

CUSTOMER PARTICIPATION IN SERVICE PRODUCTION AND DELIVERY SYSTEM

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Highlights significance of designing service delivery system, explains the integral role of customer in service production process, stresses the importance of customer- organisation interface, lists important ingredients of service package to be considered while designing customer interface, enumerates various dimensions of customer interface which can be positively made use of in design of service production and delivery system, discusses various ways and means of inducing and enhancing customer participation in service production and delivery system, emphasises the primacy of customer satisfaction in the evaluation of service organisation and finally concludes by pointing out the lopsided emphasis of librarianship on people- equipment dimension of customer-interface that, too in terms of application software only.

KEYWORDS/DESCRIPTORS: Service management; User interface; Customer participation; Service production; Service delivery system.

1 INTRODUCTION

Service is a social process and management of service is the ability to direct this process. Service organisations are more sensitive to the quality of their management than any other kind of organisation. Service management is most crucial activity of a service organisation. How the customer can be made into an active participant in the service delivery system is often the core of service management.

Changed behaviours of customers are both a result of and a prerequisite for a service system. Customers are drawn into the service delivery system in a striking way. The design of the system is such that customers and employees are

unexpectedly linked. The customer is not just an onlooker; his presence in this particular context created a social dynamic which makes the employees conscious of their roles and their prestiges, which in turn helps to create a genuine new experience and a sense of participation in the customer. A well designed service delivery system makes all the participants (i.e., the employee, the customer and any other organised but not employed participants) feel better and emerge with enhanced self-esteem.

2 IMPORTANCE OF CUSTOMER INTERFACE

Often the production and even consumption of service takes place before the eyes of the

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customer instead of being hidden from him and through which a degree of quality control is incorporated into service delivery system. This emphasises importance of harmony and mutual support between the main parts of the service delivery system i.e., staff, customer and physical setting. The customer is almost compelled to receive impressions, to be aware of an experience, while the self respect, the motivation and the excellence of the employees are almost certain to be enhanced if there is harmony in the interface. It is difficult or expensive to achieve the same effect without the complimentary physical setting. The service on offer is uniquely linked with the service delivery system. In nutshell, customer plays interestingly complex role as he not only receives and consumes the service but also serves as a component in its production and delivery. The service concept and the benefits of the service, as perceived by the customer, depends on the nature of quality of the contact staff, the physical facilities and equipment used by the service organisation and how these are presented, and the identity of the other customers.

The customer-organisation interface in service organisation is quite crucial and many experts have conceived and explained it in their own way. *In the service management system the customer appears twice: as a consumer in the market segment and as part of the service delivery system. The two aspects of the relationship with the customer are inter-connected, since it is, of course, the totality that the customer himself will evaluate. Part of what the customer sees as the output of the service organisation consists of 'how much' and 'in what way' he has to participate in the provision of the service, and what problems and satisfactions are involved in this process* (Normann, 1991, p79).

Toffler(1980) sees the rise of the 'prosumer' (Producer- Customer) as part of a general trend towards a reorganisation of society whereby much of the specialisation of industrial society is being swept away by 'The Third Wave'.

Zeleny (1978) sees increased 'self-service' as the only possible way of maintaining the performance of people-intensive services with a limited potential for productivity improvements. Zeleny also feels the price mechanism for labour does not function in western societies according to classical economic theory; in people-intensive service sectors, costs will rise more rapidly than productivity, and the market will not be able to bear the increase; it will therefore prefer self-service.

Lovelock and Young (1979) describe increased customer participation in service production and delivery as an *active strategy for achieving cost effectiveness*.

Customer-Organisation interface is extremely important and delicate task for any service organisation. *Interface design is a crucial variable which determines much of the strategic positioning of the organisation, and it has profound operational consequences.*

3 SERVICE PACKAGE

For designing appropriate service delivery system, it is necessary to understand the nature of service package. Some important ingredients of a service package are:

(i) *Specialised capacity to deliver services*

In this sense, service organisations not only have to compete with each other but also compete with their own customers. In other words, customer becomes a competitor to service organisation when he is acquainted with service production process. As such adding more value to the customers operations than what he could perform himself becomes crucial. It all depends on organisations ability to do things better and/or more economically or on the customer's temporary or permanent lack of capacity to do it himself. A common example is restaurants versus housewives. The necessity and the role of

information intermediaries are revolving round this crucial issue.

