular situation. Rationalization, with a more specific expression, can be stated as reaching a pre - determined objective through minimum labor and expenditures, within the shortest amount of time.

The purpose of rationalization in volume food service is to meet consumer's needs within minimum cost. However, since several points seem opposite in nature, it is deemed necessary to infer some explanations.

## **The primary objectives of rationalization are :**

1. Meeting consumer needs in the best possible way. This implies the obligation of recognizing consumer's tastes and preferences in terms of both price and quality, and satisfying them in the most confirming and convenient medium.

2. Meeting consumer needs within the most favorable condition, particularly from the standpoint of the operation. In this case, minimization of imposed difficulties, both on the employees and on the operation, is the implicit aim.

3. Reducing the incurred costs.

Decreasing costs to a minimum level involves eliminating useless and unnecessary procedures through gradual inducement of services down to a most simple and direct form.

Factors which necessitate rationalization in volume food services are summarized as follows :

a) Applicability of mechanization and automation only over a limited scale due to the prominent structural characteristics of those operations. In other words, they are considered as "labor intensive" investments.

b) Inability of reaching an adequate level of standardization in performing the work.

c) Lack of an ongoing analysis and control system, due to deficiencies and malfunctions originating from the operations' organization.

d) Poor architectural design and construction of receiving docks, storage areas, kitchens, dining rooms and offices.

Rationalization of any operational function, such as receiving, storage and etc., obviously would depend upon the presence of a general rationalization concept and / or policy for the entire departments (Olali, 1969 : 148).

The four major types of analyses, viewed as drastically useful with regard to realizing rationalization practices in volume food services, might be listed as follows :

a) Work and Motion Studies

b) Job Simplification

c) Value Assessment Analysis

d) Systems Approach and Systems Analysis

As known, it is possible to find the best material flow through work and motion studies.

Job simplification is allowing operational personnel to work under the most favorable conditions and expending the least energy.

As frozen foods, canned foods and similar ready - to - serve food products become popular in volume food service industry, the value assessment analyses increasingly become coercive. The purpose of such analyses is to investigate the relationship between functions and costs of a given product and/or service, through substitution of one raw material for the other, in the production process.

Lately, so many problems of mass-production oriented firms are being solved by means of the systems approach. In systems analysis, subsystems constituting the system, are studied individually, towards finding solutions to problems, through rational employment of all the resources utilized.

The most significant of the rationalization techniques, affective in carrying out the above-mentioned analyses, can be specified in terms of :

Procurement, Receiving, Costs Control, Personnel Management, Menu Planning, Rendering Services and Sanitation.

Obviously, when purchasing, taking advantage of quantity discounts and keeping costs down is the main point in procurement. It is considered beneficial to have itemized procurement figures based on daily customer count records.

Receiving is an area where complaints regarding quality and quantity of food, can be prevented. To the extent this function is executed orderly and in harmonious with other functions of the operation, a corresponding degree of rationalization would be attained.

Lowering the costs of products and services produced in food service industry and keeping tight controls over them, naturally have significant effect on operations. Since employee turnover is one of the important problems having unfavorable effects over costs and productivity, this justifies the need for control.

Menu planning constitutes a center of gravity with regard to the administration of services in general. Standardization of recipes and installation of cycled menus are basic issues in reaching rationalization of menu management.

Techniques related to the rendering of services are concerned with product and service differentiation, automation of equipment used, and rational organization of the work flow. By means of those techniques, it is possible to serve thousands of people within a very short time via realizing labor savings as well.

needs in the most clean and efficient manner, with sufficient protection against contamination and pathogenic factors. It is viewed as imperative, from the point of food sanitation, to teach employees regarding bacterial growth.

### III. AN APPLICATION ON SELECTED OPERATIONS

The application of those previously mentioned theoretical information onto some distinguished operations can be summarized as follows :

This section of the research was carried out in six establishments, included in the Lodging Directory, prepared by the Turkish Ministry of Culture and Tourism, operating in the Greater İzmir area.

The characteristic features of those establishments, each holding a tourism operation certificate, are indicated below :

- **Golden Dolphin Resort Complex** : Class "A" holiday village with 1030 beds, privately owned, food service employees during tourist season is 230.
- **Grand Hotel Efes** : Five-star hotel with 1000 beds, government owned, food service employees during tourist season is 150.
- **Grand Hotel İmbat** : Four- star hotel with 540 beds, privately owned, food service employees during tourist season is 90.
- **İzmir Hotel Etap** : Four - star hotel with 250 beds, privately owned, food service employees during tourist season is 41.
- **Balçova Thermal Springs Hotel** : Three-star hotel with 400 beds, government owned, food service employees during tourist season is 45.
- **Hotel İzmir Palas** : Three-star hotel with 300 beds, privately owned, food service employees during tourist season is 35.

Findings, with their evaluation, are abstracted as follows :

**Menu Planning** : In four of the six operations, standard recipes were not used and the use of computers was regarded as impractical. Portion control, which is considered crucial in lowering costs, was applicable in only three of the six establishments.

