If quality of service is to be delivered operationally by a service organisation it requires a rigorous description of the dimensions of customer service. The article presents a definition of customer service based on six dimensions: flexibility, 'fault-freeness' and a framework of time are all 'firm' dimensions which can be easily measured, while style, steering and safety are 'soft' dimensions which are more difficult to measure. A service organisation can carry out an operational audit of the delivery of customer service and may establish its position according to performance against these six dimensions of customer service.

Service organisations have in the recent past become the focus of attention in America and Western Europe because of the business performance of service companies, their potential for creating employment, and the internationalisation of service organisations [Bank of England, 1985].

Customer service is being recognised as being of great importance. Successful service businesses see being good at delivering a high level of customer service as an effective means of gaining advantage over existing competitors in a national market, as a way of resisting the infiltration of foreign competitors, or as a means to internationalise. Consequently many service organisations are now starting to pay more than just lip-service to the creation of the operational means to deliver a competitive level of quality of service to match customers' expectation of service.

The difficulties faced by a service organisation in maintaining quality of service have been well documented [Horowitz, 1987; Johnston, 1987; Moores, 1986]. Essentially they relate to the presence of customers within the service production process and the intangible and individualistic nature of assessment of many aspects of service quality and the multi-stage heterogeneous nature of services, which make the quality procedures employed in manufacturing more difficult to apply.

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This article looks at the dimensions of customer service and gives some suggestions for approaches which might be adopted to produce operationally the required level of quality of service.

DIMENSIONS OF CUSTOMER SERVICE AFFECTING QUALITY OF SERVICE

Customer service and quality of service are not easy factors to define precisely. Any service comprises a mixture of some physical items which form part of the service and the interaction of the service organisation with the customer characteristically through a personal face to face interaction. This mixture makes the service package, characterised by serving retail goods or food and drink in a restaurant. Also many services organisations offer not one but a number of services in a service bundle [Langeard, 1981], and in addition, each particular service delivery involves a number of stages and contact with more than one server.

The effect of this potential and inherent variability of the service product makes the likelihood of error high and often visible to the customer who is present in at least some parts of the service production and delivery either as a patient, traveller, diner, bank or shop customer.

If operational systems are to be implemented to deliver and control service quality at a required level service organisations should seek to be as precise as possible about what customer service means for their business and market sector. It is possible as a guide to have a checklist of some dimensions of customer service which reflect the main factors which constituted customer service for a range of service organisations.

'Firm' Dimensions

Framework of time

The 'framework of time' dimension provides answers to the questions:

• When can a customer get the service?
• How long does the service take?
• How dependable is the timing?

The operational parameters which affect the answers are:

• The availability of the service (i.e., hours/day)
• The availability of all or part of the service package at the time it is needed (food dishes, goods on shop shelves, service people).
• The responsiveness of the service organisation to the demand for the service by a customer (telephone, hotel, or field service receptionist).
• Waiting or queueing time for the service or for a stage in the service.
### TABLE 1
DIMENSIONS OF CUSTOMER SERVICE

<table>
<thead>
<tr>
<th>Framework of Time</th>
<th>'Fault-Freeness'</th>
<th>Flexibility</th>
<th>Style</th>
<th>Steering</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Availability of service (i.e.: hours/day)</td>
<td>* Physical Items of the service bundle</td>
<td>* To customize the service</td>
<td>* Appropriateness of attitudes</td>
<td>* Perceived Importance</td>
<td>* Trust</td>
</tr>
<tr>
<td>* Availability of all aspects of the service package</td>
<td></td>
<td>* To cope with mistakes</td>
<td>* Accessibility (to people and location)</td>
<td>* Feelings of being in control</td>
<td>* Confidence</td>
</tr>
<tr>
<td>* Responsiveness (How long to react to customer)</td>
<td>* Correctness of Information/Advice</td>
<td>* To introduce new services (to complete a service package)</td>
<td>* Perceived value</td>
<td>* Clarity of Service (where to go, what to do, who to see)</td>
<td>* Honesty of Advice/Information</td>
</tr>
<tr>
<td>* Queue Time</td>
<td></td>
<td></td>
<td>* Ambience</td>
<td>* Consistency</td>
<td>* Security</td>
</tr>
<tr>
<td>* Process Time</td>
<td></td>
<td></td>
<td>- Decoration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Dependability/Repeatability of service time</td>
<td></td>
<td></td>
<td>- Lighting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Temperature</td>
<td></td>
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<td></td>
<td></td>
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<td>- Cleanliness</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Dress</td>
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<td></td>
</tr>
</tbody>
</table>

