

Collecting Events for Knowledge Management

dti

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

An Approach to Knowledge Management for SMEs



UCE
Birmingham

SME KNOWLEDGE

SME is the term used for companies with less than 250 employees. 99% of the construction industry involves SMEs but there is little attention levelled at the knowledge they need to survive. SMEs are not just small large companies; they are different animals living in different habitats. They need different sources and types of knowledge to remain nourished and healthy. SMEs see the world in an operational way with cash flow and survival their main concern.

Knowledge in SMEs is also different. It tends to be small, oral, tacit and contextual. Their Knowledge Management needs immediate outputs which can give benefits straight away.

Much activity in construction SMEs takes place far away from head office. For example, site managers and project managers solve complex problems in their day-to-day work by using their experience and intuition. This is the focus of Knowledge Management in this project.

EVENTS

“A Funny Thing Happened on the Way to the Site”

Our lives are filled with Events. Events are occurrences that can be distinguished from the general flow of experiences that we normally expect. It is this break with expectation that makes events particular and also very useful for learning and knowledge management. In our expectations, we have in our minds a model of what we believe should happen. In an event, we find that our model is not quite right. What we do as a result of this is a critical skill involving making ‘sense’ of the Event and then managing the consequences. People do this every day in their work but this is seldom recognised. If this learning from events could be captured and made available for others then there would be significant benefits to individuals, to the companies and to the industry as a whole.

Example

A site manager on a small site, told the story of how the sand he had ordered for one day did not arrive. This was planned for making mortar to lay bricks that day. His problem-solving dilemma was whether to lay off the bricklayers for the day and upset them as they do not get paid, keep the bricklayers on but lose the cost of the work time, or to buy some very expensive sand from a retail source which loses time as well as cost.

The solution taken was a compromise in that he talked to the bricklayers to engage them with his problem and lay them off for only half a day (loss of 4 hours money). This was done with the minimum of animosity from the bricklayers.

CAPTURING EVENTS

The multi-dimensional world of oral communications, in which events occur in SMEs, contains much tacit knowledge. Diary keeping captures events, however to work in SME, audio diaries are used to minimise the disruption to the participants' daily work. The main tool for an audio diary is a Dictaphone, which is a low cost and readily available device. Participants are asked to record an event each week that they think stands out. The event may be challenging, successful, worrying, complicated, difficult, frustrating, and/or annoying. The event may relate to technical issues, organisational process and/or relationships between people. A set of questions helps participants record their stories: What was the context of the event? What should have happened? How did people react? What did you feel? What did you learn?

The weekly audio diaries are stored and used in the monthly debriefing to access the tacit knowledge. The company itself can run this.

Knowledge from Example

- Good working relationships with subcontractors and individual workpeople allows more flexibility and minimum disruption from problems
- The service from a merchant needs to be negotiated as well as price
- Relationship between H.O. and site needs to be clearer as regards responsibilities for site costs, site performance and individual bonuses

THE PROJECT

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

THE PARTNERS

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.



Spring and Company Limited