(ii) *Linkages and social relationships*

Service organisations try to link customers and other resources either with new linkages or old links on new contexts. An example from librarianship could be referral service or information brokerage. A more general example is tour operators.

(iii) *Transfer of know-how*

An inherent dilemma or a problem or a possibility in service organisations is to supply service or provide know-how. A classic example is whether to carry out delegated searches or train end users for self service.

(iv) *Management and organisation as a service product*

It is interesting to note that the recent trend in service management is that service organisations are now actually would like to sell 'management systems' rather than services as such. Examples are like that of offers to manage hotels, hospitals, waste-handling systems, etc.

There are other usual ingredients of a service package but the above four are considered as crucial in terms of developing customer interface.

4 DIMENSIONS OF CUSTOMER INTERFACE

A clear understanding of customer interface is a prerequisite for design of service production and delivery system. There are many dimensions which characterise the customer-organisation interface. They are: (a) people-equipment dimension; (b) (in terms of) functions of the customers; (c) degree of freedom of choice; (d) degree of integration; (e) duration of contact, etc. Other dimensions include temporal aspects of

relationship, its spatial characteristics, who dominates the interfacing process and how, etc.

On the people-equipment dimension, 2x2 matrix as shown below in Table-1 will lead to four cells and the examples are self explanatory. We can also thought of few library services for this illustration.

Table 1

CUSTOMER → ORGANISATION ↓	PEOPLE	EQUIPMENT
PEOPLE	Conventional training	Repair & maintenance service
EQUIPMENT	Automatic (bank) teller	Automatic car wash

In terms of functions of the customers, several functions as indicated in Table 2 can be identified against three broad modes of participation of customer, namely, physical, intellectual and emotional participation. The physical participation is commonly seen in open access systems and self service counters of libraries. The intellectual participation is abundantly seen in the tasks carried out by library committees. The emotional participation of the customer is more subtle and sensitive and for this participation one has to identify oneself with service organisation.

Table 2

MODE → FUNCTIONS ↓	PHYSICAL	INTELLECTUAL	EMOTIONAL
SERVICE SPECIFICATION			
SERVICE PRODUCTION			
QUALITY CONTROL			
MAINTENANCE OF ETHOS			
SERVICE DEVELOPMENT			
MARKETING OF SERVICE			

Each one of the functions mentioned in Table 2 can be explained and illustrated with examples.

(i) *Providing specification* of the service by customer is common in customer-tailored services like the SDI service.

(ii) *Coproduction* of service is concerned with customer doing some of the (physical) work which could conceivably have been done by the service organisation. On-line or CD-ROM database search by a customer himself or searching and locating a book on the shelf of a library could be cited as reasonable examples.

(iii) Customer can actively participate in *quality control* i.e., in maintaining quality of the service like cleaning of vehicle or providing feedback for a search result on the screen while seated along with intermediary.

(iv) The service organisation may decide to incorporate customer participation and customer interaction as part of the service delivery process for the simple reason that it provides *benefits to its employees in terms of interesting experiences, excitement or valuation feedback*. In other words, customer may influence ethos, motivation and productivity of staff when jointly produce a service like doing a literature search.

Designing the customer-organisation interface in such a way that 'positive circles' emerge in the face-to-face interactions is of key importance in incorporating quality maintenance and quality control into the service delivery system.

(v) The customer can also participate in the *development* of the whole service system, i.e., the organisation should work together with knowledgeable and demanding customers for the development of service. The 'good customer' is as essential to successful development as anything else. Customer participation in collection development, particularly through customer representative library committee, is an appropriate example.

