Assessing Call Centre Quality using the SERVQUAL Model

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ABSTRACT
The call centre industry is a relatively new phenomenon. As many organisations are now providing customer service and support via call centres, due to the lower cost of operating, issues addressing the service quality are being raised. Call centres do not exist for the customer to physically interact with, apart from via the telephone, and are in effect virtual organisations. The nature of the service encounter between the call centre and customer is predominantly undertaken using enabling technology; the conventional speech telephone. This suggests the criteria used to assess it may be different from that of a more traditional face-to-face method of service delivery. Combining the different method of service delivery with the relative youth of the industry has meant that many organizations are still grappling with how to best manage their call centres. For some this involves focussing on how they deliver a quality service to the customer. These issues prompted our investigative research into service quality in a call centre context using the widely applied SERVQUAL model. Initially the SERVQUAL model was used to analyse the service encounter with a virtual organisation and examine the models applicability in this context. SERVQUAL was then used to examine the way in which a case call centre’s management had tried to deliver a ‘quality call’ to the customer.

Key words: Call Centres, Service Quality, SERVQUAL, Service encounter,

1.0 Introduction
The call centre industry is one of the most rapidly growing industries in the developed world today (Dalrymple and Phipps, 1999) (Staples, Dalrymple and Phipps, 2001). This global trend is reflected by the expansion of the Australian call centre industry (AFR, 2000). “The Call Centre Association (1999) defines call centres as a physical or virtual operation within an organisation in which a managed group of people spend most of their time doing business by telephone, usually working in a computer – automated environment” (Gilmore, 2001). The growth has occurred as many service providers are now seeking to lower the cost of providing services while increasing the time period access is available (Staples et. al, 2001). It also reflects the desire of companies to improve access to their services, in a cost-effective manner, and retain satisfied customers (Bird, 1998). Whilst the call centre industry has improved access for those able to use conventional speech telephones, it does have the potential to exclude some customers, in particular the hearing impaired (Staples et. al, 2001).

Call centres have now permeated everyday life and become increasingly difficult to avoid. Many industries now conduct standard business via call centers. Examples of this are banking, insurance, travel, taxi, and airline companies, in addition to utilities such as gas, electricity and water. In this context, these service encounters are conducted by virtual organisations that could be located anywhere in the world, adding weight to the literature that considers organisations have no geographical boundaries in a global economy (Electronic Commerce Centre, 2002). This is particularly true in the case of the call centre. The call centre does not exist for the customer to interact with apart from via the telephone, which allows the service to be delivered from anywhere in the world. The development of technology, of which call centres are a by-product, has forced companies to revisit the ways in which they manage relationships with their customer base. Many organisations have been innovative in the method of service delivery, for example banking via telephone or internet. Call centres provide companies with valuable information about the performance of their goods and services (Staples et. al, 2001). They allow the organisation to learn how the customer felt or how the employee thought the customer felt (Gilmore, 2001).
The industry started out as a lower cost solution to a relatively expensive problem, where productivity was the focus rather than customer demands. In some call centres there has been a recognition that this was not working, or fulfilling service quality objectives so the focus is now changing. However, the efficiency of call centres is critical to the image of the organisation (Black, 1998, cited in Gilmore, 2001). Call centres are in effect the gatekeepers of information about an organisation for its customers (Staples et. al, 2001). Call centre managers who want to improve the quality of service are confronted with balancing two opposing goals of efficiency and excellent service (Wallace, Eagleson and Walderssee, 2000). Efficiency is important since call centers must provide speed of delivery and operate at a low cost to remain competitive. To achieve efficiency, many call centres have focused on the implementation and use of technology (Mehotra, 1997, Green, 1996, Tissor, 1995, cited in Gilmore, 2001). The technology is often used to facilitate the physical concentration of staff, labour scheduling, staff monitoring and high productivity rates (Gilmore, 2001).

Studies have found that call centre operators are often required to answer a great number of calls regardless of the quality of the call as they are judged on how quickly they deal with the inquiry (Denny, 1998; MacDonald 1998a, 1998b, cited in Gilmore, 2001). The statistics then become an efficiency measure but not an effectiveness measure. Furthermore, whilst managers continue to assess performance by the quantity rather than the quality of the calls, employees will continue to become demoralised (Clement and Woodford, 1998, cited in Gilmore, 2001). In a services context the “product is often the employee’s performance” (Berry, 1981). Given the influence of front-line staff in a service encounter this may be a disadvantage (Bell and Zemke 1990, cited in Gilmore, 2001) especially as Customer Service Representatives (CSRs) contribute a significant amount of emotional labour when being helpful, friendly and empathetic to customers (Wallace et al, 2000). Wallace et al. describes three different types of call centers; transactions, sales and solutions. Transactions are well defined and relatively simple tasks which can be delivered through encounters (Guteck, 1995, cited in Wallace et al, 2000). Sales centres focus on revenue and results, while solutions centres provide professional services on-line. The optimal trade off between service and efficiency will be different for each category of call centre task. A transactions centre will be primarily focused on efficiency, whilst a sales centre will attempt to achieve a balance between service and efficiency. A solutions centre will focus on personalized attention and service for the customer (Wallace et al, 2000). The rapid growth of the call centre industry emphasises the importance of service delivery in this context, and as few customers will be able to avoid dealing with call centres in today’s environment it highlights why it is important for call centres to attain the correct balance between efficiency and effectiveness.

