

CAPTURING CLIENT NEEDS IN REFURBISHMENT PROJECTS

Cynthia ChinTian Lee¹ and Charles Egbu

School of Built and Natural Environment, Glasgow Caledonian University, G4 0BA, UK

The briefing process in construction projects involves the documentation and communication of clients' requirements and represents a cornerstone for achieving client satisfaction. The inefficiency of the briefing process has long been recognised as an area which needs improvement. To improve on the briefing process, it is necessary to look at the capturing of clients' requirements so as to develop a brief that fully satisfies the clients' needs and requirements. Refurbishment projects are generally characterised to be of higher risk, more complex and needs greater coordination than new build, thus meeting the clients' requirements and working within the constraints of existing building structures may pose a difficult task. Based on an on-going doctorate study, this paper examines the characteristics of refurbishment projects. Clients' requirements and clients' needs are differentiated and client needs for refurbishment projects are explored.

Keywords: client requirements, refurbishment, requirements capture.

INTRODUCTION

Being the initiators and financiers of projects, clients are central to the construction process and the ultimate goal of all parties in a project is to satisfy fully the requirements of the client. Client requirements constitute the primary source of information for a construction project and therefore, are of vital importance to the successful planning and implementation of a project. Construction professionals usually design with the needs of the environment, aesthetics and posterity in mind, not so much that of the client (Latham, 1994); the effect being that the resulting facilities fall short of the expectations of the clients. Greater demands from clients for a better quality of building product delivered on time and within budget are now part of the construction service ethos (Smith et al., 1999).

Client briefing is the process whereby the client's requirements are progressively captured throughout the construction project (Barrett and Stanley, 1999). It is the process of turning the client's desire for a built product into a clear brief (Winch et al., 1998). The briefing process has for some time been recognised as an important area in which the construction process can be improved. The Banwell report of 1964 concluded that insufficient resources are devoted to defining project requirements. The theme of briefing in relation to communication in the construction industry received prominent coverage in the 1960s (Higgin & Jessop, 1963). Work in this area was also progressed by, or commissioned through, the Building Research Establishment (O'Reilly, 1969, 1973, 1987; Newman, et al., 1981; Mackminder, and Marvin, 1982). Despite this considerable body of literature spanning three decades it

¹ leec@gcal.ac.uk

is arguable if the briefing process has improved significantly. Sir Michael Latham's report on the construction industry came to a similar conclusion on the need to improve briefing as that made by the Banwell report some thirty years previously. To improve the briefing process, it is necessary to look at the capturing of clients' requirements so as to develop a brief that fully satisfies the clients' needs and requirements.

Refurbishment projects accounts for around 46% of the total construction output in the UK construction industry. These projects are generally characterised as being of higher risk, more complex and needs greater coordination than new build. As a result, meeting the clients' requirements and working within the constraints of existing building structures may pose a difficult task. Briefing for refurbishment projects can be just as complex as for new build projects and can have additional problems such as the need to deal sensitively with existing building users (Barrett, 1996).

Based on an on-going doctorate study which aims to provide an appropriate methodology to match the knowledge of the project team with the project requirements for refurbishment projects so as to fulfil the client's needs and increase client's project objectives, this paper examines the characteristics of refurbishment projects. It also provides definition of refurbishment clients. Clients' requirements and clients' needs are differentiated and clients' needs for hotel, hospital, office and retail refurbishment projects are explored. It is envisaged that the outputs of the study will benefit project managers, refurbishment organisations and clients of the construction industry in the following ways:

- i. Refurbishment organisations could become more knowledgeable about the requirements capture process and may become more attuned to client's needs; increasing the chances of a successful project outcome.
- ii. Clients' needs will be met, leading to an increase in client's satisfaction.
- iii. Organisations are able to have a better understanding of knowledge sources and the different techniques and approaches to capture different forms of knowledge needed to meet the clients' needs and requirements.
- iv. The results of the study could assist clients to fully exploit the knowledge of the project team members to fulfil their objectives.
- v. An understanding of the types of knowledge and its contribution to construction projects will assist project managers in identifying and capturing the knowledge and bring benefit to the organisation as a whole.
- vi. The study will allow project teams with the relevant skills and knowledge to make a better contribution to the project.

RESEARCH IN THE MANAGEMENT DOMAIN OF REFRUBISHMENT

Only a meagre amount of empirical studies have been conducted in refurbishment in the UK in the management domain (Quah, 1988; Young and Egbu, 1992; Egbu, 1994, 1995, 1996), despite the growth and the increasing recognition of the importance of refurbishment. In their review of what has been published in the international journal: *Construction Management and Economics* in the ten year period 1983 – 1993, Betts

and Lansley (1993) noted that despite their importance in developed construction markets, the use, maintenance and refurbishment phases have received little attention.

