

# PROJECT MANAGERS' SERVICE QUALITY FOR CLIENT SATISFACTION ON DESIGN & BUILD PROJECTS

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Service quality and client satisfaction are defined in terms of the construction industry particularly design and build services in the UK. Existing theoretical models of service quality and customer satisfaction which have been applied in different industries for example airlines, banks etc. are examined. Through adoption of this approach, construction organisations offering design and build services may be able to better differentiate themselves from their competitors. By developing their own unique service culture and delivering a better quality of service this may encourage client loyalty and repeat business. The pilot study involved surveys of clients and contractors involved in design and build services. Questions concerned how clients in this sector evaluated the services being provided throughout the phases of their projects. The aim was to establish any variance in how the different parties perceived and rated the various dimensions of service quality. Based on the initial findings of this study, a number of observations were made and recommendations may be provided on how design and build contractors may improve their services. Clients needs and expectations are dynamic and change throughout the project life-cycle. There appears to be gaps in the perceptions of clients and contractors in terms of the importance of the factors that will satisfy or dissatisfy clients throughout the contract. It is recommended that contractors should establish systemic client research to probe their expectations on an on-going basis. After-care is seen to be the weakest point in the contractors service and needs particular attention.

Keywords: Client satisfaction, design and build, service quality.

## INTRODUCTION

In today's competitive climate, service quality is an effective tool to enhance the firm's position in the market place (Baron and Harris, 1995). It should be seen as the prime cause of client satisfaction and the appropriate way to create or sustain a competitive advantage, and building a strong and lasting relationship with clients (Preece and Moodley 1996, Preece and Tarawneh 1996). It may be the vehicle for contractors to differentiate themselves from their competitors.

Despite the great concern to service quality as a critical issue in the marketing performance of contractors (Buttle 1996), and the importance and the distinctive characteristics of the construction industry, in particular design and build services, little attention has been paid to service quality and client satisfaction (Ahmad and Kangari 1995, Preece and Moodley 1996, Preece and Tarawneh 1996, Buttle 1996, Procter 1997). The previous work that has been published on service quality in construction is general and replicates to one instrument without attention to the unique characteristics of construction (Buttle 1996, Procter 1997). It has not examined the dimensions of service quality in design and build services or taken a dyadic view in

the evaluation of service quality and client satisfaction from both parties involved in design and build projects, i.e. the perspectives of clients and their advisors and design and build contractors.

The major objective of this research is to explore the concept of service quality and client satisfaction and its evaluation from both design and build contractors and clients and their advisors (architects). There would seem to be a clear need for this type of research to bridge the gap in the knowledge about service quality and client satisfaction in design and build services. This approach to the research will enable us to identify and analyse the existing gaps between those parties and to provide contractors with clear understanding of their operations and any required improvements.

## **IMPORTANCE OF DELIVERING A QUALITY SERVICE TO THE CLIENT IN CONSTRUCTION**

Despite increased academic attention to the area of marketing, empirical evidence would appear to indicate that this essential management function is still underdeveloped in practice in the context of the construction industry (Preece 1993; Preece 1994). Recent research focusing on the area of pre-qualification team presentations and interviews (Preece, Moodley, and Habeeb 1995) has confirmed the findings of earlier surveys (Fellows and Langford 1993, Morgan and Morgan 1991), that clients are broadly seeking long-term relationships with contractors and consultants based on partnership between compatible organisational cultures.

More demanding and discerning clients are increasingly looking for high quality of service from largely technical project management teams. This service must be experienced from initial contact, throughout the phases of a project, through completion and hand-over and beyond. Achieving a competitive advantage through contractual service marketing is increasingly requiring closer understanding and identification with the client, internal cross-functional partnering and active executive level support.

The existent literature on services marketing appears to provide little attention to the construction industry. This may be justified by the unique characteristics of construction. The industry is one of the most diverse businesses in the world. Projects are generally unique. Furthermore, it cover a very wide range of products and the people working in it come from a broad range of professional backgrounds and crafts.

In today's competitive climate quality service is an effective tool to enhance the firms position in the market place (Baron and Harris 1995). Quality service is an essential factor for success or failure for any business (Barsky 1995). Quality service is a profit strategy due to the fact that high quality service will increase first purchase clients, repeat purchase of the existing clients (Storback et al. 1995), and in the construction industry in particular it should decrease the need for remedial work. Success or failure in the construction industry is partly based on knowing the needs and wants of the client, so it will be easier to satisfy those needs. To do so contractors should know the factors or dimensions of their service which can satisfy their clients.