(vi) Through word-of-mouth or formal reference, customers may participate in *selling/marketing of services*. Because of the special characteristics of services, a good reference of either kind from a satisfied/dissatisfied customer is always a particularly valuable marketing tool, both for services to individuals and for professional services to institutions. A satisfied customer is more valued in marketing library services than any other publicity and advertisement. It is a well established finding that library users prefer references suggested by other users than obtaining from any other sources. As such there is high impact of customer participation in service production and delivery on marketing of services and a detailed discussion of the same is outside of the scope of this paper.

The other dimensions of customer interface like the degree of freedom of choice given to customer, the degree of integration of customer in the overall organisation setup, physical setting, temperament and attitude of contact staff, etc. are also equally important in the design of efficient and effective service production and delivery system. An ability to involve the customer appropriately and even emotionally is very often what makes the difference between success and failure of service organisation. Customer interface design is the key means for such achievements. The successful organisations have managed to transfer not only service but a great deal of know how so that the customer would know what to do when problems arose. They transfer and reinforce the culture and climate necessary to cost-effectiveness and to high-quality service in addition to using appropriate customer-interface.

5 CUSTOMER PARTICIPATION

Sometimes customer participation may be limited to the diagnosis of the problem, or extended to the extent of even providing the data for a diagnosis like in health care. It is always an important operational choice for the service organisation to decide how far the customer

should be allowed to participate and carry out laying specifications of the service. The extent of customer participation may vary very widely from single customer contact with demand for (or receipt of) a service to various degrees of participation as discussed earlier. Even when there is a customer contact with the service delivery system with minimum participation, the customer may do it himself or in proxy through a delegated person. Delegated searches for information are quite common in library situation.

The intensity of *customer contact* has high significance on the organisation design in service sector. The other factors to be taken into consideration are size of the organisation, level and type of technology to be used, mission and marketing strategies of service organisations. For example, the technical areas of the service generation system have to be protected and subjected to minimum customer contact. Similarly low contact back office services may have to be disaggregated and decoupled from high contact front office services. It is also said that ... *a service systems potential operating efficiency is a function of the degree to which the customer is in direct contact with the service facility relative to a total service creation time for the customer* (Chase and Tansik, 1990, p81). Here the efficiency is the ratio of outputs to inputs. An interesting area for further examination is the effect of altering the ratio of various inputs like skilled labour, equipment, technology, etc., for achieving optimum output as propounded in theory of production. ATM is a good example from banking sector.

It is interesting to note that, generally, higher the customer contact with the system, higher the task uncertainty, higher the need for skill required and knowledge of policies on the part of service personnel, higher the non-programmed decisions, higher the inexactness of production planning and capacity determination, more difficult to effectuate control and less flexible to locate production of service away from customers. Further, high contact systems have to

maximise effectiveness goals (as against maximising efficiency goals in case of low contact systems), emphasise 'analogic' as opposed to 'digital' communication and need to have some capacity to handle non-routine as well as boundary spanning tasks. High contact systems may have to very carefully look into theory and psychology of waiting lines, detailed discussion of which is outside the scope of this paper.

6 ENHANCING CUSTOMER PARTICIPATION AND CREATING NEW CUSTOMERS

Definite programs to increase customer participation and induce new customers is necessary and should be a continuous activity in service organisations. There are many ways to induce customer to participate in the service production and delivery process. Some of them include: (i) cost or more favourable price/quality ratio; (ii) stimulating experience/learning experience; (iii) social interaction; (iv) educating customers; (v) giving various kinds of tools like, form to fill in or checklists to influence his behaviour and to facilitate his work; (vi) appropriate physical setting; (vii) delivery process is so designed that the status and self-image of the customer are enhanced; and (viii) participation of co-customers like that of participation in journal clubs.

A customer buying a service is often compared to watching an iceberg. The potential customer has to base his decision on a number of incomplete clues, i.e., he sees only tip of the iceberg in choosing a service (as against choosing a physical product). The *customer satisfaction* is the prime indicator of success of service organisation. Customer satisfaction is often used as the criterion for evaluation of the service organisation itself. On the other hand, customer himself is concerned with evaluating potential benefits and with reducing uncertainty and risk of the service he has to choose. The service organizations must develop tools to make this process of evaluating benefits easy and effective.

