

**SWP 64/91 "BARRIERS TO SERVICE QUALITY: THE CAPACITY,  
QUALITY, PRODUCTIVITY BALANCE"**

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Title      **BARRIERS TO SERVICE  
QUALITY**

**THE CAPACITY,  
QUALITY,  
PRODUCTIVITY  
BALANCE**

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Summary

Much of the work on service quality thus far has centred on the problems of service definition, largely discussing methodologies for measuring customer perception of a range of tangible and intangible attributes. Other work focuses on the role of the service providers, how they can be motivated to deliver better customer service and how teams can be built.

More attention is now being paid to service delivery design, following the pathway pioneered by manufacturing companies who have discovered the benefits of designing quality into the products and processes, rather than relying on monitoring quality on or after the event and adjusting accordingly. Attempts have been made to identify process flows by "blueprinting" (Shostack) and "moments of trust" (Collier).

This paper addresses two areas. The first is to identify barriers to service quality and to indicate how these may be removed, and the second is a discussion of a fundamental aspect of service delivery design, namely that of capacity management and its impact on quality and productivity.

**WHAT ARE THE BARRIERS TO SERVICE QUALITY?**

**\* Not Clarifying what is needed**

Many organisations evolve and grow through time, often adding complexity in the process. A service organisation may be set up originally to provide a focussed service to a limited customer base. Through time, further business opportunities may present themselves, new staff are taken on who don't share the original vision of the organisation and before long there are as

many versions of the organisation's purpose as there are employees (if not more!).

Lack of clarity of direction at the strategic level translates into uncoordinated actions at the tactical level. For individual service providers this means confusion, particularly when customers demand what seems a reasonable level of service which for reasons known only to senior management is not offered. Lack of guiding strategy leads to deteriorating communication between elements in the service supply chain and uncoordinated process changes which may or may not improve the effectiveness of the total system.

Posing the question, "What business are we in?" to an "in-company" group can open up lengthy but fruitful discussion! However, this debate is only useful if there is a working conclusion. We have discovered that there is considerable merit in organising the issues into the following framework for operations task definition as it allows an organisation to recognise those things which must be managed particularly well to ensure customer satisfaction as well as those things which prevent or constrain improvement.

**Business Objectives:** A statement of the current priorities at corporate level. Employees must be clear as to whether the company is going for growth, profit or innovation.

**Value Adding Activities:** Revisiting the question of what the customer actually pays for. The computer manufacturer is as much in the people business through consultancy and training as in turning out electronic boxes. Recognition of this shift is crucial in designing service delivery systems.

**Customer Service Dimensions:** Figure 1 lists both tangible and intangible quality attributes. The organisation must decide which are Order Winning Criteria (Positive) and those which are Order Qualifying Criteria (Neutral). These are those attributes which respectively create competitive advantage and those which customers expect to be inherent

**Equipment, complexity, specialisation**

**Configuration:**

**Front Room/Back Room organisation**

**Network/Area/Branch/Unit configuration and content**

**Process Flow:**

**Standard/customised delivery**

**Identification of critical processes**

**\* Not working a capable system**

**In researching companies one is often struck by the attention to detail paid by operations managers. Many are extremely effective because they know their particular business inside out. However it is also true to say that many delivery systems are less effective because of a lack of follow through on the detail. The main problem areas are outlined below.**

**People - Service Providers**

**Much has been written on the problem of the "service robot". The person who for reasons of boredom or pressure no longer wants or is able to provide the level of service expected very quickly conveys the impression of someone going through the motions yet again.**

**Much of the research on "burn out" in social services can be applied more generally. This research indicates that the combination of the continual demands for assistance linked with inadequate resources rapidly transform a person eager to provide a high level of care and support into someone who will deliver the minimum to get by. The research indicates that all people**

will be affected to a degree by "burn-out" and therefore this must be reflected in systems design.

Strategies for limiting the effects of burn-out include better induction training, the support of colleagues and design of systems that prevent a feeling of isolation.

