# "Darshini": Emergence Of `Focussed' Service Design In Indian Rrestaurant Industry

## By

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## Introduction

The recent decades have seen a rapid growth of service sector in the world economy. Jobs in this sector have increased tremendously (Kano, 1996) and organizations offering financial services, healthcare, communication and food, hospitality, transportation have proliferated. Many organizations in this sector have encountered rapid changes in regulations, technologies and customer preferences. These changes have forced service industries to identify ways in which to remain competitive. Firms are forced to increase their focus on customer satisfaction, quality of service at affordable cost of service (Schemenner, 1986). Traditional service sectors have seen emergence of new design, with increased customer focus and reduced cost of services. Focus in service organisations is the differentiation and selection of market segments, and the adjustments of the process and infrastructure parameters of the service delivery system to meet the needs of customer's (Mclaughlin et.al., 1995). The literature on focus in services is sparse, yet the examples are quite interesting (Heskett 1983, Yang, et.al, 1992). Focusing in services is not just marketing related, but involves obtaining strategic fit between the service delivery system and competitive strategy. Designing a service delivery systems involves issues such as facility design and layout for effective customer and work flow, procedures and job definitions for service providers, measures of quality, extent of customer involvement, technology/equipment selection and service capacity.

Our understanding of emergence of service design that defines a service delivery system is partial and at best rudimentary. Given that the development of new services is often not a well-organised process, understanding of how results of intuition, personality, resource availability or competitive action enshrine a new service design and quality is imperative. The primary focus of this paper is to describe the emergence of a new operational design, and factors that contribute to its standardization. Specifically, this paper attempts to identify emergence of 'service' focus in Indian restaurant industry. The empirical data comes from a spectrum of restaurants in Bangalore and Hyderabad. The paper is organised as follows. The immediate section describes the operations in traditional Indian restaurants, followed by emergence of a new design 'Darshini'. The later sections compare the service characteristics of both the designs and draw out some managerial implications.

## The traditional South Indian Restaurant: Design and Operations.

The first licensed restaurant was in Mumbai in 1835, and by 1930 there were 1370 registered hotels in India (Indian Express, 1995). The early restaurants catered to distinct regional or sect preferences. Examples include Shekawati and Kathiawadi restaurant's depicting Gujarat's distinctive cooking styles while Marwari or Chetty or Bukhari hotels reflected a particular community style of cooking. During early 1920, enterprising migrants from Coastal Karnataka and Kerala founded restaurants serving south Indian varieties in cities such as Bombay and Madras, offering typically rice as the major serving. South Indian states despite their differences in palate preferences use rice as a staple diet and several forms of food items are based on rice. These include idly, dosas

(pancakes), appam, Utappam, etc. The restaurants serving these dishes came to be termed as 'South Indian' restaurants. The typical South Indian restaurant, mostly vegetarian, served breakfast, lunch, evening tiffins and dinner. Food was served in plantain leaf laid on the top of wooden tables and chairs or benches were used to seat the customer. The principal focus was on product attribute, with extreme emphasis on taste of the food. Taste was an important means of retaining customer loyalty and each town had its own share of legendary hotels offering unique dishes. The breakfast menu included a wide variety of dishes (averaging 4), often requiring different raw material and operations. Majority of the restaurant carried huge inventories of the raw material and backroom operations were labour intensive. Operations such as grinding, dough-mixing, shredding and cutting were carried out manually. Wood, Coal or LPG were the cooking mediums used and often the specific requirement of a dish determined the medium. For example, baking of Chapathi's required tawa using Coal or Wood. Associated issues are loss of heat, Chef's discomfort and emissions of smoke and soot into the dining area. Moreover, several restaurants, especially the high-volume, high-variety kind (say, Sharavana Bhavan in Chennai), resort to make-to-stock (MTS) kind of operations. While batch size economies are obtained at cooking, re-heating may be required for completion of order required which result in duplication of activities, cost and additional manpower.