2.0 Service Quality

Quality and customer service have been identified as critical strategic issues in the 1990’s for both public and private sector organisations (Donnelly, Wisniewski, Dalrymple and Curry, 1995). Not much has changed in the current decade. In the private sector, customer satisfaction and loyalty are secured through high quality products and services. They provide value for money for the consumer and are seen as being essential for the long-term survival and success of the call centre (Donnelly et. al, 1995). Public sector organisations are not immune to pressure to improve customer service on a continuous basis (Donnelly et. al, 1995). Some of these pressures arise internally from a genuine desire to improve quality of services provided to communities, others are imposed through corporate initiatives like customer charters or through and increase in consumer activism (Donnelly et. al, 1995). It is recognised that public sector organisations face more difficulties than those in the private sector in their efforts to improve customer service (Donnelly et. al, 1995). A customer’s satisfaction with individual service encounters, affects the customer’s dis/satisfaction with the overall service experience (Johnston, 1994).

2.1 SERVQUAL

The SERVQUAL approach to the measurement of service quality has attracted considerable attention since it was first introduced by Parasuraman et al. in 1985 and further developed by them in 1998 (Donnelly and Dalrymple, 1996). “The approach starts from the assumption that the level of service quality experienced by customers is critically determined by the gap between their expectations of the service and their
perceptions of what they actually receive from a specific service provider” (Donnelly and Dalrymple, 1996). The SERVQUAL model proposes five dimensions upon which customers evaluate service quality. These are:

- **Tangibles** – the appearance of the physical facilities and materials related to the service
- **Reliability** – the ability to perform the service accurately and dependably
- **Responsiveness** – the willingness to help customers and provide prompt service
- **Assurance** – the competence of the system and its security, credibility and courtesy
- **Empathy** – the ease of access, approachability and effort taken to understand customers’ requirements

Initially the SERVQUAL model (Parasuraman et al, 1985) was purported to be a generic model for all service encounters. Work done by Donnelly and Dalrymple (1996) questioned its portability and validity in the case of public services. They contended that the multidimensional nature of the stakeholders made the service delivery and evaluation more complex. If SERVQUAL is a generic instrument is it portable to the virtual service encounter that takes place between a call centre and its customers? This paper seeks to examine the portability of the SERVQUAL Model to the context of a virtual organization, specifically the call centre industry.

### 3.0 Case Call Centre

The organisation being investigated is a public sector transactions call centre, receiving approximately 9,000 in-bound calls a day. It is a 250+ seat call centre that has been operational for approximately 2 years. Its focus is on high efficiency, which is achieved through technology developments such as the database warehouse and IVR (Integrated Voice Router). The database warehouse provides CSRs with access to information from which standardised answers can be delivered to customers. The IVR (Integrated Voice Router) is a pushbutton menu that diverts the call to the correct area, in which CSRs are equipped with appropriate knowledge and skills to answer the customer’s query.

The case call centre procedural approach to quality appears to correlate with a traditional view of quality where management defines for its customers and employees what quality is in the context of the service they offer (Ho, 1995). While quality is considered important, there is still a preoccupation with efficiency based measures. The advantage of a production line approach is that the organisation controls the system and leaves nothing to the discretion of the employee (Gilmore, 2001). Production-line type management in a call centre environment will inevitably be able to report the number of calls, the duration, the number of rings before answering but little about whether the customer was happy, or the CSR thought that customer was happy with the service they received (Gilmore, 2001). More emphasis would appear to have been previously placed on efficiency measurements than on the effectiveness. Change has occurred reflecting the move towards a more solutions based centre, rather than the previous transactions centre. The case call centre implemented coaching as its relations-oriented management style to obtain synergies between service quality and productivity (Parasuraman, 2002). It employed coaches to monitor CSR calls and provide monthly performance feedback, to promote service quality and productivity, as well as obtaining a measure of its quality of service delivered to customers.