CUSTOMER SERVICES AND OPERATIONS MANAGEMENT

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• Process time for the service to be produced and delivered -- the customer will be part of the process for some of the production process time but necessarily for all. For example, the client of a professional service can have a marked influence on this element of time.
• Dependability/repeatability of the time framework.

Fault Freeness
The 'fault-freeness' dimension provides the answer to the question:
• Is the service process and product free of errors or faults?

The operational parameters affecting the 'fault-freeness' are:
• The specification of the physical items of the service package
• The correctness of information or advice
• Control procedures to measure and monitor the physical aspects of the service package.

Note: 'Fault-freeness' here applies to those factors which can be measured relatively easily and tends to exclude 'soft' dimensions.

Flexibility
The 'flexibility' dimension involves answers to the question:
• How good is the service organisation at coping?

The operational areas which make up aspects of coping are:
• Coping with mistakes (either your own such as a wrong response made too late or those of the customers; for example incorrect labelling on airline baggage). As errors will occur through human error this dimension is particularly important in service operations.
• Customising the service (if only to give the perception of customisation).
• Introducing new services which add to the completeness of the service.

'Soft' Dimensions

Style
The 'style' dimension provides answers to the question:
• What is the house style or culture of the service organisation?

Operationally the following constituent factors must be considered:
• The appropriateness of the attitudes of service personnel; overt friendliness is acceptable perhaps in leisure services but not in an undertakers firm.
• The assessibility of the service organisation to the most appro-
priate person for the customer to deal with; for example does the organisation tend to protect and to distance senior managers from the customers.

- The ambiance of the service environment described by decoration, lighting, temperature, space, cleanliness, dress.
- The perceived values of the service.

**Steering**

'Steering' encompasses the factors which go to answer the question:

- Do customers have the sense of driving the service and of being in control?

Factors which operationally contribute to the steering dimension are:

- Clarity of the service in terms of where to go, what to do, who to see or talk to. This factor is particularly important where customers are unfamiliar with the service or are nervous as with airline travel.
- Perceived importance or status given to the customer.
- Promoting the feeling on the part of the customer of being in control of what is happening [Bateson, 1984].
- The consistency of the service through different stages and on repeat visits.
- The time the service seems to take as distinct from the actual measured time; service managers have an opportunity to influence this factor for example, by having the customers work as part of the service production or perform some other activity like reading or watching a video.

**Safety**

The ‘safety’ dimension is concerned with the question:

- Do customers feel at ease with entrusting themselves and/or their possessions to the service organisation?

Operationally the realisation of this dimension means attention to the following factors:

- Honesty of information and advice
- Security of persons and articles
- Trust/confidence
- Confidentiality

**POSITIONING OF SERVICE ORGANISATIONS ACCORDING TO CUSTOMER SERVICE**

Service businesses and organisations have the choice of where to position themselves according to the attention they give operationally to the firm and soft dimensions of customer service and hence service quality.
Four main positions are shown in the matrix Figure 1: these reflect the stances that are taken by stereotype service organisations, namely ‘Stars’, ‘Complacent Technocrats and Bureaucrats’, ‘Complacent Professional Servers’, and ‘Lip Servers’.