Figure 1 shows the layout of traditional south Indian restaurant. In these restaurants the 'line of visibility' (i.e., area to which customer's view of front and back office operations is allowed) is quite low. The 'service cycle' of a traditional restaurant involved the following activities: customer entry, finds a seat, arrival of waiter, time for decision and placement of order, preparation of dish, transfer/pick up from kitchen, customer eats, waiter brings the bill and collects the bill, waiter back with change and customer exits the system.

The cost structure of a typical (8-table) south Indian restaurant is as follows.

| | |
|---|---|
| Building | 20% |
| Utensils | 15% |
| Furniture | 5% |
| Labour cost | 10% |
| Food | 40% |
| Power, fuel, & Water | 5% |

Source: Hindu, 1995.


**Trends in the industry**

The hotel industry, especially in late 80's has seen a sea change in terms of market and cost structure. The land prices moved up from Rs 200/sq.ft in 1980 moved to Rs 1500 Sq.ft in 1992 (Business Standard, 1996). Energy cost for commercial enterprises in states like Karnataka and Andhra Pradesh jumped by almost 200 per cent. Changes in the

social architectures and styles also started having their influence on the Hotel industry. According to an estimate the number of nuclear families in India quadrupled between 1970 and 1989 and the number of working women within the organised labour rose from a 1.8 per cent in 1967 to 7.9 per cent in 1989 (Ministry of Labor, 1992). With increasing urbanisation and its associated pressures of timing, most customers started demanding a quick and cleaner service. Restaurants, especially the small and hence the most vulnerable, started looking at ways of increasing efficiencies and reducing waiting times.

It was on March 1989, Mr. Janardhan, a young entrepreneur hailing from a family of restaurers, started looking at designing a new kind of hotels which meet the above demands. His objective was to design smaller layout that reduce real estate costs and integration of Kitchen with the service area to increase the operational productivity. He was also of the view that allowing the customer to participate in the service cycle will not only decrease the cost of operations, but also ensure better appreciation of the design. His intuition, personal aspirations and appreciation of competition led him to start a radically different restaurant at Gandhi Bazaar, Bangalore. The restaurant named `Upahara Darshini' proved to be a major success and several clones appeared in the market. According to a recent estimate by the Federation of Hotel and Restaurant Association of India (South) there are over 240 Darshini's in the states of Karnataka and Andhra Pradesh, and several traditional restaurants are being converted to `Darshini's" (FHRAI, 1994).


**Characteristics of `Darshini'.**

A Darshini is a simple restaurant offering: fast service, clean and high quality food at low prices. limited free space, and four/three tables with no seats and no waiters. Figure 2. shows the design of a typical Darshini. In Darshini's, the operating principle is one of make-to-order, low-variety and high-volume. The service cycle in a Darshini involves the following activites: customer entry, buy a coupon, walk to counter and pick the dish, walk to a table, complete meal, and exit. Table 1 provides the comparison between service cycles of traditional restaurant and Darshini. The facility design stresses `functionality' and the departments are grouped on qualitative criteria of `criticality of sequence'. Unlike the traditional restaurant the `line of visibility' in a Darshini is quite broad. The customer can actually look into the kitchen area and this has two effects. Increased responsibility on the Kitchen staff to keep the place clean and for the customers to know literally what is cooking. This eliminates the need for `product information' to the customers and aids in his production selection. Given the space constraints in which the design evolved, technology was seen a critical resource that can eliminate some of the problems related to service package. Darshini's employ a centralized heating system for their cooking and use exhaust for heating up the stock-up products. Moreover, given the cook also is involved as `nikalwale' (the kitchen passer), manpower requirements are also reduced.

Another important dimension related to Darshini's strategy is the level of product differentiation and standardization. While increasing customer contact, it is imperative a

service firm make trade off's in the degree of horizontal differentiation (Yang, et.al., 1992). By adopting a policy of few seemingly different products (mostly rice based) and/or the service restricted to commonality of product consumption Darshinis' successfully exploits the service package. More product variety in 'basic' product forms would have hurt the 'focus' (Skinner, 1974).

