# **Defining the Domains for Research into Clients**

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## Abstract

Research into construction clients is in its infancy. Construction clients are multifarious and internally complex thus it is extremely difficult to present an overarching model of their world. This difficulty prevents research into improving the response of the industry to clients and into helping clients be more successful clients. This paper will explore the generic feature of clients as displayed by their relationship with four domains. Clients only become clients when they initiate or maintain facilities. These facilities have the effect that client's desire but involve interaction with the other domains. One domain is internal to the client and involves the facilities users. The other three are external to the client. Two are independent namely the social/business environment and the regulatory environment. These external dimensions both drive the client's purpose but also limit what the client is capable or allowed to do. The final domain involves the construction industry which is contracted to the client to act for them but in so doing the client has dependency on them. This four domain model will be used to explain clients concerns and these will be presented through four viewpoints: operations, economics, social structure and experiential. The presentation of this model will show what research needs to be undertaken to better address client needs.

#### Keywords: clients, research, model.

### 1. Introduction

As Boyd and Chinyio (2006) state 'building is not about building but about organisational development' for the client. The concept of a construction client is not well defined as it is only given meaning by the client's actions associated with initiating building or operating a physical facility. Clients do not immediately associate themselves with this term as it is the business or service that they are providing that gives them identity and consumes their attention. They use a facility as a means for conducting the business or service; thus, the facility is a tool or a technology for meeting a purpose and this gives it a secondary interest to the client. The facility then may be a constraint on the client, and the client may prefer not to have it, or a positive opportunity for enhancing their purpose. As the facility is secondary to clients' purposes, what success means, as regards a facility, is bound up with the clients' success as a business or service.

The complexity of clients is made worse by the fact that although the term is unitary, almost all construction clients are organisations. In order to operate, organisations divide themselves into

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internal functional divisions with differing activities. These divisions have their own problems and the client has to coordinate the differences. The divisions also have different relationships with the environment in which the client operates.

Defining a research domain for clients requires putting the client's purpose central to research. Such a placing is contrary to other work in which construction clients appear. What this other work does, is consider how other stakeholders see clients from their world. Construction management research on clients see clients as a problem for the operation of the construction industry (e.g. (Cherns and Bryant 1984). Work on planning see clients as something that need to be stopped in order to advance the public realm (e.g. (Healey 1991). Work on architecture focuses on their ability to provide an aesthetic environment for clients e.g. (Cuff 1992), (Hays 2000). Work on real estate sees clients as providers of work for consultants (Fisher and Collins 1997) or the funders of property (Isaac 1996). Work on Facilities management sees owners as providers of facilities (McGregor and Then 1999). Business and management research seldom see facilities as worthy of mention but concentrates on the business operations or service operations (Huczynski and Buchanan 2007); thus, does not provide a solution to defining the domain for research. Any research on clients must be cognisant of these views but must search out the clients' perspective.

This paper aims to define the domain for research into clients by creating a composite model of any clients' environment. The paper adopts critical discourse method (Weiss and Wodak 2003) using literature surrounding clients to explore the generic feature of clients as displayed by their relationship with four research domains as shown in Figure 1.



# **Construction industry**

#### Figure 1. The Domains of Client Activity

The domains arise through the clients being defined by their facilities. These facilities contribute to the client's purpose but involve interaction with the domains. The first domain is the social/business environment in which the client fulfils their purpose. The second domain is internal to the client and involves the facility users who fulfil the clients' purpose. The third

domain is the regulatory environment which limits what the client is allowed to do as regards their facility. The final domain involves the construction industry which is contracted to the client to act for them but in so doing the client has dependency on them. These domains will be explored through four client viewpoints about them: operations, economics, structure and experiences. The presentation of this model will show what research needs to be undertaken to address better the needs of clients.

# 2. A Model of the Domains of Research into Clients

Clients exist as a business within the wider environment of businesses and society. Clients can be distinguished by the nature of their business and the constitution of their organisation principally whether they are public (McKevitt and Lawton 1994) or private enterprises (Wilson 1948). In different places in the world, different businesses are undertaken under different constitutions depending on the governance arrangement of the country and the prevailing political disposition (Bell and Hindmoor 2009). All clients have to experience a desire to building which they see as developing their organisation for or within this environment of business and society. This development might be simply to increase capacity of production or service, it might be to undertake a new activity or it might be to improve an already performing activity. In all cases it is this sense of achievement within the environment of business and society which drives them as a business and ultimately what drives them to building. This environment also defines the way economics of the client activity is calculated and also the economics of building (Warren 1993) making this an important viewpoint. This is sometimes confused as building itself adds assets to a client (Isaac 1996) inducing the client to view this as a driver to build and this may interfere with the functional reason for building. Thus, building is not just a cost but possibly an economic multiplier though it is a less fluid asset than money or stocks.

