

# ICT in Knowledge-Event Management for SMEs



A Department of Trade and Industry (DTI) Partners in Innovation Programme funded project

## An Approach to Knowledge Management for SMEs



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## ICT USED IN THE APPROACH

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This knowledge management approach, called Knowledge-Event Management, has three stages: event-collection, debriefing-analysis and dissemination. (Leaflets on each of these are available). Event-collection is principally in oral form. The dialogue part of debriefing-analysis is also in oral form although a diagrammatic presentation is also produced. Dissemination involves presenting written material derived from the events to individuals and groups. ICT were used in each of these.

**Dictaphone/recorder** is used to record knowledge events and debriefing. It is low cost and easy to operate. The digital version also has the advantage of transferring the data to computer conveniently.

**Telephones** are available on all construction sites both as land lines and as mobiles. With the help of a recording adaptor, a telephone can then be used to record knowledge events and carry out debriefing remotely. This allows this knowledge management practice to be carried out without time or space restraints.

The data generated in audio format can be stored on a **Computer** and the set of audio files form a knowledge-event database, storing and retrieving the data efficiently. When connected to the **Internet**, participants can visit the dedicated web site and learn about the immediate and wider learning of transcribed events as part of dissemination.

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## FUTURE USE OF ICT IN APPROACH

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It is in the future developments of ICT that they will assist in the operation of this approach. As computers become embedded into every aspect of work life, the opportunity for their use to enhance the approach will arise. Some of the following is possible now but is either expensive or not easy to use.

Speech recognition software such as Dragon Naturally Speaking and IBM's ViaVoice, can convert audio data automatically into transcripts. This will need to be edited for further analysis. Currently the accuracy of the automatic transcription is not good enough. This will greatly remove the barrier of additional time and cost incurred from these aspects of this knowledge management practice. Further advancements of this with automated dialogue (currently used for buying cinema tickets) could both collect events and assist in analysing it.

The development of textual analysis software that can interrogate events could automate the process of completing written event record and codifying them for storage.

The development of audio databases on computers will allow the manipulation and access to event and debriefing records which can become an asset for an organisation. Currently it is possible to record events onto the computer either locally or over the internet. However, the processing of this is cumbersome and requires other developments mentioned above for its adoption.

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## INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

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It has been widely agreed that knowledge management is more about people and culture than about information and communication technology (ICT). However, appropriate ICT can facilitate knowledge management particularly as ICT are increasingly becoming a part of the day-to-day management process. With the help of ICT, the speed and volume in which information and data can be processed and exchanged can be greatly enhanced.

ICT in the form of computers and email is extremely good for storing, accessing and transferring explicit knowledge. However, these can also be used to aid collaboration and co-operation between people, and as tools to manage the process of knowledge management.

This project has been dealing with a different character and form of knowledge which computers and email are less useful in managing. In addition, the approach targets small and medium sized construction organisations, which are unable to invest heavily in ICT. Thus, the ICT used in this research was kept to the minimum and appropriate but effective and efficient in carrying out the necessary tasks.

In the future ICT will develop to undertake task more appropriate to this approach and the organisation will be more able to buy this and also to work with it. Thus, it is important to see the opportunity that ICTs have in helping to operate this approach.

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## THE PROJECT

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This leaflet is part of a DTI funded project to test and improve an *Approach* to Knowledge Management for construction SMEs

The *Approach* is a simple and low cost technique for Knowledge Management using; Dictaphones to **Capture** Knowledge from events, Debriefing to **Transform** the Knowledge, and visual communications to **Disseminate** Knowledge within the company and the industry.

People have **Knowledge** when they can make use of information from the past events for a current situation.

**Tacit Knowledge** is personal knowledge in people's minds including know-how and intuition.

**Explicit knowledge** is generalised knowledge that can be put into documents or databases.

**Knowledge-Management** involves appreciating this Knowledge base and actively collecting it, sharing it and creating new knowledge within an organisational setting.

**For Information on the Project**  
<http://www.be.uce.ac.uk/kem4construction>  
Professor David Boyd, Dr Hong Xiao,  
School of Property and Construction,  
University of Central England,  
Perry Barr, Birmingham, B42 2SU.  
Tel: 0121 331 5151  
or  
Professor Charles Egbu, Ms Cynthia Lee  
School of Built Environment  
Glasgow Caledonian University,  
Cowcaddens Road, Glasgow, G4 0BA  
Tel: 0141 331 8968

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## THE PARTNERS

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This is a DTI funded project that involves 12 construction companies, 3 construction networks and 2 universities. The companies involved are part of the new progressive thinking in the industry and demonstrate their own willingness to be the champions of change.



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