**Call monitoring instrument**

A call monitoring instrument was developed for coaches to assess the CSR’s call performance. The call monitoring instrument is a predetermined 28 point checklist of criteria used to assess a CSR’s call with a customer. The call monitoring instrument became the call centres ‘customer expectation benchmark’. This benchmark is used by the call centre to measure its own service quality performance in between obtaining customer service feedback from external surveys. The data collected from the call monitoring instrument is an internal quality measure and is not used to report back to customers on how well standards are being achieved. One of the call centre’s objectives is ‘first call resolution’, which seeks to resolve each individual service encounter to the customer’s satisfaction in one call.

### 4.0 Methodology
Since service quality is essential to the long-term survival of the call centre industry this paper seeks to examine the applicability of certain ‘quality’ instruments to the context created by that industry’s service delivery. In particular, an examination is conducted of the SERVQUAL Model, including the 5 dimensions of service quality. If SERVQUAL is a generic instrument, is it portable to the virtual environment?, and can it be used to evaluate the virtual service encounter that takes place between a call centre and its customers? A call centre was selected as an exploratory case study and SERVQUAL was further used to assess a tool the call centre has developed to assist its CSRs to provide a ‘quality call’. The call centre uses the SERVQUAL measures service quality from the customer’s perspective. Comparative analysis was undertaken between the call monitoring instrument criteria and the SERVQUAL model. The call-monitoring instrument was analysed with respect to the SERVQUAL 5 dimensions of service quality (Tangibles, Reliability, Responsiveness, Assurance and Empathy) and the dis/continuities between the two were examined.

5.0 Results

5.1 Portability of SERVQUAL

Is SERVQUAL portable to the virtual organisation - call centre industry environment? Only some of the 5 dimensions of service quality are applicable in the virtual organisation environment. As a customer never comes into contact with the physical appearance of a call centre, the area covered by the Tangibles criteria does not apply. From the customer perspective there is little ‘tangible’ about a call centre service encounter. Given the method of delivery, via the telephone, and hence the absence of visual cues the only way of transmitting any of the dimensions of service quality is through the CSR’s voice. The CSR’s voice therefore, is extremely important in any encounter. Reliability from the customer’s perception is difficult to assess for an individual service encounter. It is not possible for the customer to fully evaluate whether the CSR has performed dependably and accurately. This can only be evaluated on subsequent use of the service. The other criteria; Responsiveness, Assurance and Empathy are all transmitted via the CSR's voice and are dependent on the CSR’s ability to communicate. Tone and language (how they deliver) and content (what they deliver) are the critical dimensions.

5.2 Call Monitoring Instrument

The call-monitoring instrument is a predetermined 28-point checklist of criteria used to assess a CSR’s call with a customer. The instrument contains two sections; relating to Call Handling and Technical skills. Both sections contain pass or fail criteria, either they are present or they are absent. For example, was the client greeted and acknowledged ‘Hello my name is….. How may I help you?’, and closed, “Thankyou for your call, goodbye”. Another example would be ‘Were the privacy guidelines observed?’ The instrument also contains criteria that address the degree to which the CSR knows how to use the technology. This measures the CSRs detailed knowledge of information and systems. There are also numerous criteria covering how the CSR behaved towards the customer. These behavioural criteria involve judgements made by the call center coach. Further criteria cover how the CSR represented the organization. Coaches monitor CSR calls and award passes or fails based on the call monitoring criteria, as well as highlighting areas for improvement. By satisfying all 28 criteria a CSR is awarded a pass or ‘quality call’. 6 of the 28 point checklist criteria are critical criteria and if they are not addressed properly in a call this leads to the CSR being given an immediate fail by the coach. Two of these are concerned with how the CSR accepted ownership of the call and represented the organization. Two relate to the security and privacy of information. One is concerned with the accuracy and currency of information provided, and one that the call centers internal systems have been updated to reflect the interaction that took place with the customer.

6.0 Discussion

There is very little tangible about a call centre service encounter. How tangible is a voice? In the absence of face-to-face contact the role of the CSR, and the voice of the CSR is extremely important in a call centre service encounter because it is the tool of delivery, and voice contact is all the customer experiences. Given the absence of visual cues, the only way of transmitting any of the SERVQUAL dimensions is through the CSR’s voice. The nature of the service also means that the Empathy dimension, including
communication and understanding customer interaction is difficult and dependent on the CSR’s skills. Customer’s assurance that their service transaction has been completed to meet their needs is dependent on the CSR’s knowledge of the call centre’s products and services, and the CSR taking a positive ownership of the encounter relationship with the customer. The customer’s assurance dimension expectations are largely met by the organisation’s call centre public image, whether this is public or private (enterprise). It is easy for the customer to determine whether they were dealt with courteously, by the language and tone the CSR uses. The reliability dimension is difficult to assess for an individual service encounter, and is only achieved with the next transaction the customer has with the call centre. This can be confirmed with retrieval of records including annotations and completion of appropriate actions. If SERVQUAL is an instrument that measures service quality, then the challenge for a CSR is to satisfy all the dimensions in the SQ instrument using only one medium; their voice. While we have established that little is tangible about the CSR’s voice, many of the model’s other dimensions can be satisfied via the voice. However given that SERVQUAL was originally purported to be applicable to all service environments, the absence of tangible dimensions, in the call centre service encounter, suggests that this may not be the case.

