

Project Initiation and Business Cases Handbook

Chapter 15

Design in Construction

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The Role of Design

1.1. Public construction projects are significant investments and can have profound impacts on communities and the environment. It is therefore essential to ensure that the potential opportunities of a project are properly understood and harnessed to maximise positive outcomes and return on investment. Good design processes are central to achieving this.

1.2. Design costs often account for a fraction of the long-term project costs, but design can often have the biggest impact on efficiency, sustainability and overall success.

1.3. Design fees for skilled designers should be viewed as an investment, rather than as a cost. Good design can deliver real efficiencies and is the primary tool to deliver longer-term savings through initial preventative spend in construction projects.

1.4. It is vitally important that all parties involved in the commissioning and creation of projects understand at the outset that a stated requirement for good design is not a matter of style but one that is focussed on achieving the best outcome for public good. Information on the benefits of design can be found in *Creating Places*, the Scottish Government policy statement on architecture and place.

Design Process and Design Outputs

2.1. There are two important elements to consider in relation to design: the design output and the design process.

2.2. The design process is a creative and iterative method of interpreting and responding to a challenge. If the design process is to be effective, there needs to be a commitment to and investment in the quality of the process and the relevant skills.

2.3. The quality of the design output is a product of the quality of the design process. Design quality can be understood in terms of how well it delivers each of 3 main components:

- physical quality (such as appearance, robustness and build quality);
- functionality (such as performance, accessibility, security, health and safety, flexibility and whole-life value); and
- impact (how well the facility relates to its environment and how it addresses cultural, social, economic and environmental needs).

Design Leadership

3.1. Delivering quality outcomes requires a commitment to good design at a strategic level and, consequently, design leadership is crucial throughout the project lifetime.

3.2. This may be achieved through the early appointment of client Design Advisor or Design Champion roles. These are independent advisors with relevant specialist

knowledge, appointed to interpret and represent the client's business needs and project objectives. Typically, a Design Champion may occupy a senior role, such as on a project board, with Client Design Advisor involved in more detailed issues. However, what is most important is that the process puts in place appropriate advice on design issues, and that decision-making power is informed by this advice. Both roles report directly to the client, i.e. not through the design team.