## **ESTABLISHING & MEASURING DIMENSIONS OF SERVICE QUALITY**

Service quality has been the central focus of much research, (Gronroos 1984, Parasuraman et al. 1985, 1988, 1991, Lehtinen and Lihtinen 1991, Gummesson 1992, Lewis 1993, and others). One of the interesting scales to measure service quality is SERVQUAL, an instrument developed by Parasuraman et al. (1991) This is based on five dimensions of service quality; reliability, assurance, tangibility, empathy, and responsiveness.

### **SERVICE QUALITY MODEL AND PERFORMANCE GAPS**

Parasuraman et al. (1985) and Zeithaml et al. (1988, pp. 35) have developed a conceptual model to measure service quality in four service industries included; credit card and management, security brokerage, retail banking, and product repair and maintenance. The most important finding of their research is the identification of a set of four gaps existent in the service provider side and one gap in the customer side. As emphasised by Parasuraman et al. 1985, pp. 44), “these gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality”.

The four managerial gaps as described by Zeithaml et al. (1988, pp. 35) are as follows:

**Gap 1:** The difference between consumer or client expectations and the management perceptions of those expectations.

**Gap 2:** The difference between the management perceptions of customer or client expectations and the service quality specifications.

**Gap 3:** The difference between the service quality specifications and the actual service delivered to customer or client.

**Gap 4:** The difference between the actual service delivery and what is communicated about the service to customers or clients.

### **SERVICE QUALITY MODEL FOR DESIGN AND BUILD CONTRACTORS**

#### **Nature Of Construction Industry**

The construction industry is diverse and often involves a variety of parties with different and conflicting interest. It is the variety of interest that provides the fertile environment for conflict in the industry. Moreover, this problem will escalate with the traditional separation of design and construction. Furthermore, there are other factors which increase client dissatisfaction;

- The finished product does not meet the agreed specifications.
- The contractors focus on the technical aspects of the product rather than elements of the service.
- Conflicts may arise between the personalities and management of the contractors with those of the client which increase client dissatisfaction.

All the above factors will undoubtedly have its effect on the relationship between clients and their contractors and sub-contractors. Therefore construction firms should

recognise the impact of product quality and quality service on this relationship and in turn on client satisfaction.

Contractors need to establish what are the priorities sought by the client. A project of high quality, handed over to the client, only tells half the story. The standard of service in providing the project may have been less than satisfactory, with major conflicts between the parties rather than a partnership culture focusing on satisfying the clients needs and wants. To ensure client loyalty and thus repeat purchase, contractors need to provide a high quality service throughout.

Firms need to know how their products and services, promotional efforts, managers and staff, facilities and image affect clients and their advisors. They also need to know how the competition are perceived. The firm in practice needs to establish why the client continues to negotiate and place contracts with them. What are their priorities? Is this merely repeat business, and are they continuing to look for better service from the competition? Just how loyal is the client?

Contractors need to be able to manage word-of-mouth, previous clients experiences and use them as independent testimony to the quality of the service provided. Clients will use such information along with their own experiences to benchmark against competitors. The only way to find out whether a company has met, or indeed exceeded client expectations, is by asking them. This should identify strengths and weaknesses in the service experienced, and will aid in improving processes in the future.

## **SPECIFIC ISSUES RELATING TO DESIGN & BUILD**

Despite the existence of the well established SERVQUAL technique, given the specific characteristics of construction and the particular features of design and build services, the decision was made to develop a specific model in the measurement and definition of service quality and client satisfaction. To help design and build contractors to determine those key factors, the following model is presented in Figure 1.

Design and build contractors have to have a clear picture of what clients are looking for and to know what they are evaluating during the course of their projects. It is important for design and build contractors to identify the key factors that clients use to evaluate the contractors' services throughout the life of a project and to establish those important dimensions that lead to their satisfaction, or otherwise. These stages are defined under three main headings of pre-construction, construction and post-construction. Once these factors have been established, the firm can re-allocate their resources and re-design their service during the phases identified, to the achievement of the total satisfaction of their clients and advisors. In addition to achieving the total satisfaction of the firm's clients, the desired outcomes will be in terms of repeat business and positive recommendations and word-of-mouth endorsement by previous clients.

