Clients and Users in Construction

Research Roadmap Summary
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<th>Title</th>
<th>Clients and Users in Construction</th>
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Research into clients and users is an important new field of research and development which may provide economic, social and environmental benefits to society, business, government and academia. The CIB Working Commission W118 is leading this development internationally to set a collective research programme within its academic and practice network and supporting funding agencies in formulating their research programmes.

The overall aim is to strengthen the activities on the demand side of construction in order to improve building, building production and building use. The impact of this research will create important benefits by considering the client’s role in:

- business and society, where the design of buildings facilitates their improved use;
- buildings and society, where conservation, sustainability, infrastructure and regeneration have different meaning in different countries;
- business and users, where usability and adaptability of buildings can respond to shifting demands, and focus on the well-being, of users; and finally,
- the construction industry where the clients can influence major changes through encouraging new production systems, materials use and enhanced design tools.

These impacts require a broad range of research to provide solutions to such client-centred problems as: the globalisation of business; regeneration of existing building stock; new user demands for building performance; energy and CO₂ reductions; efficient but collaborative procurement systems; and enabling innovation of production systems and materials.

Three main research themes are identified to facilitate this in a robust and comparable manner:

- client roles and responsibilities,
- client organisation and operation, and
- client innovation.

These themes are described in this summary.
RESEARCH THEME 1

CLIENT ROLES AND RESPONSIBILITIES

In research terms, client roles and responsibilities are often described as *Agency*. Research theme 1 explores to what extent clients can act independently to achieve their aim or whether they are always required to act in the way their environment expects them to act. The significance of this for practice is about how clients operate and how they are able to change. Central research objectives within this theme are:

**Needs and values**
A central challenge is the need for a shift in focus from building as an end in itself to building as a means to achieve objectives related to the activities of the users of a building during its lifecycle. Consequently, a prerequisite for clients and users is to be knowledgeable about their own values and needs, and to juxtapose, converge or otherwise position these in relation to other stakeholders. Thus, it is important to fully explore client needs and user values in different domains by mapping the content and scale of clients' and users' value chains in various national and institutional contexts.

**Structures**
A second challenge is related to how socio-technical structures shape the roles and responsibilities of clients and users in construction. The ability of clients and users to influence the course of events is not only linked to their own will and wishes, but is shaped in part by their structural position, among others their roles and responsibilities. Public regulation, policy making, market conditions etc. are among the conditions that shape the practices and behaviour of clients and users. Understanding how clients’ independent action works under different structural conditions is essential for identifying the space for action available to clients and users.

**Capabilities**
A third challenge is the question of what capabilities constitute a “client” and a “user”. Understanding both terms and their various configurations under different structural conditions are imperative in order to develop theories and conceptual frameworks, which can be used to build a coherent model or even the theory of clients and users. Viewed from a management perspective, the problem could be expressed as contingencies, convergence and contradictions in an organisation between the different roles and associated responsibilities. This will be essential for identifying the clients’ and users’ core competences and how these can be developed.

**Research objectives:**
- To map the content and scale of clients’ and users' value chains in various national and institutional contexts.
- To analyse how sociotechnical structures shape the roles and responsibilities of clients and users in construction.
- To develop a coherent model of what constitutes a client and a user under different structural conditions.
In research terms, client organisation and operation are often described as Governance. Research theme 2 considers the problem of how client organisations operate internally and interact with the external environment of suppliers, policy makers etc. and make decisions.

**Behaviour and practices**
A first challenge to the improved performance of built facilities depends on the behaviour and practices by clients and users. Insights into the differences and similarities of these strategies, competences and practices will provide researchers and practitioners with the understanding of the scope of action, useful inspiration on different approaches to solve problems etc.

**Decision-making and accountability**
A second challenge is to better involve users and stakeholders in decision-making processes in the construction as well as the operation of built facilities. These methods need to include new types of collaborative arrangements like partnering and public-private partnerships which support a construction industry orientated more towards user demands. This requires working with much greater transparency and accountability. Other parts of this challenge consider managing the differences between user needs and organisational objectives. The success of this will deliver more value for money to the clients.

**Learning processes**
A third challenge is to enable learning from successful/failed projects and to investigate why some tools etc. may be more appropriate than others. Studies of interactions and changes of processes and mechanisms are relevant because they are instrumental in bringing about sustainability, they identify boundaries, and they manage information and develop briefing tools. This understanding is a prerequisite for developing appropriate guidance material for clients and users. For example how to manage the early phases of the construction project and where keeping many options open has to be balanced by effective formal planning.

**Research objectives:**
- To analyse clients’ and users’ strategies, competences and practices for procurement, management and use of built facilities in a life-cycle perspective.
- To assess different methods for involvement of users and stakeholders in decision-making processes on construction and operation.
- To understand the mechanisms behind successful/failed projects and why some tools etc. may be more appropriate than others.
Innovation is generally considered to be the key driver of improved wealth and welfare. However, clients face a number of underlying challenges with regard to innovation. Hence, clients need to be able to manage change versus continuity in relation to both client practices and industry practices so that mutual benefits are achieved.

Risks and rewards
In recent years, policy makers in many countries have advocated that construction clients take on a greater responsibility for stimulating innovation through (public) procurement of construction products and services. Stimulating innovation is a dilemma for construction clients as doing things differently potentially offers great rewards in time, cost and quality, but inevitably increases risks. Thus, for example public construction clients will often be caught between two different objectives: spending public money in a secure manner and taking on risks for adopting new technologies.

Management of innovation
A second challenge is related to how and where innovation will take place. While new technologies may offer a range of new opportunities, they also pose threats to clients and users. Clients are placed in a double position as intermediary between users and the construction industry. On one hand, buildings themselves are instruments in the hands of clients to change the very business of the client organisation. On the other hand, clients’ setting of requirements shape which technologies the construction industry applies to deliver buildings and services. In both cases, clients need to make conscious choices on how to manage the innovation process.

Towards sustainable buildings
A third challenge is how clients and users can support the move towards a sustainable future. Clients play a particular important role with regard to procurement of sustainable buildings and refurbishments, while the behaviour of users has an equal importance with regard to the operation of buildings. Providing insights, showcasing best practice and developing new guidelines and simulation methods could be valuable contributions towards a sustainable future of the built environment.

Research objectives:
• To explore how clients and users can act as change agents of the construction industry.
• To understand how clients use buildings as instruments of change within client organisations.
• To assess how new technologies like BIM will impact on clients and users.
• To develop guidelines on how clients and users can support the move towards a sustainable future.
For more information about the CIB Working Commission W118 on clients and users in construction, please contact the coordinators:

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