In undertaking this organisational purpose then the building is a framework that is populated and activated by users who fulfil the clients. Thus, the way the building contributes to the business through users is critical (Evans, Haryott et al. 2004, Saxon 2005). The difference between clients and users needs to be careful acknowledged and their relationship better understood. The Client may have a very functional attitude to what the building is doing but the users experience it in a much more physical and emotional manner. Thus, the client might be interested in how productive the building allows users to be, whereas the users may be more interested in the way they identify with the building and what it does for them.

The clients building aspiration fits within not just the business environment but also the building/land and social environment. This is in most countries set within a regulatory policy framework (Baldwin and Cave 1999) which works outside (and often against) the business environment (Morphet 2011). It is here that the long term meaning of the building is controlled and how it fits within the spatial development of society. This is a complex interaction as individual clients see this as a cost and constraint but they benefit in the longer term sustainability of the built and natural environment. Indeed, the registration of land and property provides value for these within the national political economy.

Finally, the clients building aspiration is delivered via the construction industry (Cherns and Bryant 1984). Clients experience the reliance on professional skills to meet their objectives; however they are always questioning these and trying to demand more. The construction industry's operations are reasonably well researched however the relationship with the client is seen through a supply and demand model. Such models do not acknowledge the contradictory interactions between clients and the industry which need to be researched in a lot more detail. The fragmentation of the industry is also evident and difficult for the client to comprehend; for example, the way design is separated from construction being the most fundamental. There is a strong legal framework in this relationship and this is set within business and societies wider interactions. Thus, changes to the way buildings are procured, particularly in the public sector, seem to dominate operations with the assumption that once these are sorted out, it is easy to design and build. In this new relationship with clients, there is a growing expectation that the client uses their power to develop the industry and to develop the technology of the industry. This new dimension is confusing for clients who are used to a more conventional supplier purchaser arrangement. Again, clients only receive benefits in the long term from such initiatives rather than on an individual project, thus they are difficult to evaluate. Similar pressures come from an expectation to support the local community and local workforce during construction which again affects the ability to judge value from investment.

The domains identify groups surrounding clients that influence what the client does but these groups have different needs and ways of working. This complexity can be confusing to clients but it also, means that it is difficult to have a single overarching theory of client situations. If a single model of clients was considered viable then there would need to be a single model of the built environment (for example (Lorch 2003, Koskela 2008). Boyd (2007) discusses the difficulties of undertaking such a task and demonstrates the contradictions inherent in trying to achieve this conceptualisation. These contradictions involve both thinking about the situation but also in the practice of acting in the situation. The desire for unity of view comes from a rationalist perspective which concentrates on a single correct view of a situation most often concentrating on functionality and efficiency (Hislop 2009). This aligns with classical economic theories both in terms of money and now in terms of resources and sustainability but it is only one view. The basic notion that buildings are merely concerned with shelter or functional activity is limited. The significance (Beynon-Davies 2011) of buildings is the meaning they have for clients' and those around them. This meaning of buildings in relation to clients and the domains is more complex to understand as clients purpose can be both functional and symbolic (Zukin 1996). Thus the variety of aspects necessary to achieve a successful building is multifarious and these aspects interact to provide an overall impact which is continually being reformed. Also, it is possible to have poorly fulfilled physical aspects being acceptable because of well fulfilled symbolic aspects, but this is seen differently in each domain as well as changing over time.

In order to research these complex, interdependent and dynamic issues of clients across the domains, it is necessary to view the domains from different viewpoints. These viewpoints are shown in Figure 2 in relation to the domains and can be regarded as different ways of knowing in the client situation and have a character similar to Morgan's (2006) metaphors of organisations. Firstly, operations focuses on the processes that are set for the client engagement with the domains. These are pressurised by the client's desire for business and

building change which are the objectives of engaging with construction, Secondly economics presents the flows of resources and information between the domains for the purposes of the client and evaluates the success of this. Thirdly, the social structure defines the client identity in relation to other parties and is also associated with various influences that the client has and is affected by. Finally the experiential system defines how the client experiences activity in the domains; it is important as it determines the emotional feeling of the client and how others regard them.