This process may be hindered by the existence of the four gaps identified by Parasuraman et al. (1991 pp. 440). These concern the differences of perceptions between the parties involved throughout the provision and use of the service. The gap between the company's quality specifications and policies and clients actual expectations of the level of the service. The specification and policies may not be delivering the appropriate level of service. The company's employees do not deliver the performance set in the company's policies and specifications. What the company

says it will deliver through communications with the client and what they actually deliver, may not coincide.

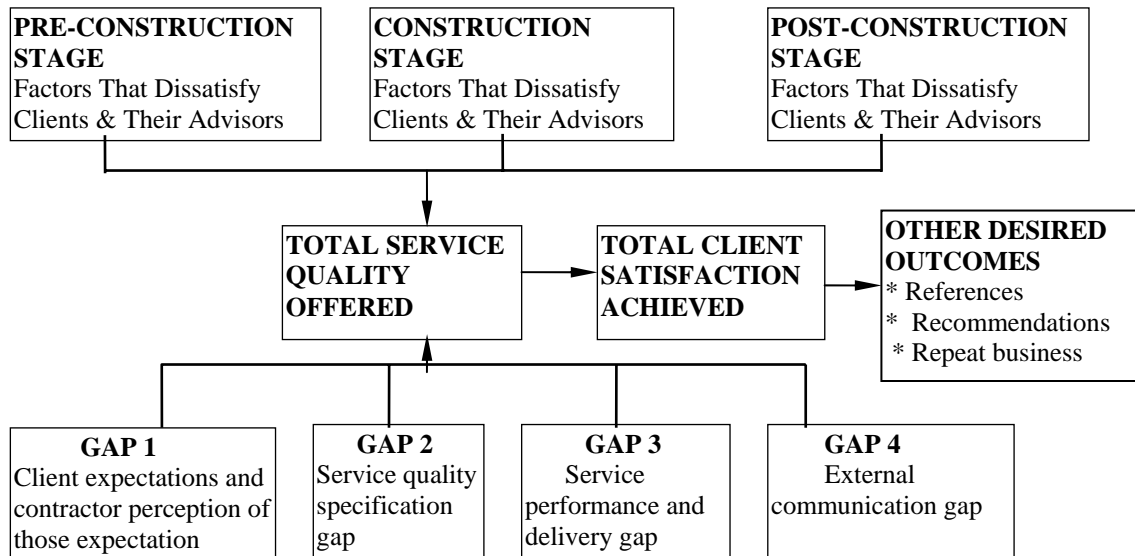


Figure 1, Conceptual Model Of Service Quality For Client Satisfaction In Design And Build Projects

## RESEARCH METHODOLOGY

The research programme consisted of semi-structured interviews with a group of senior managers, selected to represent:

1. **Client Organisations & Consultants (N=20).** Ten clients were selected from the “Contracts Journal” 1996. The aim was to generate a range of client organisations which had currently or recently (within the last twelve months) completed a design and build project. Respondents were involved in the selection process of design and build contractors across a number of industrial sectors.
2. **Design and Build Contractors (17).** Seventeen contractors were selected from “New Civil Engineer”, Contractors File 1996 and the “Contracts Journal” 1996. The aim was to select a range of contractors who had constructed design and build projects within the last twelve months. Respondents were senior management in marketing or business development functions. Each was able to give an insight into their company’s activities, and their relation with clients and their advisors.

## INITIAL RESEARCH FINDINGS

Results from the face-to-face in depth interviews with respondents from client organisation, architects and design and build contractors are summarised in the following sections.

### CLIENTS & THEIR ADVISORS PERSPECTIVES ON SERVICE QUALITY

This section presents the key factors that will satisfy or dissatisfy clients throughout the life of their design and build projects. Particularly at the pre-construction stage, the construction stage and the post-construction stage.

## **FACTORS THAT DISSATISFY CLIENTS AT THE PRE-CONSTRUCTION STAGE**

All respondents from the client organisations (N=20) are dissatisfied by the contractors image and reputation in terms of incompetence and claims consciousness. Poor references and recommendations will put clients off from the start. In addition to that contractors lack of interest and effort in understanding the client brief and requirements in terms of asking questions or visiting the clients working place is emphasised by all respondents (N=20) as a source of dissatisfaction.