Several empirical studies on planning and control in the general construction management field are in place, however these are geared mainly towards new construction works, covering areas such as factors affecting planning efforts, outcomes and effectiveness (Laufer and Cohenca, 1990; Faniran et al., 1994); involvement of various parties in the preparation of construction plans (Laufer et al. 1993, 1994; Cohenca-Zall et al, 1994); and improving tools and methods (Birrel, 1980). Despite the fact that refurbishment is generally characterised to be of higher risk, more complex and needs greater coordination than new build, only a meagre amount of studies has focused on the planning and control processes (Fiedler, 1987; Weaver, 1993). There also appears not to be any industrial comparative studies on planning and control processes geared towards construction refurbishment (Egbu et al., 1998).

DEFINITION OF CLIENT

To capture the requirements of client, a holistic definition of client is required. There are various definitions of what client is by different authors. Morledge (1987) considers clients as primary and secondary developers whilst Flanagan and Norman (1993) classify clients as public and private. Clients are differentiated between public clients, individual clients and corporations by Rougvie (1987). Hillebrandt (1984) refers to 'continuing clients' and 'one-off clients' and also distinguishes between public and private sector clients. Kelly et al. (1992) suggest that clients can be broadly categorized in accordance with three parameters: size (small or large); sector (public or private); and project interest (developer or owner-occupier). Further, clients are grouped into 3 categories: on-going, on-off and one-off clients by Naoum and Mustapha (1994); and Masterman and Gameson (1994) categorises clients into 4 categories: secondary inexperienced, primary inexperienced, secondary experienced, primary experienced. Clients are defined by Kamara et al., (2002) as the person or organisation responsible for commissioning and paying for the design and construction of a facility (e.g. a building, road or bridge), and is usually (but not always) the owner of the facility being commissioned. The clients can also be the users of a proposed facility, or they (i.e. the client and user) may be separate entities. The client may also be the owner, users and other identified persons, groups or organisations who influence, and are affected by, the acquisition, use, operation and demolition of the proposed facility.

The client, in this research shall be defined as owner or representative of owner of a building including personnel in the department within the organisation who has the authority to comment or make decision on the facilities affected by the refurbishment project in a public or private organisation who refurbish to enhance their business activity (for example, to boost company image, increase productivity or improve well-being of employees and occupants) or increase their earnings from the refurbished building.

DIFFERENTIATION BETWEEN NEEDS AND REQUIREMENTS

Very often the measurement of project success can be indicated by client's satisfaction. Clients are most likely to be satisfied when their perception of the services provided in a facility, which is may be different from that of construction professionals, matches or exceeds their expectations (Ahmed and Kangari, 1995). In order to satisfy the client, it is essential to fulfil the needs of the client. Very little literature has been written to differentiate requirements and needs of clients and often the words 'needs' and 'requirements' are used interchangeably.

Kotler (1997) has indicated that a study of client satisfaction starts with the assessment of needs. Emery, (2004), has labelled requirements as wants and needs. As identified by Emery, the word 'want' is a condition that we desire and each want is a means to an end whilst 'needs' implies a necessity and it is a special 'want' that is necessary if we are to achieve the end. Based on this context, the authors will define 'wants' to mean 'requirements'.

Nkado and Mbachu (2001) have categorised client's needs into two ways: 'latent' needs which may not be directly observed by the use of the conventional briefing instruments and the 'stated' needs which are the client's perceived solution for realising the real latent needs. Such categorisation has been perceived by the authors that latent needs are 'needs' and stated needs are 'requirements'.

Requirements as described by Kamara et al (2002) are described as the vivid description of the facility that satisfies the business need of the project initiator. Project requirements as illustrated by Kamara et al (2002) include:

- Client requirements – which describe the facility that satisfies his or her business need. Incorporates user requirements, those of other interest groups and the lifecycle requirements for operating, maintaining and disposing of the facility
- Site requirements – which describe the characteristics of the site on which the facility is to be built (e.g. ground conditions, existing services, history, etc)
- Environmental requirements – which describe the immediate environment (climatic factors, neighbourhood, environmental conservation, etc.) surrounding the proposed site for the facility
- Regulatory requirements – which are building, planning, health and safety regulations and other legal requirements that influence the acquisition, existence, operation and demolition of the facility
- Design requirements – which are requirements for design, a transition of the client needs, site and environmental requirements
- Construction requirements – which are requirements for actual construction, which derive from design activity

Project requirements shall be looked into in this research but in the context of this paper, only clients' requirements shall be discussed here. Cited by Kamara et al. (2002), clients' requirements can be classified as basic or expected needs, articulated

or demanded needs, and exciting needs (Griffin and Houser, 1991; Mallon and Mulligan, 1993). Basic needs are those that are not voiced but are assumed to be present in a facility. The fulfilment of basic needs would not excite the client but their omission will reduce his or her satisfaction. Articulated needs are those that are voiced or demanded. Exciting needs are those which, although not voiced, will pleasantly surprise or delight the client if fulfilled. To fully satisfy the clients, all three categories of needs must be fulfilled.

