W102 – Information and Knowledge Management in Building

Three Years Later: More Thoughts about Information and Knowledge Management in Building

by

Colin Davidson

Objectives

During the discussions that lead to the establishment of W102 in 1998, we prepared a general statement of objectives, which was followed by forecasts about our work program. Looking back after nearly three years, the work program has changed but the objectives are as important as ever. We wrote then:

“Information is an all-pervading ingredient in building, common to research and practice. By giving proper consideration to the flow of information, research results can be usefully translated into innovation and further adapted to provide the knowledge base for best practice. In an environment in which the tools for making information available are developing at breakneck speed, it is necessary to manage the whole spectrum of information forms in a way that reflects the realities of decision-making in modern building practice.”

In other words, W102 has to tackle information at several levels simultaneously and:

- Follow the evolution of research interests in the building sector.
- Follow the evolution of practice in the context of globalisation and the increasing rapidity of work.
- Keep abreast of changes in the information environment (specifically the new ‘tools’)
- Know about current changes in the use of knowledge and its management for decision making.

Information Coming from Research

Regarding research, two changes are impacting on W102. The first change is ‘performance based building’ (PBB). We believe that PBB has consequences, which are probably more far reaching than almost anyone realizes. It attacks the current way of organizing the building process and changes the bases upon which tasks are shared and responsibilities assumed. New kinds of information are going to be needed in a new sequence and in new forms. To explore the impact of PBB on information and vice versa, W102 is joining forces with W060 to share work in this area.
The second research change concerns the spread of innovation into the building industry, particularly in the context of the industry’s many SMEs. We suspect that new mechanisms will grow up in the technology watch field and that they will become essential in the information transfer process, at least by digesting it and readying it for take up in practice. W102 has already set up a working group to look at the specifics of information transfer to SMEs. We now look forward to working with the new task group studying the innovation brokers.

**Information Technology**

The information environment has been changing rapidly – though there are signs that we are now entering a period of consolidation, particularly regarding Internet. The problem of finding reliable information from the current overload of information is at the forefront of our thinking. There has to be a paradigm shift corresponding to a move from search engines providing references to strategies based on ‘QA’ procedures (i.e. providing answers to questions – since that is the practitioners’ primary need).

Fundamental research in this area is going on around W102; our challenge is to lock into the most promising sources and make sure that they are known about in the building community in due course.

**Information and Knowledge Management**

Contemporary information science strategies affect the way the tasks of information and document handling are undertaken. New generations of procedures are emerging and we have to know about them and assess their pertinence for the building industry we work for.

In addition, contemporary management tools are impacting on knowledge and knowledge retention in enterprises, and on its use for making decisions at levels of strategy (i.e. intra-enterprise) and of tactics (i.e. intra-project / inter-enterprise). We have to know about the trends and find some way of adding this concern to the more central parts of our mission.

**Our Trajectory**

W102 has not followed a linear path from ‘zero to top speed’. Instead, we have tackled several subjects in our first two meetings, which now have to be knitted together.

In Montreal in 1999, we explored the impact of e-commerce on the information environment and in Helsinki in 2000 we looked at information in the ‘sustainable development’ context. Now, in 2001, as we meet in the Southern Hemisphere, we gear up to look at information and technology transfer *per se* and in the performance context.

Information remains a challenge to be met at two levels: ‘medium’ and ‘content’. The *medium* may appear to be an exclusive concern for ‘specialists’ like the members of W102; the *content* is the concern of all CIB researchers as they reach out to practice.

We therefore look forward to developing good links with other CIB Commissions who have cause to think about information, its availability and its use.