Sixteen out of twenty clients in the survey are dissatisfied by poor quality proposals and specifications and the lack of programming to carry out the project. The same number indicated their concern on the contractor inability to convey trust and to install confidence in terms of lack of experience in similar work, incompetence to do the job and the contractor lack of communications in terms of not keeping clients informed and providing them with clear information which is easy to understand.

Only ten out of twenty clients are dissatisfied by the contractors lack of responsiveness to answer clients enquires, not keeping promises and not attending meetings.

## **FACTORS THAT DISSATISFY CLIENTS AT THE CONSTRUCTION STAGE**

All clients in the survey (N=20) are dissatisfied by the contractors inability to deliver what they promise at the pre-construction stage and inability to deliver the promised service accurately in terms of cost and time. They are also dissatisfied by poor quality of sub-contractors. Although clients are not interested in dealing with sub-contractors on a day to day basis, they were concerned with their competency to do the job. They consider them as the arms of the main contractors so they are dissatisfied if the main contractors denies responsibility for their sub-contractors work. In addition to that, clients are dissatisfied by the contractor's inability to control, the project operations on site in terms of quality and cost control to keep the project within the budget and working to the programme to achieve the time limit.

Sixteen out of twenty clients are dissatisfied by lack of communication which keeps them in the dark about their projects, unclear information about the progress of their projects, lack of reporting and meetings to follow up the progress of their projects. While Fourteen client are dissatisfied by the contractor's lack of interest to develop an on going relationship with clients or with sub-contractors.

Another thirteen clients were dissatisfied by the contractor's lack of flexibility and understanding to accommodate client variations and charging unreasonable fees for any variations in their requirements. The same number are dissatisfied by contractors not keep their interest at heart, not taking care of their property and disturbance to their business. In addition to that they are dissatisfied if the health and safety requirements are not being considered seriously. They want to see low accidents rate and an enforcement of the CDM regulation. Clients are interested to have safe sites for the project personnel and for the public. They are concerned about the amount of argument throughout the life of the project and the effort required to get the end-product. They are also dissatisfied by the lack of co-ordination and team spirit between all involved in their projects and the lack of courtesy and individual attention paid to them throughout out the life of their projects.

All clients in the survey (N=20) indicated that they are dissatisfied by the severity of defects they have experienced at the post-construction stage. They are also dissatisfied by the lack of responsiveness to rectify those defects and to deal with complaints as they arise. In addition to that, clients are dissatisfied by poor quality of the finishes of the building or structure and also by poor quality of the building systems i.e., the lighting, heating and ventilation system.

Sixteen out of twenty clients are dissatisfied by the lack of communication after the completion of the project where contractors deny their responsibility to deal with defects and complaints. The same number indicated they are dissatisfied by the lack of understanding of the clients time and cost constraints in terms of leaving the hand over until the clients dead-line to use the building i.e., starts of a school term or tenancy agreement.

Fourteen out of twenty clients stated that they are dissatisfied if they receive any negative comments from the people who use the building regarding uncomfortable conditions i.e., over heating, lighting and cool etc. At the same time, six clients show their concern if it takes a long time to settle the contractors final account. They do not want any claims or disputes hanging around after the completion of the project.

## **FACTORS THAT DISSATISFY CLIENTS AT THE POST-CONSTRUCTION STAGE**

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## **CONTRACTORS PERSPECTIVES OF SERVICE QUALITY**

This section will explore the key factors that design and build contractors think will satisfy or dissatisfy clients throughout the life of their projects. Particularly at the pre-construction stage, the construction stage and the post-construction stage.

## **FACTORS THAT CONTRACTORS THINK WILL DISSATISFY CLIENTS AT THE PRE-CONSTRUCTION STAGE**

Most contractors (N=15) think that clients will be dissatisfied by the lack of demonstration that the contractor understands their requirement, business and

problems. A number of contractors (N=12) think that lack of communication and unclear information about the design and the preparation of the project documents to ensure smooth running of the project will lead to client dissatisfaction.

Eleven out of seventeen contractors in the survey indicated that they think client will be dissatisfied by the lack of response to their questions, enquiry and problems as well as the lack of interest in the project and do not take the job seriously in terms of a non detailed proposal and programme.

### **FACTORS THAT CONTRACTORS THINK WILL DISSATISFY CLIENTS AT THE CONSTRUCTION STAGE**

Most contractors (N=14) in the survey believe that inability to work according to the programme and to complete the project on time, leads to client dissatisfaction.