As a result of the non-tangible nature of the service encounter the case call centre’s call monitoring instrument does not address tangibles. It focuses on the assurance, empathy, reliability and responsiveness dimensions. Many of the case call centre’s call monitoring instrument criteria are interdependent and have relevance to more than one of the SERVQUAL dimensions of quality. For example, clarifying and confirming the customer’s query, and the use of probing questions to ascertain all the relevant query facts relates to both the empathy and assurance dimensions. As indicated earlier, 6 of the 28 point call monitoring instruments checklist are critical criteria, and if the CSR fails one of them, they automatically fail the overall assessment by the coach. Four of the critical criteria relating to the ownership of the call, representing the organization, security and privacy of information are assurance dimension criteria under the SERVQUAL model. Providing correct and current information, and updating the internal systems to reflect the encounter relate to the reliability dimension. It would appear that due to the absence of the physical facilities and material related to the service (tangibles) a high emphasis is placed on assuring the customer of the systems security and credibility (assurance), and hence the ability to deliver the service reliably. One of the major issues confronting the call centre is in its effort to deliver quality to its customer through coaching whether the judgement of the coach is, or would be consistent with the judgement of the customer. In effect when the coach is coaching the CSR he/she is acting in the role of the customer. If the coach’s judgement or evaluation of the service is not consistent with that of the customer then the call centre’s idea of what a quality service is in their context is different from that of the customer. In the SERVQUAL model this is called GAP 1 and describes the difference between management’s perception (of what the customer wants) and customers’ (actual) expectations.

What are the barriers to service quality in the call centre industry? While there is a need for both efficiency and effectiveness these two have been viewed as in competition and a culture of efficiency versus effectiveness may prevail. This can be exacerbated by HR practices. For example the training, development and the way staff appraisal systems operate will all impact on service quality. As will systems that limit a CSR’s ability to immediately respond to and resolve the client’s query without rushing the call to meet internally driven statistics. If HR is to train CSRs properly to achieve service quality then there will be an impact on cost. This may be unwelcome in an environment where the intention is to keep costs down. For the case organization a balance clearly has to be achieved between efficiency and effectiveness. As they have previously been largely a transactions based centre, and are now evolving into more solutions based activities, they will need to have appropriate efficiency effectiveness tradeoffs for the differing tasks. Reliability may be influenced by the call centre’s CSR turnover rate and ability to train CSRs to capably represent the call center. Operations scheduling including the managing of loads is a factor that may strongly influence the customer’s perception particularly the amount of time spent waiting in queues, or on hold. If a call centre can not manage peak call times it may not matter what occurs once the call is answered the impression has already been formed of a poor quality service. The case call centre’s ‘first call resolution’ policy adds credence to Johnston’s (1994) work on the importance of individual service encounters leading to dis/satisfaction with the overall service. The importance of individual service encounters would appear to have been recognised by the case call centre. Due to the lack of tangibles present in call centre service the first service encounter becomes even more important.
In a transactions call centre where queue lengths and the number of calls are productivity measures, the CSR is continually under pressure to service the customers immediate needs and reduce the time cost to the customer by finalising the call swiftly. Therefore a trade-off exists with the customer or the CSR feeling that there service expectation or needs have not been met. For the case call centre the level of service offered could be influenced by the public sector nature of this call centre. In a situation with no alternative provider the alternative for customers is to choose not to use the service. Many other call centres operate in a commercial environment where they are required to compete for customers, and there is a direct fee for service relationship rather than the slightly less direct public sector relationship. Perhaps Johnston’s work on ‘zones of tolerance’ has some applicability to the public sector call center context. Johnston (1994) contends that a service that causes a customer to neither be dissatisfied or very satisfied falls in to the zone of tolerance that a customer will tolerate.

7.0 Conclusion

The call centre industry has grown and permeated areas of every day life. The concept started out as a lower cost solution to a relatively expensive problem where productivity was the focus rather than customer demands. There has been a recognition that this was not working, or fulfilling service quality objectives so the focus has now changed, or is shifting. The SERVQUAL model was purported to be a generic model but given the absence of tangibles and the difficulty in assessing reliability its portability to the virtual organization has to be questioned. SERVQUAL is not portable because it has an inappropriate dimension in tangibles, that is not applicable in a call centre. Examining the case call centers call monitoring instrument through which it aims to provide a ‘quality call’ it can be seen that assurance and reliability are considered critical elements for service delivery in this context.

8.0 References
