

Agile Report

Client Charter Case Study B: An Approach to Difficult to Quantify Objectives

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Introduction

Overview

This case study outlines the approach taken by Dane Housing (Congleton) Ltd, a Registered Social Landlord (RSL), when dealing with project objectives that are difficult to quantify (question 2b of the Charter). The study also provides some useful insight into how the Dane Housing involves its end-users in the design process (question 2f in the Charter).

The document discusses the main process that the Dane Housing uses; the inputs into this process; and also highlights some of the associated issues and problems. The final part of the study summarises the main lessons from the study and can be used as a quick reference for those who may want to adopt a similar approach.

Why this Case Study?

Dane Housing's Charter Plan submission indicated that the company were involved in many forward thinking activities. Their approach to partnering, tenant involvement, and the monitoring of local demographic housing needs were all issues that would have made interesting case studies. However, it was decided that at this stage it would be most appropriate to study their approach to identifying and developing the difficult to quantify objectives (Cultural Indicator 2B). Dane Housing's approach towards setting and achieving their objectives on schemes has helped them gain recognition through the Civic Design Award scheme.

Benefits to other Clients

- The study shows that a practical approach can be taken to translating difficult to quantify objectives into something more tangible.
- It shows how the actual users of a scheme can be more closely involved in specifying objectives, even in cases where they may not all be known in advance.
- It shows the benefit of making the effort to involve tenants and of trying to understand these difficult to quantify objectives.
- It shows a simple process that can be followed by Clients who are struggling to get to grips with these issues.

The Context of the Case Study

Process Overview

The process that the organisation currently uses to identify and deal with non-quantifiable objectives has evolved over time and it is still to some extent *ad-hoc*. Nevertheless, attempts were made to formalise the process when the organisation made their original charter application. The main features underpinning the development of their process was

- A desire to achieve the best value on a project.
- A commitment to listen to outside input.
- Confidently utilising professional judgement.
- Appreciating the need to be flexible with their approach.

The Client's view of the main issues

Organisational Commitment

The organisation's commitment to establishing the right objectives for itself and its tenants, whether difficult to quantify or not, is emphasised in its mission statement, which sets one of its core values as "Working together to achieve mutually agreed objectives."

Tenant Involvement (Educating Tenants)

It was recognised that in the past the Dane Housing had canvassed too much input from their Tenants (or representatives), who were generally not familiar with the design process. This created unnecessary delays and led to unrealistic expectations within tenant groups. However, the need for effective consultation was realised and therefore rather than ignoring this input, Dane Housing committed to educating their tenants so that they could more easily express their requirements and contribute to the success of the design.

Using Professional Staff

The organisation has also found that employing staff with professional backgrounds in construction has a positive impact on the design process. In particular, they seem better equipped to understand the sometimes conflicting requirements of end users and the supply side. In addition, because they generally understood the language and the way the supply side operated, they were able to ensure that the organisation's requirements were effectively communicated.

When to use the Matrix Approach

Dane Housing has used a matrix to address both quantifiable and non-quantifiable objectives as describe by the ‘Good Practice’ example for criterion 2B. Generally, the matrix approach has been used to decide upon which contractors and consultants should be selected as partners. In some cases the company found that though suppliers were able to produce good tender submissions, their performance fell short of their promises. Therefore, over time the matrix has been refined to include issues such as the reliability of the supplier and how easy it is to work with them.

Now that Dane Housing has successful partnering arrangements in place, it finds that there is less need for the regular use of the matrix scoring approach. Instead, difficult to quantify objectives are refined through an iterative design development process that involves both the supply side and the end users. This approach is covered in more detail in the following sections.

Dealing with the general public

One area that Dane Housing occasionally has difficulties with, is overcoming the concerns of the local population when they plan to develop special needs housing or similar. Often their approach is to work very closely with the Local Council, who seen to be better suited to deal with public concern issues. Though consultation is often required, it is dependant upon the interest that is generated as the project develops. If it is felt necessary, then an open day is held to communicate with the public, local groups and other interested parties. These events aim to alleviate any fears and misconceptions, and generally explain what is happening and why the development is required.

Generally, though, the company prefers to present the completed project to the public and then win them over. This provides added impetus to ensure that properties are well designed to suit the local settings, which smoothes the process of gaining acceptance.