A number of contractors (N=12) indicated that lack of responsiveness in terms of not responding to the clients questions and breaking promises to deliver what client are asking for, as well as poor communication in terms of lack of information being supplied to the client to keep him informed about his project, may dissatisfy clients.

Nine out of seventeen contractors in the survey think that clients are dissatisfied by the fact that the site is untidy and unsafe and not managed properly.

### **FACTORS THAT CONTRACTORS THINK WILL DISSATISFY CLIENTS AT THE POST-CONSTRUCTION STAGE**

Contractors indicated that the construction industry has got a problem in terms of quality of after sale service and their is a real need to develop this service to client satisfaction.

A number of contractors (N=12) in the sample indicated that lack of response to deal with any defects or problems client have with continuous excuses or just disappearing after completing the project are major source of dissatisfaction factor to clients.

### **INITIAL ANALYSIS OF RESULTS**

The above sections show responses from clients, architects, and contractors on the key criteria that will satisfy or dissatisfy clients and their advisors throughout the life of their projects. In particular the pre-construction, construction, and the post-construction stages. Critical examination of those responses indicate that their are clear gaps between clients, architects and contractors perceptions of the factors that may cause clients and their advisors satisfaction or dissatisfaction.

At the pre-construction stage, for example, all clients (N=20) in the survey are highly concerned about the contractor's image, reputation in terms of high quality references and recommendations. They also indicated their concern about contractors interest in their project. While only eleven out of seventeen contractors in the sample, indicate the importance of those factors to client satisfaction or dissatisfaction. At the same time only twelve of seventeen architects in the survey, consider those factors to be important to their satisfaction or dissatisfaction. On the other hand clients express their concern on the quality and details of the contractors proposals and tender while contractors fail to mention those factors. Clear gaps exist between the two parties perceptions of other factors such as communication, responsiveness to client enquiry, team work and quality of sub-contractors.



The construction stage is of no exception, clear gaps exist between the perception of clients, and contractors on several key issues. Clients express their concern on employees courtesy and individual attention paid to them, quality of the sub-contractors, contractor's attitude toward clients variations while contractors fail to mention those points.

The post-construction services or the after sale services are considered to be the weakness of all contractors. So it is a non exploited area where design and build contractors may have a real opportunity to differentiate themselves from their competitors. Again a clear gap exists between clients and contractors perceptions of the key factors that might affect clients and their advisors satisfaction or dissatisfaction.

Cross comparison of clients, and contractors perception of design and build contractor's service quality indicates that they evaluate contractors service in different ways. This would seem to prove that there are certain key dimensions that clients use to judge or evaluate the contractor's quality of service. The importance of those dimensions may be different for clients, and contractors. The relative importance as well as the size and direction of the existing gaps between the parties are the focus of the quantitative elements of this research.

Exploring the key factors or the dimensions of service quality from the client perspective is a crucial step toward closing those gaps. It will also enable contractors to effectively manage and direct their resources to the important factors rather than risk those resources to less important ones.

## **CONCLUSION**

The main objective of this research is to explore the dimensions of the quality service that is provided by design and build projects. It also aimed to explore the perception gaps between clients, and contractors toward those dimensions.

The initial finding of this research show that there are key criteria that clients and their advisors use to judge or evaluate the contractors service quality. Clients use the contractor's image and reputation. They also evaluate the contractor's proposal in terms of its quality, detail and price. Clients judge the contractors programme in achieving this. They are concerned with the quality of the sub-contractors, the safety procedures and contractors responsiveness to them. They are looking for contractor communication and understanding to their needs. They evaluate contractors reliability in terms of accurate record and drawings. Clients want to see high quality documentation and tangible products. They want to be assured that they will get what they pay for in terms of contractor experience, competence, credibility and employees courtesy. In addition to that they want to work as a team.

Clients may use the same dimension to judge the contractor service at the three stage of a design and build project. Particularly the pre-construction, construction and the post-construction stages. Although they may use the same dimensions for each stage, but clearly they use certain items related specifically to each stage of their projects.

It also shows that there are clear gaps between all those parties on evaluating the service provided by design and build contractors throughout the three stage of a design and build project. Therefore there is perceptual gaps between clients, and contractors a long those dimensions.

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