### **People - Customers**

Customers play many roles in service delivery and thus have a direct bearing on service quality levels. Just as service providers must be managed, so also must customers. The organisation that fully understands process flows, and in particular has analysed the process through the customers eyes rather than purely from a functional stand-point will be able to clarify the role of the customer in process delivery and better provide necessary direction and training where appropriate. In some cases this should also mean more rigorous selection through careful marketing and, occasionally "firing" the customer.

An example of the latter would be the unwilling delegate on a Business School Short Course. He has a disruptive effect on the group, he doesn't want to be there and the rest of the group doesn't want him either. It is probably best to refund his money and send him packing! It may be that there was a failure at the point of purchase, perhaps by the course being oversold to boost numbers!

### **Managing Load and Capacity effectively**

It is our contention that many quality problems occur because there is a mismatch between load and capacity, and furthermore that when a short term overload occurs (as it sometimes must) many organisations either react too late or in fact do nothing to mitigate the effect of the problem, hoping that the customers will see the situation and lower their expectations accordingly.

**In the latter case, the best practice appears to be clear about how the displaced customer is to be pacified and to offer help in locating alternatives but experience indicates that very rarely placates the customer.**

**The chase strategy is commonly used where customers will not wait because the value of the service in relation to its alternatives is low, and therefore fast response is crucial. This may often be accomplished by scheduling labour as in a fast food outlet thereby maintaining service levels without deterioration in labour productivity. Supermarket checkouts are another example, but in this case facilities such as channels must be provided to cope with peak demand, perhaps for late night shopping. In this case a conscious decision must be made as to how much floor space must be given up from productive display areas to site checkouts.**

**The extent to which quality is affected will often relate to the speed of response to changes in demand. The supermarkets appear to be reactive rather than pro-active here, waiting until the queue length is excessive before action is taken to staff another channel. A key management task is to improve the organisation's ability to forecast demand and to provide resources to maintain appropriate service levels.**

**We identify a third, short term, capacity strategy which is in effect a coping mechanism. At some point an immediate increase in demand will be inside the leadtime required for the organisation to add a unit of capacity. The Chase system effectively becomes Level at this point, and the effect on quality is discussed in the sections which follow.**

**\* The level of capacity management.**

**Figure 2 illustrates the issues here. Many service organisations operate at a number of levels, total network, branch level and unit level. So for a high street bank, the network is the national organisation, the branch is the individual outlet and the unit would be an individual function within the bank, for example foreign exchange or personal loans.**

**The time frame for capacity decisions shortens as we move from network to unit level, the network level being largely interested in medium to long term planning, whereas the unit is concerned with planning for short term provision of capacity.**

**Clearly, the units ability to match load and capacity effectively will be determined to no little extent by the accuracy of the network's long term planning.**

**\* Flexibility of Network Capacity.**

**There is a further element in this equation and this is the ability of the network to flex its capacity in the short term to cope with short term changes in the load and capacity balance at unit level. There is an equivalence to holding inventory in centralised stores as against at many locations at unit level. If the network can shift capacity quickly, short term overloads can be coped with more cheaply by holding a central capacity store rather than separate buffers locally.**

**A good example of network flexibility improving quality at unit level by re-allocating capacity is that of telephone response centres. As one centre becomes overloaded, response times would normally decline, but calls are redirected to a different centre without the customer being aware of any change or degradation in service.**

**\* The Influence on Quality when Chase becomes Level in the Front Room**

**In the immediate short term, even the most flexible of chase systems becomes fixed in that they can not respond quickly enough to add sufficient capacity to deal with a queue. At this stage individual service providers employ a range of official or unofficial "coping" mechanisms.**

**A restaurant may have a deliberate policy of informing customers of an extended waiting time, perhaps even suggesting alternatives. In this case the**

**customer, and must not ignore the possibility that technology may reduce opportunities for direct personal contact leading to a feeling of lack of care.**