The Perfect Solution is Not Always Possible

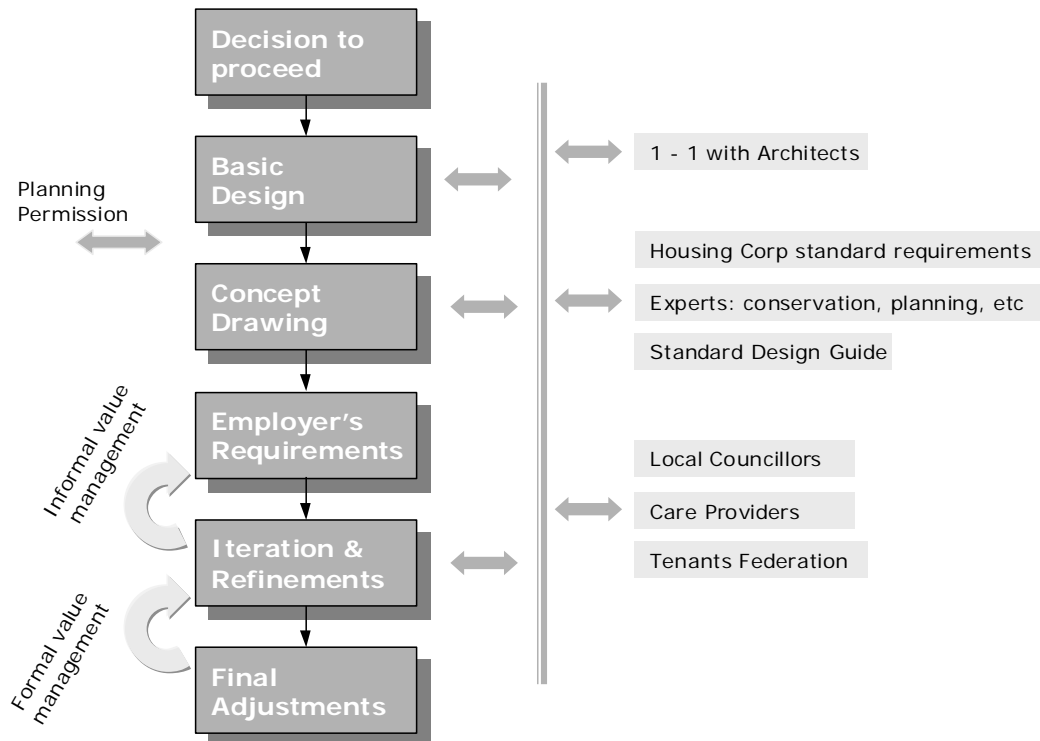
Another important lesson that Dane Housing has learnt is that the perfect solution is not always possible. By involving various interested parties in the design process it is likely that some will have to make compromises. On some schemes, for example, the organisation has produced a final design that is ideal for the tenant but does not provide the best option for housing management or maintenance.

Flexibility

Finally, though Dane Housing follows the process outlined in the next section, it was clear to them that a key issue was to remain flexible. Technology, legislation, social demographics, and tenants’ expectations are all constantly changing and thus to succeed in the long term the organisation must adapt its approach to suit the prevalent circumstances.

How do I use this?

Process Flowchart



The Elements of the process

Basic Design

The basic design is usually very simple and consists of little more detail than the size, number of units and target costs. It is developed in an intuitive manner by Dane Housing's internal design staff and it is acknowledged that the specification is very fluid at this stage.

Concept Drawing

At this stage the organisation begins to seek input from external sources such as the Tenants Federation and the Housing Corporation requirements. The concept drawing can still be quite open to change and the degree to which this is complete depends upon the type of development. In some cases there may only be minor adjustments throughout the development of the design. Though, if the need arises, there might be a complete re-design. The main purpose of the concept drawing is to provide a starting point to allow discussions to start.

On some larger schemes, where the additional cost can be more easily justified, Dane Housing has used 3D computer models to make the concept drawing easier to understand by non-construction people. This has proved to

be a useful tool. In other cases, the company has arranged coach trips to similar sites, to allow people to walk around and gain a better understanding of the design concepts.

Employers Requirements

By the time Dane Housing produces its Employers Requirements many of the major elements of the design have been firmed up. It is usually at this stage that the objectives that are more difficult to quantify become apparent. These are normally refined through an iterative process that involves input from the company's design, maintenance, housing management staff and external input from tenants, their representatives and the supply side.

Iterations & Refinements

Through a series of iterative stages the specification tends to evolve in terms of the 'nice touches' that can make the property seem much more appealing to the end-users. The approach normally adopted by the company is to refine the difficult to quantify objectives into specific requirements by breaking them down. A simplified example is shown on the following table.