- ‘Stars’ are those service organisations which pay attention to and give commitment equally to the firm and the soft aspects of customer service irrespective of the relative proportions of physical items and intangible service aspects in the service package.

- ‘Complacent Technocrats or Bureaucrats’ are service organisations in the service sectors which have a high degree of physical items in the service bundle characterised by the repair work or documentation where attention is given to the control of quality of the firm aspects while disregarding the service contact aspects of the service package; characteristically a restaurant which delivers the soft aspects of service but falls down on the performance of the food standard or timing.

- ‘Complacent Professional Servers’ are service organisations which pay attention to the soft dimensions of service but tend to ignore the firm dimensions perhaps on the grounds that they are perceived as less important.

- ‘The Lip Servicers’ are those service organisations which tend to pay lip service to the operational aspects of customer service but in actuality fail to deliver in either the firm or the soft dimensions of the service.
The matrix may be used to make an assessment of a service organisation in a number of ways:

i) The service organisation as a whole in relationship to other competitors.

ii) Between different stages within one particular service.

iii) Between the delivery of different service products. An example is shown in Figure 2 for a number of estate agents. Agents A pay great attention to circulating details of properties and are punctilious at arranging appointments but with a concentration on satisfying the framework of time more than of the soft aspects. Agents B pay great attention to contact with clients establishing the individual concerns but often fail on the accuracy of information and timing. Agents C fail to deliver the correct documentation and information and fail in delivering the dimensions of style, steering, and safety.

**FIGURE 2**

POSITIONING OF SERVICE ORGANISATIONS ACCORDING TO OPERATIONAL DELIVERY OF CUSTOMER SERVICE DIMENSIONS

![](image)

*Effect of Business and Marketing Policies*

The business and marketing policies of a service organisation influence the operational requirements for the operational production and delivery system and hence the quality of the service package to meet the customer service expectations of the customers of the business. Lack of clarity of business and marketing policies makes the process difficult as it is less easy to establish a common view of the operational nature and direction of the business within the service organisation and to create a realistic level of expectation of the customer service for the customer.
There is a view [Voss et al., 1985; Sasser et al., 1978] that there should be a matching of the creation of the expectation and the capability of the production and delivery system to avoid unattainable expectations being held by customers of the service process and service product (see Figure 3).

FIGURE 3

```
SERVICE PACKAGE
       ↓
SERVICE PACKAGE
       TO MEET
PERFORMANCE STANDARDS
       SET BY
OPERATIONAL ATTRIBUTES
AND VARIABLES FOR THE
SERVICE PACKAGE

CUSTOMER/CLIENT
NEEDS FROM THE
SERVICE PACKAGE

EXPRESSED BY MEDIA
WORD OF MOUTH
PREVIOUS EXPERIENCE

CUSTOMER PERCEPTION OF THE
SERVICE PACKAGE GIVING
SATISFACTION/DISSATISFACTION

SERVICE QUALITY FRAMEWORK
```

Source: Adapted from Sasser et al.

Business policy should act as a filter between the market and the service operations management to define operational parameters of volume of services, variety of services, and variation of demand [Slack, 1987]. Without this filter it is difficult for the operations management to focus on the aspects of the service product(s) which are important in winning business [Hill, 1985]. If the service operation is able to organise so as to concentrate resources on a limited number of activities this is conducive to high operational performance [Skinner, 1985] and is illustrated by often quoted examples of excellence in service businesses such as Scandinavian Airlines (business travel), Macdonalds (limited menu).

OPERATIONS MANAGEMENT GUIDELINES FOR MEETING TO CUSTOMER SERVICE EXPECTATIONS

The operations management task is to produce and deliver service packages to quality standards which meet the customers expectations of customer service. If this task is to be achieved consistently it requires clear answers to the questions:
• Are the standards for the service clearly established?
• Is the service production and delivery system capable of meeting the standards?
• Is each stage of the service process meeting the standards?
• Is the completed service product to standard?
• Can the customer service performance be improved with the same resources?