## **MANAGING THE CAPACITY AND LOAD BALANCE**

### **\* The effect of utilisation on quality**

**The operations manager is continually faced with the problem of maintaining/improving perceived quality levels whilst at the same time controlling cost. It is easy to see the relationship between capacity management and productivity in that higher utilisation of people and facilities leads directly to lower costs, hence the attention to load factors for airlines and occupancy rates for hotels. It is all too easy to talk in general terms about the need to improve service quality levels, but assistance must be given simultaneously with ensuring that productivity is maintained, if not enhanced, at the same time.**

**There is a similar relationship between utilisation and perceived service levels, though this is not well understood. For some services, low utilisation has a detrimental effect on quality. If there is a strong social content in the service, the atmosphere of a full theatre, the "buzz" of conversation in a restaurant, low utilisation may well be perceived to be bad. Indeed, some financial organisations believe that a small queue is infinitely preferable to an empty office!**

**As utilisation rises for in this group of services with a strong social element, so too will perceived quality, until the pressure of load forces changes to either service level or the product that is delivered. This change may be difficult to detect at first. The restaurant may be producing the same quality of food in approximately the same time, but aspects of personal attention may deteriorate. The service manager must understand the dynamics of this situation in order to balance a possible short term gain of high utilisation against the longer term gain of high customer retention. Research quoted by Heskett relating to the American hospitality industry indicated a sharp decline in perceived service levels over 75% utilisation, and we have no**



**reason to believe that similar dynamics do not exist in the majority of service businesses.**

**This aspect is rarely considered by those conducting customer satisfaction surveys. Indeed, it is possible for an organisation to feel it is doing well because there is a general trend upwards in the ratings whilst the figures may obscure the fact that at times when there is an excess of demand over capacity there may be a significant group of extremely dissatisfied customers.**

**\* The choice of capacity strategy**

**Discussions of the two major capacity strategies are common, ie level or chase. In fact most organisations employ a combination of both, though at the aggregate level it is useful to identify the implications of the predominate approach.**

**A level strategy is normally employed where resources are scarce or costly or there are big steps to change capacity. The emphasis here is on ensuring that maximum use is made of the resource by managing or influencing demand to smooth the load. This strategy depends on the service being felt to be valuable by customers who may have to wait to use it. There may of course be some difference of opinion between service providers and customers as to the relative value of service resources set against customers' time. Mass scheduling of hospital appointments to bring all patients in at the start of a clinic thus ensuring that the consultant is not kept waiting causes much resentment. Indeed, such an approach may be dysfunctional in that patients tend to exhibit the behaviour that is clearly expected of them by arriving late or simply not arriving at all!**

**Service designers must be clear as to the quality implications of the approach selected. An appointments system creates expectations as to timeliness, the customer being happy to wait if arriving ten minutes early, but becomes restless if the service is running five minutes late. Other writers have explored in some detail queue psychology and the dangers of employing yield management techniques such as overbooking to ensure full utilisation.**

**This subject is dealt with more thoroughly in the second section on this paper, but an example is given to illustrate the point. The capacity of a certain roadside restaurant is fixed by the ability of the chef to produce meals on the griddle. When the restaurant is reasonably busy, the waitresses are cheerful and friendly, the meals are produced promptly and customers are generally very satisfied with the service. Unfortunately, when all the seats are occupied, the griddle chef cannot cope with the demand for meals fast enough. At this point the waitresses become less friendly, spending the minimum amount of time in the restaurant, partly because they are busier, but largely because they know they will only get complaints about the slow service. There are often complaints about the waitresses, whereas the root cause is an inability to manage load and capacity effectively.**

#### **Inappropriate measurement**

**Maintaining the correct emphasis between capacity management, quality and productivity is effected by the choice of measurement systems and the weight that is placed on each factor consciously or subconsciously by the management. It is all very well to say that improving quality levels is the number one priority, but if managers are monitored most frequently on cost and rewarded accordingly there is no doubt which area will receive most attention.**

**In analysing an organisation's approach to capacity management it is necessary to understand the level and timing of capacity decisions. Again, this is explored in more detail later, but it should be clear that if correct medium to long term decisions are made at the top or network level it is more likely that there will be the necessary short term flexibility to react to demand fluctuations at branch or unit level. These issues are discussed more extensively later in this paper.**