Figure 2. The Viewpoints of Clients

### 3. The Operation of Clients

The operational processes of clients was the focus of the work of Boyd and Chinyio (2006). They created a composite model of clients operations so that the construction industry could understand clients actions. What clients desired from a building is added value to their business/ service. During construction, the client's business as well as the building change and this duality gets embedded in the objectives of construction, Boyd and Chinyio's (2006) model is a system dynamics model (Flood and Carson 1993) using a theory of whole system constraints (Goldratt, Schragenheim et al. 2000) both externally to the situation as in contingency theory (Huczynski and Buchanan 2007) and internally due to the constitution of the organisation (Goldratt, Schragenheim et al. 2000). There are also psycho-dynamic aspects (French and Vince 1999) due to the organisational and individual change such that organisational development is complex and uncertain (Stacey 2011) Thus, success for the client means to be satisfied: in the building, as an organisation, and as people. Boyd and Chinyio (2006) used their model to look at the operations of six clients demonstrating its ability to draw out the particular features that would be required for success for these clients. The operation of the 'regulation of place' is undertaken through the planning system which is constituted in national governance (Cullingworth and Nadin 2006). Clients only occasionally act in this domain. This domain puts many conditions on clients about where and what can be built. However, there is an operating tension between the economic advantages of a successful client and the maintenance of the significance of place (Schneekloth and Shibley 1995). This is also discussed under economics as it influences the flow of resources within a location and about social structural in the way that power and influence act in the location. In addition, the symbolic nature of a building can provide the inspiration for others to build; thus, the building is the symbol of the start of development or re-development. This creation of the wider public realm: involving buildings, public space and infrastructure, is part of the symbolic economy (Zukin 1996). This public realm can only be a minor interest to clients who may criticise it for being too costly. On the other hand, there are other stakeholders who criticise planning as failing to preserve heritage or the ecology (Flyvbjerg 1998, Priemus, Flyvbjerg et al. 2008) against the client. These debates and tensions span social and spatial scales through their symbolic and physical significance but also change over time.

The 'regulation of supply' is to some extent much simpler as it is represented by the built environment industry. Again most clients only act in this domain occasionally. This has well recognised operations in terms of roles and processes (Winch 1996). However, as Groak (1994) shows, there is no coherence as an industry but merely a collection of projects. What the client can get produced in what time scale and by what means is set within this constraint (Winch 2010). It is problematic as everything is possible if enough resources can be brought to bear on a project; the relationship between what is possible and what is practicable is unclear. Thus, in these complex operations, it is possible for the clients to feel that the industry is inadequate and indeed it is backward (Woudhuysen and Abley 2004) and there is always the desire to find another construction supplier who can do what the client wants.

That the vertical axis involves constraints is annoying to clients but the horizontal axis is the motivation to see this through to meet their business purpose. The '*purpose*' of building aligns to this motivation through an explicit formal statement, such as a brief; however, there is often an undeclared, but tacitly understood, aim that fulfils other purposes (such as status) (Boyd and Chinyio 2006). The formal purpose leads operations to be driven by financial analyses and economics. Further, buildings that are owned by a client are part of the fixed assets of an organisation (Peterson 2002) and this can add to the confusion of purpose. However, some clients have social purposes which adopt a business approach through usage and social accounting (NEF 2007). As buildings involve use in the future these analyses are somewhat speculative but often buildings are not just designed for an immediately perceived use but also a notional expansion in use which is even more speculative. The tacit purpose are often symbolic aspects which are complex because they can be justified by manipulating arguments in the business and social arenas (Boyd and Danks 2000). What is key about both the business and social purpose is that operations are framed within a wider social world of business or public service and cannot be detached.

The final domain of operational interaction for the client is with the building user (Vischer 2008). The purpose of the building also defines the user. Users can be customers or suppliers or employees of the business or service. Users may also be more tangentially associated with the

building as observers or neighbours. Users make use of the building for their purpose which is most often the client's purpose (Rubin, Elder et al. 1980) (Vischer 2008). Complex buildings, like hospitals, have building operations that are social and technical to fulfil the purpose of health provision. Their primary users for their function are patients and medical staff so that patients enter and are transformed by these staff to exit with improved health. However, surrounding this are family and friends on the patients side and numerous ancillary staff, professions and administrators that support the facility operation. The scale of this, and the scale of the building, means that these need management to coordinate and plan the enterprise; this management becomes a surrogate client for the building function. Finally the building is a technology in itself which requires managing and maintaining and such functions as facilities and estate management become part of the client operation (Alexander 1996, Kyle, Baird et al. 1999, Deakin 2004).