Stage	Example
START WITH THE GENERAL REQUIREMENTS.	MAKE THE AREA FEEL SAFE.
Break this down into features.	We should have safe fences.
Refine and quantify the features.	THE FENCES SHOULD BE 7' TALL AND MADE OF WOOD.

Dane Housing tends to use an informal approach to Value management during the iteration and refinement stages of the project. This is based on the knowledge of the various in-house and supply side experts. As the objectives are being refined, the design team is encouraged to think in terms of increasing value and achieving excellence (a theme reflected in their Vision Statement). Options are also presented to end-users and the implications of these choices are discussed.

Final Adjustments

Eventually the design process has to be finalised and at this stage the company tends to rely on the judgement of its own qualified staff. Where possible the actual tenants will be allowed to make the final detailed choices on issues such as colour schemes and the choice of fixtures and fittings.

During this final stage it is sometimes necessary to trim back the final specification due to limited funds, and therefore a more formal 'Value management' approach is taken. This approach is briefly discussed below.

Value Management

Dane Housing recently used an external expert to help them with this process and re-introduced a weighted matrix system approach to assist with decision making. The organisation found the results to be very useful and has decided to employ the external experts on future suitable projects.

However, the company admitted that this is more about trimming back costs whilst ensuring that the most valuable yet affordable option is selected. The term Dane Housing used for this was working on the ‘edge of affordability.’

The Inputs to the Process

1 – 1s with the Architect

Although Dane Housing has its own Architect, it tries to gain the input of its partnered Architect as soon as possible. The early discussions will be very informal but will help to produce the basic design and then refine this into the initial concept drawing. The Architect will then be involved throughout the project.

Experts

Experts provide advice on issues such as environmental concerns, fire safety and planning permission requirements. They tend to be more involved at the start of the design process but will be consulted as required throughout a project.

Housing Corporation requirements

The early part of the process is heavily driven by the requirements laid down by the Housing Corporation who provide the majority of the funding for the company’s development work. These include guidelines such as the ‘Secure by Design’ initiative. However, Dane Housing always tries to interpret these to suit the particular circumstances they are in and the needs of their local end users.

Standard Design Guide

The title of the document is slightly misleading in that the emphasis is more on the word ‘guide’ aspect rather than ‘standard.’ The Guide tries to encourage innovation rather than restrict it and therefore allows the designers considerable scope. It does however contain lots of information about the minimum standards that are acceptable. In many cases these are based on the requirements of the Housing Corporation with some modification to reflect the particular needs of the local area.

The guide also contains the top-level corporate values and design aspirations that the Client hopes to achieve in every project. Their mission statement commits them to continuous improvement and excellence and these are

reflected in the Standard requirements. These requirements are reviewed periodically and may be tweaked for individual projects.

Local Councillors

Input from the Council and Councillors tends to be more strategic in nature. Their advice and help is sought on issues such as planning permission, building control, etc. Though they tend to be involved more at the start of the design process, they are encouraged to input into the rest of the design process.

Care providers

The people who look after or help tenants are often able to provide very valuable insight into how the final design can affect those tenants. This has proven to be especially true as the company has started to produce more special needs housing. In these cases, the tenants may have particular requirements and the company has no previous experience of meeting those needs.

Tenants' Federation

The Tenants' Federation includes 12 existing tenants and 1 person from Dane Housing. It comprises of a good mixture of different people who provide a broad coverage of local knowledge. It meets on a regular basis to discuss issues relevant to tenants and the organisation such as housing management, maintenance, and the company's mission statement. For development work, the Tenants' federation is used almost like a consultancy and provides input on design issues and on the selection of contractors.

The Tenant's Federation is normally consulted during formal meetings but members can also be consulted on a more ad hoc basis when necessary. Its involvement tends to be more in the early part of the design process because, during the later stages, the company tries to include the actual end-users where possible to provide detailed input.

End Users

Dane Housing is very keen to encourage design choices to be made by the people who will actually use the property when it is completed. Of course this can be difficult, as often the end users are not known in advance. Through working closely with the Local Authority and carefully monitoring the situation, the company does manage to pre-allocate, on average, approximately a third of its tenants. These are then directly consulted over decisions such as colour schemes, finishes, fixtures, etc. This third also provides a very good indication of what the remaining tenants are likely to find attractive in their homes.

Planning permission

The company also tries to involve the relevant authorities in the process from an early stage. This helps to smooth the final application for planning permission.

Why do this?

The Benefits

Partnering

Being able to clearly define the objectives has helped to create a good name for Dane Housing, which has made them more attractive to contractors and developers. This has made it made it easier to find potential long-term partners.