We need to understand the nature of the process and how to influence and facilitate the task of the customer. The potential customer is often immediately more interested in evaluating the service delivery systems than contents and benefits of service and can discover clues by assessing the service delivery system, equipment, premises, financial resources, human resources, etc. As a result 'hard' features in concrete brick and marble may be displayed in abundance to reassure the customer as a substitute for the more intangible 'soft' ingredients. It is in this context that sufficient attention and care have to be given for the design of layout and physical settings of a library including dress of service delivery personnel and standardised stationery.

It is the perceived usefulness of the service is more important while evaluating a service by customer and perceived utility contributes significantly to customer satisfaction. In case of professional services (where there is a know-how gap between the service provider and the potential customer which makes evaluation of the service especially difficult for the customer), two aspects of the behaviour of contact personnel are of decisive importance: (i) the amount of interest and emotional empathy that is shown together with the willingness to go to great lengths to serve the customer; and (ii) the principle of instant mini-delivery', which is difficult to learn and practice, but very effective tool in creating a customer. Since the whole complex service cannot be experienced and demonstrated in its entirety, this provides opportunity for skilled contact person to find or create and demonstrate what he can do for the customer. For example, an empathic and creative diagnosis of the customers problem, a sensitive and well-chosen suggestion or proposal, or an appropriate display of other skills based on the customers situation will create confidence.

Another way of describing the (intangible) service output is to refer to related transactions and produce a list of records and a list of satisfied customers. The potential customer as well wants

to know what other types of customers have been involved with the service organisation before, as he will be influenced by both its external image and his self-image will be affected by the nature of the other customers.

High *customer turnover* is closely correlated to customer dissatisfaction. Generally it is more expensive to acquire a new customer than to repeat sales to existing customers. It is very much true in case of librarianship also as it is more difficult to convert a confirmed non-user into an active user than making existing user to use more services (Sridhar, 1994). The pool of loyalty shared between customer and the organisation may act as a buffer for quite a long term. For changing supplier, customer has to overcome quite a heavy investment. The existence of loyalty pool explains why customer turnover and expressed dissatisfaction may not always immediately reflect a drop in the quality of the service. This is a very dangerous situation, since the service organisation is not receiving the right signals. How much effort should be devoted to existing customers depend on sample studies of quantitative data and economic calculations with appropriate frame of reference. In customer relationship, substandard service, misunderstandings and problematic situations may be avoided and if they do occur, they should be well handled. Surprisingly, there are even instances where slight customer discontent is desired and created to turn the situation into advantage.

7 CONCLUSION

Having noted the intricacies of service management and design of service delivery system, librarianship has a lot to learn from service management. Adequate care need to be taken in designing customer interface. Particularly, special efforts are required to be directed towards selection and training of contact (service delivery) personnel, design of service package, physical setting and creation of image of existing customers. A thorough understanding of importance of ingredients of service package is

equally necessary. An important outcome of a study of customer-organisation interface is that face-to-face interactions could lead to 'positive circles' which helps to maintain and control quality in the service delivery system. Appropriate use of various dimensions of customer interface can enhance the efficiency and effectiveness of service production and delivery system. Conscious efforts are lacking in this direction in librarianship. Even plain attempts to systematically develop programs for inducing customers for participation in service production and delivery as well as enhancing existing participation are quite rare. Some of the ways discussed above could be considered for development of customer participation in service development, production and delivery in librarianship.

Customer participation in service production and delivery system has significant effect on organisation design, quality improvement, efficiency and effectiveness of the service system as well as successful marketing of the services.

It may be noted that appropriate customer interface increases demand on and use of library services, increases productivity and decreases cost of the system (and hence increases usability of service). Librarianship has, by and large, unusually placed lopsided emphasis on people-equipment dimension of customer interface as prejudiced by user-interface concept of application software and rest of the vital aspects are ignored.

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