#### 4. Clients as economic systems.

Economics considers the institutions and consumers that combine to produce, distribute, regulate entities that are desirable and scarce in society (Gillespie 2010). This involves determining and connecting the flows of resources and information that operate within social structural relationships that define societies and define organisations. The garnering of resources to accomplish buildings is a key economic task which is greatly influenced by the client's position in the world (Warren 1993, Ruddock 2008). Buildings involve significant resources and therefore command great economic attention. This movement of resources to building is also significant as it is a decision to not use the resources for something else. Thus the priorities that are made on what to spend resources, for example, symbolic aspects, creates a tension as they are not spent on e.g. social aspects. Buildings are large and so involve a large number of resources and so the tensions are large thus the social emotion attached to buildings is large; the larger the building the greater the tension. However, the symbolic aspects can be scale (e.g. a purpose to have the tallest building in the world) thus the economics of such priorities is difficult to account.

As regards the 'regulation of place' domain, the placing of building in its spatial and social context is an economic activity (Morphet 2011). There is a dilemma for regulation between advancing economic development and retaining spatial conservation. The ownership of land as an economic asset does not allow the client to do what they like thus this regulation can reduce value. Further, society gives itself through parliament the authority to dictate to the client what they can build and for what purpose; again limiting the economic advantages. The tension that surrounds building, especially in denser social settings, increases as others become swept into the physical and symbolic development. A growing issue in this domain is the delivery of sustainability through promoting values on conserving space, ecology, resources, plus avoiding pollution and social decay (O'Neill, Holland et al. 2008).

In the business domain, the client may seek financial resources to realise their purpose. One aspect of economic value is a client's relationship provided by property rights determines their ability to command the use of property and to accumulate the benefits of this over extended time. Different forms of property ownership exist (e.g. capitalist and socialist) but nuances in the duties and constraints on this ownership are found in different national systems. All societies

have some form of public ownership such that many of the aspects of infrastructure and governance are performed within public settings.

In the supply domain, the bringing together of resources to accomplish a project is limited by the availability of materials, plant, organisations, and individual skills. Clients induce a flow of physical and symbolic resources to bring about a building project. But through their action, clients may also create these and deplete them. Indeed buildings themselves are a type of storage of resources with this being acknowledge in the term capital asset (Ruddock 2008). The creation of a building in a location is part of its economic development thus it provides jobs and business opportunities and further afield can support a supply chain and innovation (Gann 2000). Many economic discussions in the supply domain focus on efficiency; however, clients are mainly interested in costs viewing other discussions as 'someone else's problem'. The difficulty, however, is that procurement arrangements that only focus on cost produce a confrontational and dishonest response to activity such that additional costs are generated through avoiding or not managing the consequences. Clients who wants something different or even innovative are constrained by the norms of the economic framework in which they are working (Ive and Gruneberg 2000). The clients role in stimulating innovation is clear to Brandon and Lu (2009) as the industry is unwilling to take on the risk of novelty (Woudhuysen and Abley 2004). However change and innovation is also central to new practices (Akintoye, Goulding et al. 2012) and to sustainability and green buildings (Halliday 2012)

In the user domain, the value of building relates to its support of the purposeful activity. Work by Evans et al (2004) postulates the ratio 1:5:200 where 1 is the design cost, 5 the construction cost and 200 is the operating cost. This suggests that it is valuable to spend money on design to get benefits in operations. Other work by Macmillan et al (2002) draws out the intangible advantages of buildings and tries to connect value to them.

# 5. Clients as social structures

Clients themselves are entities that have social identity (White 1992). They are surrounded by competitors, suppliers, their clients, and regulators which help to form this identity. The social structure view sees clients, once identified as such, behaving to their identification. Similarly the other actors and institutions behave in this normalising way. This is critical for appreciating change in that a single new action does not constitute change; it is only when the norm changes that a social change has occurred. The roles surrounding clients includes regulatory officials, real estate, banking and finance, lawyers, local government officers, human resource managers and an array of construction professionals. These require the client to operate differently with each stakeholder who may have different priorities and different economic perspectives.