S106

It has also has helped to create a more positive attitude to dealing with S106 schemes. As the organisation's staff are all construction professionals, they are better able to help suppliers meet their S106 requirements.

Long-term resale value

One aspect of the whole life cost is what you do with the development when it reaches the end of its working life. In cases where the property has been developed to match the difficult to quantify objectives, the re-sale desirability of the property tends to be higher.

Reduced Maintenance Costs

Dane Housing has found that, generally in schemes where the tenants have had a lot of input into the design process, they take more pride in the properties and look after them more. This tends to lead to reduced maintenance costs.

Examples of success

Carpeting a communal area?

A recent renovation and conversion project showed how involving end-users and making an extra effort to understand their difficult to quantify objectives, can add value to the final scheme. In this case the property was in a less desirable area and the tenants were concerned about theft and the state of their flats.

During the design process it was suggested that the communal hallways and stairs could be made more attractive and friendly if they were carpeted. Initially there was a lot of opposition to the idea as it was felt that the carpet would not be looked after and there would be higher maintenance costs. Part of the concern was that bikes would be stored in the hallways and these would mark the carpets. After discussion the issues and options with tenants, maintenance and housing management, it was realised that simple solution could be used that would satisfy everyone.

The final design did include the carpets but also include lockable storage areas for the bikes. This has pleased the tenants and housing management.

Maintenance is also beginning to see some benefits as there is no damage from bikes being brought inside and the tenants are taking more pride in their property and so looking after it better.

What's in a name?

Another example of a small change, that can add considerable value in the eyes of the tenants, was used on the same scheme when it was decided to rename the flats. Although this appears to be only a cosmetic change, the 're-branding' of the area has been very well received by the residents.

Addressing special needs

Another example of how time invested in understanding tenants' needs can provide unexpected benefits was shown in another recent develop for special needs housing.

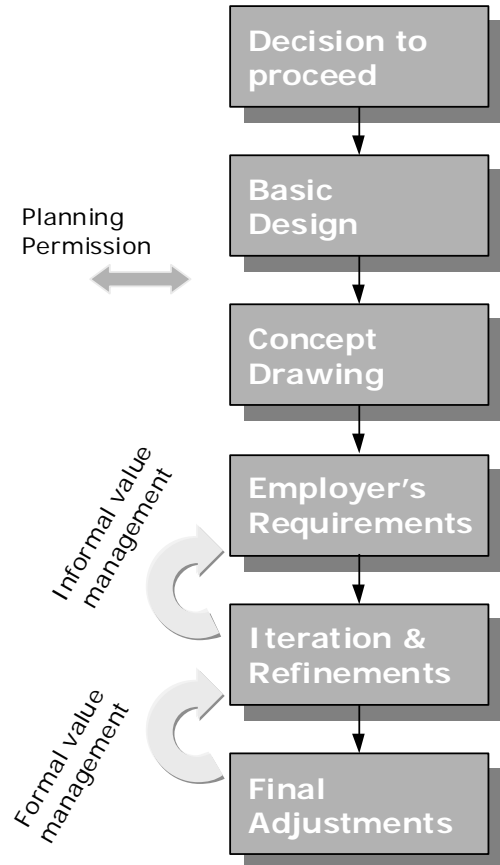
In this case the parents and carers explained that wall mounted radiators may be problematic because some users may put things behind them, or worse, try to remove the radiators from the wall. When the company proposed under-floor heating, they were told that this solution was not practical for other reasons. This prompted the company to investigate the use of overhead heating, and this solution was finally selected for used on the special needs scheme.

The experience gained has shown that overhead heating may be usefully applied to other schemes where saving wall space could be an issue.

How might I apply it?

Checklist

- Get the supply side involved as soon as possible, ideally on a partnership basis.
- Produce a concept drawing early so that you have a point of discussion.
- Be prepared to listen to and encourage input from all sources especially tenants.
- Make efforts to help non-construction people understand the issues. Consider training them or showing them real examples.
- Be open to new ideas and think how they might be applied on other schemes.
- Try to break down difficult to quantify objectives into more tangible objectives.
- Consider the use of matrices and external experts until you are comfortable with the techniques.
- Remain flexible and adapt the approach to your own particular circumstances.



Key Performance indicators & Outcomes to look for

When you are able to define difficult to quantify objectives clearly, you should see an improvement in satisfaction levels from Tenants (7b of the Charter). This may also lead to reduced maintenance costs and higher levels of enquiries from potential tenants.

The supply side should also be clearer about what you as the Client require. This should lead to less delays and improved Time and Cost Predictability KPI scores.