#### **Inability to recover from problems.**

**In general this relates to the ability of the organisation to recognise it has a dissatisfied customer and instigate meaningful action to recover the**

**situation. The "excellent" companies are those which encourage customers to complain, having the confidence in their staff and systems that everything possible will be done to resolve the complaint.**

**Recovery may also be required when the organisation itself has not failed. A second group of problems come from factors outside the control of the organisation. In fact it is a measure of the success of quality management when the focus for quality improvement shifts to investigate how it can improve the quality of its environment. Studying the response of emergency services to a disaster may give some clues.**

**Issues to be considered in assessing the ability of the organisation to recover include:**

**Whether or not service providers have a positive attitude to service.**

**To a large extent this will be influenced by the example of management.**

**To what extent staff at all levels have the authority and ability to give a meaningful response to problems.**

**The range of procedures and the extent to which they give guidance rather than being overly restrictive.**

**The degree of training given for all likely problems.**

**The understanding that good response to unstructured situations is more likely to come from positive motivation rather than by rigid goal setting.**

### **Unfriendly systems**

**One frequently comes across systems which are very efficient but somehow leave something to be desired when being dealt with. An intelligent check-out in a retail store may give good information for stock control, and speed up transactions, but may be inflexible to the customer who changes his/her mind.**

**Organisations implementing changes to systems, whether they be low technology such as a revised application form or high technology as for example electronic shopping must be very clear as to the effect on the**

**organisation recognises the impact on service quality and attempts to limit the damage.**

**On the other hand, an individual service provider may employ other tactics to deal with the overload, notably by limiting the service offered or manipulating the customer to choose options which are produced quickly.**

**\* The Influence on Quality when Chase becomes Level in the Back Room.**

**Service quality may also be affected when the Front Room is comfortably loaded, but the heart of the process contained in some form of Back Room processing is run too tightly on efficiency goals, leading to higher work in progress and hence longer leadtimes. Back Room management may feel that they are succeeding in meeting their function goals but in reality the total organisation is failing.**

**Organisations must be clear as to how this situation is to be handled. A film processing company automatically gives an immediate discount if the one hour promised delivery is not achieved, even if only by a minute. Other services are not as professional, preferring to cope by blaming the system which doesn't help or impress the customers who feel they have to cope with the organisation's problems rather than the reverse.**

## **CONCLUSIONS**

**In this paper we have discussed some of the barriers to delivering consistently good service quality. They range from strategic (not knowing what business we are in), to the tactical (is the detail of the delivery system appropriately managed).**

**The requirement to understand the relationships between capacity strategy, quality and productivity have been discussed, identifying the need to clarify the coping mechanisms employed. The impact of such official and unofficial coping mechanisms on customer perceived quality levels must be understood and where necessary corrected.**

**The underlying philosophy is that quality must be designed into the service delivery system. Given that at least for Front Room operations, production and consumption are simultaneous, the quality principle that prevention is better than policing must be the only realistic approach to quality improvement.**

#### **REFERENCE**

**Heskett, J., "Managing in the Service Economy", John Wiley, Chichester 1984.**

# RELATIVE COMPETITIVE ADVANTAGE

## CUSTOMER SERVICE DIMENSIONS

ATTRIBUTE	WEIGHT (W)*	COMPETITIVE POSITION (R)	WxR
<b>TIMINGS</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Availability	_____	_____	_____
Responsiveness	_____	_____	_____
Reliability/Queue/Wait	_____	_____	_____
Service Time	_____	_____	_____
.....	_____	_____	_____
<b>FAULT FREENESS</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Physical Items	_____	_____	_____
Information/Advice	_____	_____	_____
Consistency	_____	_____	_____
.....	_____	_____	_____
<b>FLEXIBILITY</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Customerisation	_____	_____	_____
Recovery from mistakes	_____	_____	_____
New Services introduced	_____	_____	_____
.....	_____	_____	_____
<b>STYLE</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Competence of Staff	_____	_____	_____
Attitudes of Staff	_____	_____	_____
Access to People	_____	_____	_____
Ambiance	_____	_____	_____
.....	_____	_____	_____
<b>PERSONAL CONTROL</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Perceived Importance	_____	_____	_____
Feeling in Control	_____	_____	_____
Clarity of Service	_____	_____	_____
Consistency	_____	_____	_____
Psychological Timing	_____	_____	_____
.....	_____	_____	_____
<b>SAFETY</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Trust/Confidence	_____	_____	_____
Honesty/Security	_____	_____	_____
.....	_____	_____	_____
<b>TOTAL</b>	<b>100</b>	<b>- 3</b>	_____