Attainment of quality standards in this manner requires a holistic approach to quality, taking into account all factors which have a bearing on the quality.

Standards
Essentially, clear standards and procedures need to be established, either internally or through co-operation with national or international standards bodies. In the UK British Standards Institute administers the quality standard BS 5750. Many service organisations tackle the question of standards by means of highly detailed specifications of the procedures to be followed by the staff and supervision.

Operational Capability
The capability of the service production and delivery system requires attention to:

- People - skills/knowledge/numbers
- Process - flow of customers, information and materials
  - level of customer contact with the service personnel and customer involvement
  [Langeard, 1981; Chase, 1978].
  - technology
- Facilities - location/numbers/size of sites
- Organisation - relationship between the front office where the customer is and the back room support activities and the management of the interface between the front office and back room [Teboul et al.].
- Instruction - clear procedures for the tasks to meet standards
- Planning - organisation of work in periods of time
- Monitoring - can each stage meet its standards?
  - does the final service product match standards?

Operational Focus in Service Quality
Some focus for operations managers in maintaining service quality can be gained from an understanding of the interaction of the 'firm' and 'soft' dimensions of customer service. The 'firm' dimensions contain
parameters which lead themselves more easily to the normal quality control of setting standards, measuring, monitoring and correcting. The major influence(s) of the ‘firm’ customer service dimensions on the ‘soft’ dimensions are shown in the matrix in Figure 4.

**FIGURE 4**
WHERE ‘FIRM’ DIMENSIONS OF CUSTOMER SERVICE MOST INFLUENCE ‘SOFT’ DIMENSIONS

<table>
<thead>
<tr>
<th>Framework of Time</th>
<th>'Fault-Freeness'</th>
<th>Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style</td>
<td>Availability</td>
<td>‘Right First Time’</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>Culture</td>
</tr>
<tr>
<td>Steering</td>
<td>Dependability</td>
<td>Customers involved in monitoring</td>
</tr>
<tr>
<td>Safety</td>
<td>Dependability</td>
<td>Culture of Competence</td>
</tr>
</tbody>
</table>

The ‘Framework of Time’ dimension can encourage openness, availability, and dependability in the ‘soft’ dimensions. ‘Fault-freeness’ [Price, 1984], active participation by customers in the monitoring of the process, and a culture of competence through skills and knowledge. ‘Flexibility’ enhances customisation and recovery from mistakes, errors, or misunderstandings, and can provide the contingencies for events which might disrupt the service production and delivery.

Operational matching of competences to quality standards can be approached through a series of questions addressed in each of the ‘firm’ dimensions of customer service to gain an audit of the state of a service operation.

*Framework of Time*
- How available does the service have to be (hours/day/week) in relationship to competitors?
- How available do all the physical items in the service package need to be? Is it possible to identify the most critical items?
- How flexible is the labour to meet fluctuations in demand (hours worked/week, days worked/week, part-time; full-time staff)?
- Are there standards for the time taken to respond to a customer at all stages in the service process
  - face to face?
It is of paramount importance that the first contact is good to accommodate the 'crisis of entry' or 'moment of truth' [Normann, 1984] or 'point of impact' [Langeard, 1981], as the customer interacts with the service organisation.

- Are there standards for the limits to queue size?
- Are there limits set on the queue/wait times?
- What is the variability in the service process time?
- Can technology assist with timing/availability?

'Fault-freeness'

- Are there specifications for all physical items which form part of the service package?
- Is there a quality control process to ensure that all the physical items meet their specification?
- Are there standards for the integrity of information?
- Is there a quality control process to ensure the integrity of information?
- Are there maintenance procedures which realistically ensure the availability of the service?