New forms of service designs also offer incentives for outsourcing some part of operations. In traditional design, fermented rice dough, the primary raw material for Idli's is produced within the restaurant. However, in Darshini's, because of the compact grouping of operational areas (like Kitchen, serving) within a given space, placing of back-room operations becomes difficult. Given the ease of separating operations in Services, initially several Darshinis had managed these operations at a different site. However, recently Darshinis seem to obtain dough from wet grinding mills directly on a daily basis. On manpower front too, several manpower Darshini's seem to have been balancing the manpower allocations to exploit lean and high service requirements.

**Effectiveness of Design**

Towards ascertaining the effectiveness of two designs, OM researchers suggest evaluation of aggregate measures of service cycle (Brown et.al., 1990). In literature, departure time from queue, time in system, service time, waiting cost, proportion of job completed on time, tardiness and reneging proportion are some of the measures employed to compare alternate designs (Gummenson, 1990). However, given the two service designs evolved independently, it was opined to measure the differences on customer related measures such as labor required per a customer, total number of customer turn per minute as estimates. The following parameters were thus computed for the designs based on empirical distributions.

Space Utilization factor: This is the percentage of useful area to the total plinth area. The useful area includes kitchen, table space, store, customer occupancy area and area occupied by number of customer in queue.

Customer turnover time: is the time required for a customer to enter the system, get serviced and leave. It is a measure of average service rate of the system. This measure was used in tandem with the bottleneck operation to identify the reneging rate and the number of customers in queue.

Labor/seat: is a measure of manpower required to man a customer. It is a direct estimate of manpower cost for each design.

Customer contact factor: is the time a customer is involved in a service cycle (Chase and Tansik, 1983). While it is argued that a higher customer contact may lead to inefficiency, customer involvement in a process may lead to higher efficiency.

Labor utilization factor: is a measure of involvement of the labor force for a given service cycle. A higher utilization rate is expected to reveal higher labor productivity and the vice versa.

Table 2. shows comparative performance of traditional restaurant and Darshini on the above parameters. As observed, on several measures the Darshini's outperform the traditional restaurant. Darshini's seem to offer products 25 to 30% cheaper compared to traditional restaurants by adopting: smaller layout that reduces real estate cost, eliminate waiters leading to reduced labor cost, reduce movements in Kitchen so that labor productivity is high, and reduce inventory costs.

**Managerial Implication**

What are the managerial implications arising out of this study?. Designing of a service delivery system is a creative process. It starts with a service concept and strategy to provide a service with features to differentiate from the competition. Ensuring fit between the design and service strategy requires a careful analysis of product flows, level of product differentiation and regrouping of activities (Evans and Lindsay, 1996). Therefore, service process designers must concentrate on minimizing process complexities, and make the process immune to inadvertent human errors, particularly customer interactions. Evolution of Darshini indicates, an improvement of existing service or design of a new service package need to follow three basic steps as follows.

1)  Analyze the service cycle and question the elements that actually produce the service.

2)  For that element analyze the inputs required to process the output and identify methods of providing the same in simple activities.

3)  For each of such input, identify source, analyze the capacity and queue behavior.

4)  Impose product variety to identify the permissible horizontal and vertical product variety

5)  Iterate to obtain a simple, closely linked sub-activities that enshrines the service strategy and desired quality.

**Conclusions**

This paper presented the development of alternate designs in a traditional service sector, viz, restaurant industry. The study reveals a successful new service design should reflect the demands of external factors and exploit the trade-off between differentiation and focus. The choices may not only offer cost-effective designs, but may also prove to be strategic weapons to alter the competition.