Rating relative to competitors  
 -3 -2 -1 0 +1 +2 +3  
 Inferior On Par Superior

# CAPACITY PLANNING LEVELS

## TELEPHONE RESPONSE CENTRES

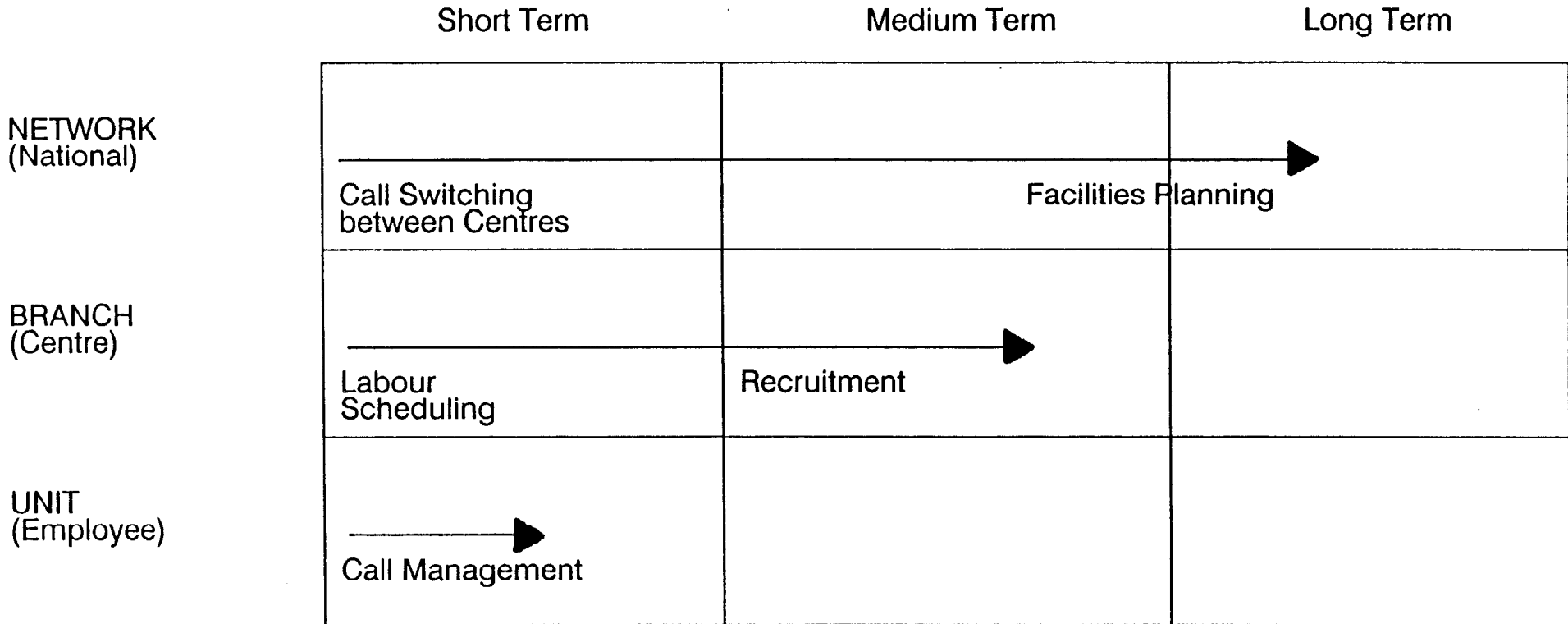


Figure 2