Limited menu concept was not sufficiently contemplated within the operations considered. On the contrary, menus rich in variety (to satisfy a wider spectrum of consumer tastes and preferences), were the preferential objective. As a natural consequence, labor and food cost tend to increase easily. However, use of

convenience foods (that save labor and time), has stayed at a very low level in all the operations due to the high costs in obtaining these newly developing food items in Turkey.

It was also found that receiving quality control / assurance has been done by the cooks, through organeleptic means, within all the operations analyzed. As a matter of fact, this is quite significant in preventing complaints.

The issue of appraising the employee performance and achievement rewarding, was more emphasized in private operations. Shortage of skilled manpower was a considerable problem in all, but two of the six operations. The underlying reason for those two establishments is that, they have the chance to operate throughout the year, with an emphasis on in - service training. As a result, their employee turnover rates stay at a low level. Therefore, they do not suffer from unavailability of trained personnel. The other four establishments, however, operate seasonally, with regard to the characteristics of certain segmented markets.

It was discovered that service and internal selling were included in all the hotels' on- the- job training programs. However, separate sanitation training was not covered to the same extent. Only two of the six operations managers interviewed had approaches positively towards that issue.

The reason for inadequate maintenance in some of the establishments was mainly due to the widespread layout of operations, and insufficient cooperation and communication among the departments concerned.

Taking into consideration some deficiencies witnessed through out the study, a few modest suggestions follow :

a) To increase service quality :

- have an ongoing in- service training program to include sanitation training,
- close supervision,
- implement standards for all services rendered,
- a permanent concept of positive thinking
- care in selecting and hiring personnel.

b) For assuring quality in food preparation :

- procurement of high quality foods,
- dispatching of above - mentioned items into kitchen area at the same quality received,
- checking performance against set standards.

c) Implementation of meal reports that can contribute to a formulation of a constructive control system.

d) In order to derive advantages with regard to standardized product and service, inventory control convenience and swiftness of the entire services :

- implementing limited menu concept,
- widespread use of standardized recipes.

e) Placing emphasis upon standard portion control which affects food cost and customer satisfaction.

f) For efficient manipulation of routine duties both in the back and in the front of the operation :

- taking advantage of principles pertaining to ergonomics and cybernetics,
- conducting preventive maintenance for facilities and equipment.

g) In order to reduce losses in pre-preparation of foods and to facilitate portion control, increasing the proportion of convenience food used.

Within limitations of the research, in regard to findings attained, and through evaluation of questionnaire results, these major conclusions can be drawn :

At first glance, modern food service management seem quite complex, but there are similar characteristics among establishments. Steadily growing operations, technology advancing in giant steps, and changes in the operational methods and equipment, all have necessitated food service management to improve according to scientific means and procedures.

It is possible to attain rationalization through employee training successes, which is directly related to quality production and superior service. Obviously, total costs of an operation would be decreased via reduction in waste and losses by employing well-trained and qualified personnel.

The role of effective personnel policies, such as those on motivating, rewarding, etc., should not be overlooked, when considering reductions in periodic maintenance expenditures and extending economic life of operational facilities. Moreover, training of employees regarding simple preventive maintenance procedures will eliminate areas of complaints as much as possible ; thereby, raising operatives' job satisfaction.

The eternal problem of employee turnover unfavorably affects worker productivity and in turn, company profits, particularly in volume food service industries. Although it can be alleviated by means of intensive in-service training,

excessive turnover rates eventually cause operational costs to increase and therefore make it difficult for the management to keep / attain a successful operation.

The success over the above-mentioned services would also depend upon ; realization of food production and service with an optimum utilization of labor, time, and financial means through a well-designed and well - equipped kitchen area.

Clearly, a commercial kitchen (no matter how perfectly it is designed and adorned with sophisticated equipment) with a disorderly and filthy - looking service area, would be rated poorly. Since, a clean operation will naturally influence the quality of food served and conduct of its personnel, sanitation and good service are not different concepts for the manager. These two ideas must be developed simultaneously to provide quality service for the customer and profitability for the owner.

#### IV. CONCLUSION

The primary objective of food service management is to arrange a medium, where employees feel motivated to handle the work within set policies and procedures. In other words, improving quality and services depends on an orderly and efficient performance in the back of the operation as well as in the front.

Inevitably, the extent of reaching those operational goals is associated with the quality of internal and external relations developed by the management. Through co-occurrence of the previously stated factors, it is quite possible to attain optimization and rationalization in volume food service organizations.

### KİTLEYE YÖNELİK YİYECEK - İÇECEK HİZMET İŞLETMELERİNDE OPTİMİZASYON / RASYONALİZASYONA ULAŞILMASI

Başarılı bir kitle yeme- içme hizmet işletmesi yönetiminde optimizasyon / rasyonalizasyon, üzerinde durulması gereken önemli kavramlar arasındadır. Bu yazıda, en basit tanımları ile optimizasyon / rasyonalizasyon ve sözkonusu işletmelerde başlıca amaçlarından başlanarak, rasyonalizasyonu gerektiren faktörler açıklanmış ve uygulamada yararlı olabilecek bazı analiz türleri ile teknikleri hakkında kısaca bilgi verilmiştir. Makalenin son bölümü İzmir ve yakın çevresinden seçilen altı işletmede yürütülen araştırma sonuçlarına ve önerilere ayrılmıştır.



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