Flexibility

- To what extent must some or all of the service process be customerised?
- Can the delivery of all or some service or service stages be customerised?
  - with little productive effort? - 'soft' aspects can often be developed in this way to competitive advantage.
  - by using technology and automation?
  - through the customers being involved and working?
- Can work be segmented to maintain operational efficiency and productivity while providing customisation?
- How often are new services introduced?
- How many new services are introduced and with what frequency?
- Are old services removed as new ones are introduced?
- Are there contingencies for mistakes made by customers and by service personnel?
- Is there an escalation procedure for when mistakes happen?

Handling the 'Soft' Dimensions Operationally

The approach to setting and maintaining standards in the quality of service in the area of the 'soft' dimensions can be tackled by a structured procedural method laying down the way in which the service is to be produced in the tasks performed by the service personnel. However, the existence of such procedural manuals as guides to the level of
service for supervision and service people is only part of the operational need in the delivery of the soft aspects of customer service. A wider vision is required as has been the experience of those service organisations which have actively attempted to focus on quality of service.

The consensus from organisations like British Airways, Avis, Sheraton Hotels, American Express and various banks is that there must be a corporate commitment to quality and customer service. Programmes within the companies have aimed at fulfilling the concept of total quality. The focus of attention of all within the organisation must be on the demands for maintaining quality standards at all levels in the organisation and in both back room as well as front office functions. The use of ‘Quality Circles’ [Dale, 1986], or ‘Quality Teams’ [Townsend, 1986], and Customer Care Programmes [Moores, 1984] have been described. The essential features of these programmes are:

- A clear corporate strategy for quality and customer service.
- Senior management care and act to maintain soft standards.
- Responsibility for quality is assumed by all staff.
- Internal controls are not in conflict with customer service.
- Customers are involved in quality assessment.
- Clear understanding of the role of service personnel in customer contact.
- Honesty in dealing with information about quality and customer service.

**Operational Audit for Customer Service**

If a service organisation seeks to improve the quality of service or to maintain more consistently existing standards it is important to be clear how the various internal resource parameters and external market factors act as a constraint on meeting the desired levels of customer service for the firm and soft dimensions. Table 2 presents a format for an operational audit of a service organisation on which the constraints for meeting with six main dimensions of customer service can be usefully identified as high/medium/low. Other factors can of course be added to the list to encompass the particular features of a different types of service organisation.

An operational audit can identify those factors in the service production and delivery system which have the greatest constraint on the six main dimensions of customer service. Ways of ameliorating the constraint can then be tackled through the application of problem solving techniques perhaps within the context of value analysis.

**CONCLUSION**

Customer service must have an operational reality and not just be a marketing wish for service companies to remain competitive in the changing world of service trade. Operations managers are presented with the complex and difficult task of providing a quality of service
<table>
<thead>
<tr>
<th>Dimensions of Customer Service</th>
<th>Es</th>
<th>Management</th>
<th>Staff</th>
<th>Buildings</th>
<th>Location</th>
<th>Current Technology</th>
<th>Internal Controls</th>
<th>Competitors Actions</th>
<th>Customers Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Senior</td>
<td>Supervisory</td>
<td>FO</td>
<td>BR</td>
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<tr>
<td>Framework of Time</td>
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<td>Fault Freeeness</td>
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<td>Flexibility</td>
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<tr>
<td>Steering</td>
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<td>Safety</td>
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</tbody>
</table>

Notes: *FO Front Office (contact)  
BT Back Room  
* International Controls Conflict  
Hi/Med/Lo Constraint
which matches the customer’s expectation and needs of both the firm and the soft dimensions of customer service. The approach to satisfying these demands is in understanding the interactive nature of the customer service dimensions and the factors which constitute them and then by the institution of a corporate commitment to quality. This paper has presented a framework for starting the process through the use of checklists and an operational audit for customer service.

The author would like to thank Professor Nigel Slack for his valuable discussions and contribution to this paper.

REFERENCES