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**Table 1. A comparison of service cycle of Traditional restaurant Vs Darshini.**

| Traditional Restaurant | Darshini's |
|---|---|
| Customer enters the restaurant | Customer enters a Darshini |
| He Finds a Table: 0-5 Minutes | Buys the coupon at Counter: 1-3 Min |
| Waiter comes to the table with menu: 3 Minutes | Walks to counter & picks the dish: 1-3 Min |
| Customer decides his order & places it: 3 Minutes | Walks to a table and eats: 2-5 Min |
| Waiter takes back the order to the Kitchen: 1 Min | Walks to the coffe/tea counter and picks his beverage: 1-2 Min |
| Cook prepares the dish: 1-7 Min | Finishes his drink and leaves: 2-4 Min |
| Delay due to waiter's absence in Kitchen: 1-3 Min | |
| Waiter goes to Kitchen: 1 Min | |
| Waiter comes back with dish: 1 Min | |
| Customer eats his dish: 5-15 Min | |
| Waiter takes his beverage order | |
| Waiter walks to the Kitchen: 1 Min | |
| Waiter collects the beverage: 1 Min | |
| Customer drinks the beverage: 1 Min | |
| Waiter brings the bill | |
| Waiter collects the bill: 2 Min | |
| Waiter walks to the cash counter: 1 Min | |
| Waiter comes back with the change: 1 Min | |
| Customer leaves | |

**Table 2. Comparison of Darshini and Traditional restaurant layout**

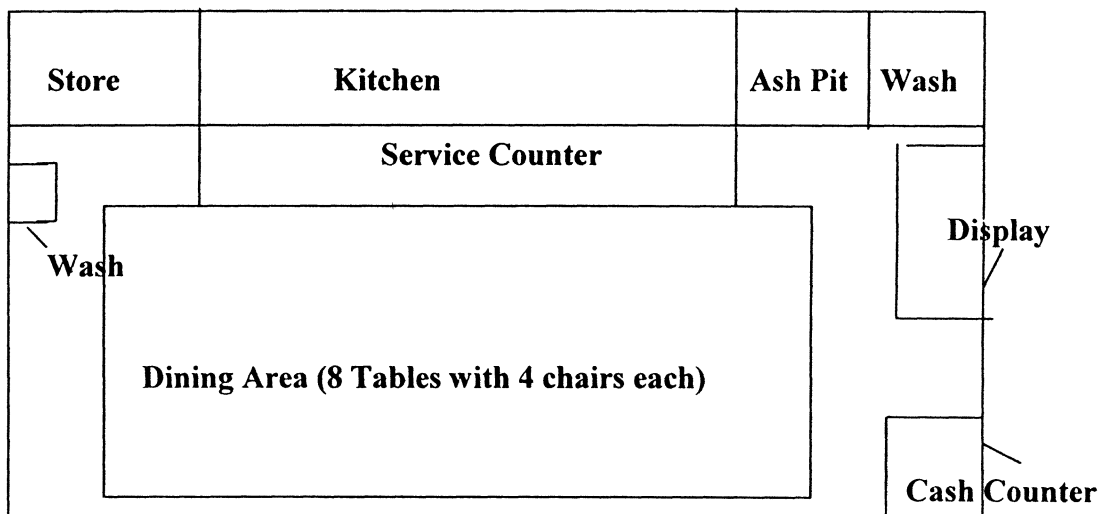| Parameter | Darshini | Traditional Restaurant |
|---|---|---|
| Space Utilization Factor | 0.72 | 0.4 |
| Customer Turnover time | 5-12 Minutes | 17-30 Minutes |
| Labour /seat | 0.36 | 0.9 |
| Service utilization | 0.73 | 0.25 |
| Customer contact factor | 0.81 | 0.10 |
| Product variety | Limited (<6) | Extensive (>8) |
| Labour utilization/cycle | 0.9 | 0.55 |

**Figure 1. Layout of a traditional South Indian Restaurant**



**Figure 2. Layout of a typical Darshini**