innotool – Innovation Toolbox For SMEs

The Innotool project is an EU-funded research programme aimed at developing innovation tools specifically for use by SMEs. Project lead comes from the Industrial Liaison department at the University of Leoben in Austria. Partners involved in the project come from 18 partners from 6 EU member states and from 1 associated country. The three partners involved in the development of the toolbox comprise:-

- University of Leoben, Austria
- Fraunhofer Institute in Aachen, Germany
- CREAX from Ieper, Belgium

In addition to the main toolbox development goal, the project also recognises the importance of people issues in change initiatives, and as such the programme objectives also include:-

- development of practical strategies to enable companies to develop and maintain an **innovation friendly atmosphere**
- recognising that a key factor in many SME environments is the lack of time to learn new skills, to develop education and training materials that enable individuals to derive real benefit from the toolbox with the smallest possible learning curve.
- conveying the ideas and goals of a **„sustainable development“**
- create and depoy strategies to encourage and enable SME´s to **cooperate** with **other industries and external research-institutions**

The validity of these objectives has been confirmed during the first phase of the project, when an extensive array of surveys of SMEs around the EU was carried out. The aim of this work was also to define the scope and structure of the innovation toolbox that is now being developed during the main phase of the programme.

One of the findings of the surveys was that TRIZ was felt by a significant majority of SMEs to offer them capabilities essential to their future success. It was also concluded, however, that the form of the tools would have to be considerably altered in order to satisfy the difficult resource limitations experienced by most small companies. The biggest resource limitation by far appears, according to the survey results, to be time, and specifically the limited availability of key skills within small companies. One of the main drivers of the toolbox development therefore has been the structuring of tools and processes that possess little or no learning curve. A key aim of the toolbox, therefore, is that it should be highly instinctive and focused towards getting users as quickly and as efficiently as possible to where they want to be. Given the breadth of different possible user types, and requirements, the toolbox will be mainly software based. The basic architecture of the software will comprise a hierarchical menu-driven expert system. By way of example, Figure 1 illustrates a schematic of what one of the initial Innotool toolbox screens currently looks like.

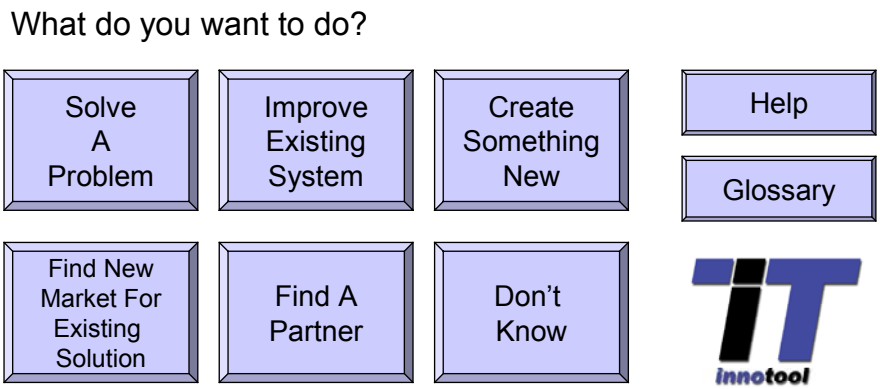

Figure 1: Schematic Of Typical High-Level Innotool Screen

Another important aspect of the toolbox will be its ability to account for the changing contexts of different SMEs. Nearly 90% of the working population of Europe is employed within an SME and hence it shouldn't be too big a surprise to realise that the range of different requirements of what users will want to use the toolbox for is just about as extensive as is possible to imagine. The project aims to solve the problem of achieving a single toolbox that will be relevant to such a broad population by incorporating an Innovation Scan tool. This tool will take the form of a questionnaire. The output of this questionnaire will be an assessment of strengths and weaknesses relative to the parameters that are known to determine whether a company will be able to innovate successfully or not. Figure 2 illustrates the current form of the output from the Innovation Scan, showing the 13 parameters most closely connected to innovation capability. A preliminary version of the questionnaire (actually aimed at all companies rather than just SMEs in its present form) may be found at www.creax.com/cis.

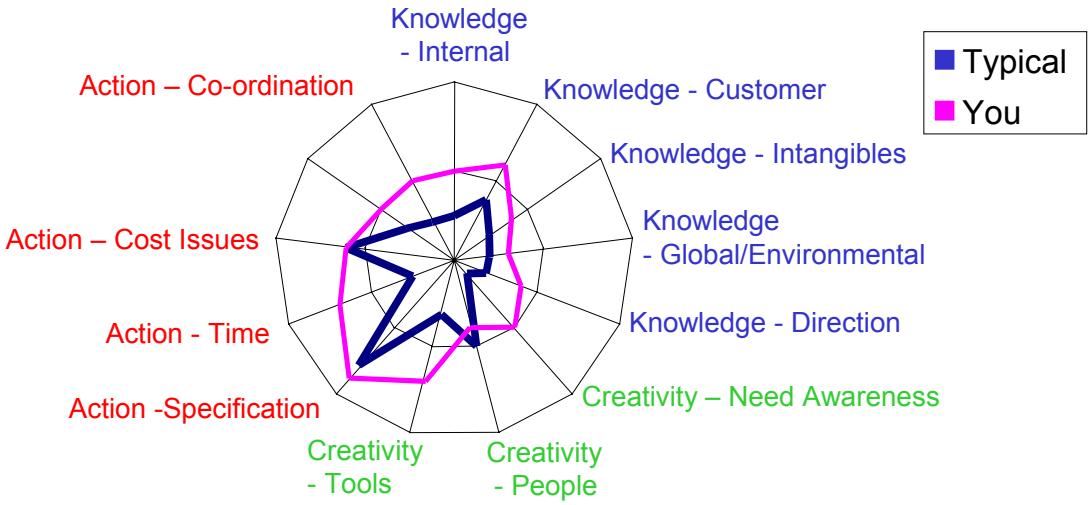

Figure 2: Typical Innovation Scan Output

The basic idea of the Scan tool is to allow the toolbox to determine which innovation tools are most appropriate to a given company in a given situation. One of the biggest problems many people find with the overwhelming array of different problem solving tools available in the world today (never mind just within the TRIZ armoury!) is knowing which one is most appropriate for their needs and capabilities. Innotool in general and the Innovation Scan in particular have been designed to mask all of this overwhelming complexity and provide simple means of steering people to just those bits that they need in their current context.

The project has a duration of just over two years, ending in mid 2005. The first versions of the toolbox will be available to project partners (in English and German) during the third quarter of 2004. Commercial versions of the toolbox are expected to be made available to all from the end of the year. At this point in time, although the list of formal project partners is full, representatives from other SMEs are invited to get in touch with the project team (start in the first instance by contacting darrell.mann@creax.com) if they have innovation experiences they wish to share, or they wish to become involved as beta-test partners in the project.

People interested in finding out more about the project in general should check out the dedicated website at www.sme-innotool.com.