These patterns of social arrangements can be linked to actions of individuals however they are often discussed in a macro scale where the power of various institutions and social groups determine what it is possible to do and even think in society (see (Mintz and Schwartz 1985) for a discussion of US business). Owning, occupying and operating buildings continues to be a key aspect of society. The identity of clients in this gives them power and authority in many aspects of social life (Healey 1991). Power is distributed in different ways; some of it is rational

regulatory power other is emotive symbolic power (Flyvbjerg 1998). This clearly interacts with an economic view but is more concerned with influence rather than on the flow of goods and services. The clients identity, particularly if a private business, emphasises the rights of self-determination, competition, enterprise, personal merit, duty and historical position (Morrison 2011).

The client's business places its users into a social structure (Huczynski and Buchanan 2007). The larger the client organisation the more formal, and bureaucratic, arrangements that prevails. This structure gives the identity to the people and provides a formal reporting and reward mechanisms; thus employees will have a contract and also be protected by employment legislation. However, it does differentiate different divisions in the client which begin to operate with their own goals and establish their own power. Corporate clients struggle to maintain a single identity internally and a common integrated purpose. These different divisions relate differently to the external structures and in particular to the different roles surrounding building. As building involves organisational development in the client. The complexity of the client system means that change occurs not just through goal driven action (design) but as a negotiation of meaning and power (Gabbard and Beaulieu 2005) between the different divisions (Wenger 1998). Thus, change occurs differently in the different client divisions and so the success of building is different in the different divisions.

# 6. Clients as Experiential Systems

An experiential view determines how the client engages with the social and physical world and how this influences client behaviour (Heron and Reason 1997). Clients themselves and the surrounding actors are all engaged in this experiential activity and it is the way that the different experiential systems contribute to each other's experience that creates outcome. This experience is set by the social structures, the economic values that have priority and the forms of operation that are conducted in the business and in the task of building.

Of particular interest is the way each makes sense (Weick 2001) of the situation that each finds themselves in. Sensemaking is the active way of knowing (Weick 2001) but also contributes to the way explanations are constructed for actions and outcomes. It can be seen as the stories organisations tell about their activities (Snowden 2002). The sharing of these stories is one aspect of creating identity in organisations (Armstrong and French 2005). Unlike more deterministic and objective views of organisations (such as economics) which focus on accuracy, sensemaking focuses on plausibility (the best explanation). What drives these best explanations is key to appreciating clients and the surrounding organisations. Inside each domain the explanations appear 'common sense' (Tsoukas 1994) however to external views they may be annoying or erroneous. Weick's (2001) view is that organisation seek to remove 'equivocality' so that they only have a single view thus de-legitimising the views of other organisational systems.

The client as building initiator is driven by 'a sense of achievement' in the business/ social world. This sets up aspirations for what can be and should be. Building then is driven by this sense of achievement and the relationship with all around is dictated by their response to this.

The regulatory system is characterised by its desire to achieve 'a sense of time and place' (Schama 1995). Regulation is often presented as upholding the view of the wider society; however, this is experienced negatively by the client as a constraint on their actions. The users in the client organisation are driven by 'a sense of being' as often work defines peoples' existence. Building can aspire to improve the sense of being and as such can be supported and celebrated by most. However, there is a tension as the client's sense of achievement seeks to increase productivity or service quality through the user as a result of building. The construction industry offers the experience of 'a sense of becoming'. Its key feature is that it is changing the client's world (Boddy and Buchanan 1992) and so its rhetoric of improvement (Green 2011).

# 7. Conclusion

This paper has shown one route to conceptualising client, accepting that a unified conception is not possible. Clients are too multifarious and their relationships are not fixed for any meaningful attempt at a single overarching theory or domain. What is required are multiple views and a way of integrating these views. Such research into clients must collect these multiple views and case studies from practice provide the best vehicle for this. These views can then be interpreted through the frameworks presented in figures 1 and 2. This helps to integrate the views and to provide a language to discuss the various actions of clients.

It is only recently that the significance of the role of clients in the building process has been recognised. Previously, the complexity of building itself and the spatial significance have dominated thought. Clients have merely been seen as external to the process; paying for it, initiating it and sometimes being problematic for the industry. Clients must be seen as an industry in themselves. The approach using multiple views presented here will allow research into clients to commence which will assist clients in performing better for themselves and also for the construction industry to respond in a more supportive way.

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