A relation between requirements and needs in system development as defined by Abbot (1986) is that user requirements describe any function, constraint, or other property that must be provided to satisfy the user needs. Therefore, user requirements describe how a future product can help users achieve their goals effectively, efficiently, and with satisfaction in their context of use (ISO 13407). Based on this differentiation and the classification given by Kamara et al (2002) on clients' requirements, the definition of clients' needs in this research shall be necessities that are not voiced but are assumed to be present in a facility without which will hinder clients' achievement of their goals and reduce clients' satisfaction. Clients' requirements are conditions that are voiced or demanded from a facility to satisfy clients' needs.

CLIENT NEEDS IN REFURBISHMENT PROJECTS

According to Mbachu (2003), latent needs are the real needs in the mind of the client. These needs are usually consciously or unconsciously concealed by clients, and may not be easily observed by the use of the conventional needs assessment instruments. Clients assess overall satisfaction with the procurement outcomes or the services provided, by the extent to which these needs are met (Salisbury, 1990; Turner, 1990; Green and Lenard, 1999). These needs and objectives may be concealed because they may have social, cultural, political or religious dimensions (Bennett, 1985). This point is supported by Runyon (1980) who sees that the existence of concealed needs and objectives is in the mind of the consumer and very often, a consumer's goals for making purchase decisions are complex, not easily inferred from direct observations primarily because the respondent may be unwillingly to release such information. Owing to concerns for embarrassment or insecurity Runyon (1980) argues that the clients may not be willing to release information about their hidden motives or real needs for purchase decisions, or could give strategic responses rather than candid answers when asked. Given the challenge to capture and maintain both expressed and unexpressed requirements, the elicitation of clients' needs should concentrate on what is expected from the building instead of describing the technical solution i.e. how it is to be constructed, so that clients are forced to think what is really needed to support their business processes (Leinonen and Houvila, 2001; CIB Report, 1982).

The clients' project needs as identified by Chinyio et al. (1998) (in order of importance) are:

- Quality
- Safety
- Functionality

- Aesthetics
- Economy
- Lack of surprises
- Fostering good contractual relationship
- Timely completion

However, an examination of the characteristics of refurbishment projects indicates a different order of client's needs.

An examination on the characteristics of refurbishment projects has identified time control to be of importance in refurbishment projects. In retail and office refurbishment where rental growth is important, time is an essence. Similarly for hospital and hotel refurbishment projects whereby least disturbance to patients/guests is sorted, early completion or on time completion of the project is a priority.

Statistics from the Health and Safety Executive (HSE, 1988) show that the repair and maintenance sector, including refurbishment, accounts for 43% of the total number of construction fatal accidents in the UK. Being characterised as high risk projects, the safety in refurbishment projects is a need that takes priority in the hierarchy of needs that clients desire.

Hospitals are largely government owned and non-profit organisations; the source of project finance for hospitals is from the government. Therefore the refurbished building within the hospital premises has to demonstrate its usefulness so as to justify the monies spent. Being a public organisation, economy may be a need that is of significance for hospital refurbishment as the money spent is accountable to the public. For hotels, retails and office refurbishments on the other hand, economy may not be a need that is of importance. This is because these organisations are very often profit oriented, the return of higher rental income would fully justify the monies spent on refurbishment and high standard of refurbishment is required for rental growth, increase in investment value and attract customers.

The main organisational goal of hospitals is to provide health service to the nation. The refurbishment requirement for hospitals is therefore to provide a better healing environment. As vital as creating a healing environment for patients in hospitals, functionality, quality and aesthetics are also needed for creating a better working environment for employees so as to motivate them and increase productivity. In the case of a developer client in office and retail business, quality and aesthetics are needs desired in refurbishment projects to attract potential tenants who would pay suitable rent. To attract new customers and returning guests, quality and aesthetics needs may also be high on the list in hotel refurbishment.

Due to the uncertainty and risky nature of refurbishment projects, the need for lack of surprises may not be under the clients' needs in refurbishment projects.

For clients whose purpose for refurbishing the facilities is not to increase rental growth, the frequency of refurbishment work may be very low or even one-off, because very often they are more concerned about the running of the business and do not see the need for refurbishment. For this reason, the need for fostering good contractual relationship is the least important in refurbishment projects.

CONCLUSION

The capturing of clients' needs and requirements is essential to producing a comprehensive brief. It is through this process that clients' needs and requirements are identified. Should the identification of client needs not be defined precisely and the solution offered not efficiently meeting the needs, the resultant facility will short fall of meeting the expectations of the clients and this results in an unsatisfied client. As very often clients' needs are not expressed clearly, the differentiation between needs and requirements will enable a better understanding of client requirements and how the identified requirements are able to meet the needs. Having examined the characteristics of refurbishment projects, the order of importance for clients' needs may be somewhat different from that identified by Chinyio et al. (1998). The next stage of this research will attempt to verify the order of these needs for refurbishment projects. It will focus on identifying the project team members who have the knowledge to best meet the clients' needs and develop a methodology to match the knowledge of the project team with the project requirements.

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