

PROMOTING INNOVATION

- conditions, mechanisms and methodologies

A King



BSRIA

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EXECUTIVE SUMMARY

Building services companies, and particularly building services contractors consider themselves innovative. In more than half the companies interviewed somebody had a specific responsibility for innovation.

The drivers for innovation amongst respondents to this study were both to add value for clients and, particularly among the building operators to reduce cost. Studies of the construction industry as a whole have shown that innovation has led to increased market share and increased profitability. The majority of innovations in this study were about the process rather than the technology of building services with new information systems and CAD systems representing 40% of all innovations reported.

The more innovative companies use a wider range of sources of information and more formal methods of disseminating it than do the less innovative. One third of all ideas come from awareness that a technology exists and “it could be worthwhile”; 17% of innovations came from an individual’s passion. This individual approach was, not surprisingly, more likely in consulting engineering practices than in the other companies we studied. Wherever the idea comes from, a champion for the innovation is still needed.

The process of approving an innovation was generally informal in the consulting engineering firms, but in contractors and for building clients formal cost benefit analyses were expected.

Successful innovations were often these that had started on one project, or in one branch, and had then been rolled out across the company. Full implementation of many of the innovations studied took a long time - in one case ten years.

Evaluation of innovations was seldom undertaken in consulting engineers nor contracting companies but most respondents reported that the benefits from the innovations had exceeded their expectations.

For companies wanting to increase their innovativeness the technical note concludes with a brief analysis of some of the popular ways to brainstorm ideas, recommendations for managing change and an encouragement to do a good benefits assessment at the end of the project.

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1 INTRODUCTION

1.1 OBJECTIVE

The purpose of this technical note is to increase innovation and the uptake of research in the building services industry by demonstrating what are good conditions for innovation, and what are the barriers to it.

It develops a picture of innovation in the building services industry:

- Are we innovative?
- Why are we (or indeed why should we be) innovative?
- What innovations do we make?
- How do we innovate?

Brief conclusions on how we could become more innovative are given at the end.

Some of the case studies that were developed as part of the research have been used through the text to illustrate key points.

1.2 SCOPE

The research for this project was restricted to three main segments in the building services industry:

- consulting engineers
- contractors
- clients and building operators.

The challenges for manufacturers of building services equipment and components to be innovative are similar to those of other manufacturing sectors and have been covered very widely in other research. The principle behind this study was to look at areas that were peculiar to construction, learning where possible from other sectors.

The work covers both process type research and innovation, ie how construction is undertaken, and technology type research and innovation, ie the uptake of new systems and their method of application. The development of these new systems, in so far as it is usually a manufacturing process, is excluded.