

Managing Expert Knowledge in the Enterprise

Managing Expert Knowledge in the Enterprise.....	1
Speech-Over and Knowledge Management.....	2
Abstract.....	2
Benefits to the Enterprise.....	2
Tacit Expert Knowledge	3
What is tacit knowledge.....	3
Capturing Tacit Knowledge.....	3
Live Presentations – an ideal medium for expressing tacit expert knowledge	3
Methodology of tacit knowledge capture	4
Technology of tacit knowledge capture	4
Publishing Tacit Knowledge to Consumers.....	5
Tacit Knowledge in Work Flow	6
Capturing and Using Expert Knowledge in a Project.....	6

Speech-Over and Knowledge Management

Abstract

Tacit knowledge -- knowledge of people that is difficult to capture in an explicit form -- includes professional insights, judgment, rules of thumb, intuition and subtle issues known by subject matter experts. Tacit knowledge tends not to be formally documented but can be crucially important to communicate to the organization and is a sustainable competitive advantage. *Tacit knowledge is lost upon departure of its carriers from the project or from the organization and cannot be applied to other projects or even in later stages of the same project.*

The Speech-Over Studio product captures, retains, shares, transfers, distributes and archives tacit expert knowledge in an organization to support the efficient development and provision of products and services.

- **Knowledge Capture** -- easy, flexible expert knowledge capture by text entry or dictation of the spoken part of a presentation as informal explanatory notes associated with individual screen items.
- **Knowledge Sharing** – sharing, collaborating and exchanging captured knowledge using a three-tier expert knowledge publication technology
 1. Ordered, screen-oriented notes on notes pane
 2. Subtitles in slide show
 3. Narration in slide show, by human or synthetic voice synchronized with the visual animations
- **Knowledge Distribution** – transfer knowledge to another enterprise project, easy distribution on central server, e-mail or web; education and training courses using speech-empowered presentations

Benefits to the Enterprise

- Making available increased knowledge content in the development and provision of products and services
- Achieving shorter new product development cycles
- Facilitating and managing organizational innovation
- Leverage the expertise of people across the organization
- Allowing employees to rapidly access useful and relevant knowledge resources and best practice guidelines
- Facilitate organizational learning
- Managing intellectual capital and intellectual assets in the workforce (such as the expertise and know-how possessed by key individuals) as individuals retire and new workers are hired

Tacit Expert Knowledge

What is tacit knowledge

Knowledge management experts distinguish between two types of knowledge that exist in an organization: explicit knowledge and tacit knowledge.

Explicit knowledge is information that has been fully, clearly and precisely expressed and is documented in standard written form for use anywhere within the organization.

Tacit knowledge refers to knowledge of people that is difficult to capture in an explicit form. This includes professional insights, judgment, rules of thumb, intuition and subtle issues known by subject matter experts. Tacit knowledge tends not to be formally documented but can be crucially important to communicate to the organization and is a sustainable competitive advantage.

In the same category is the preliminary and partial knowledge produced by a team during the development process. This knowledge, often created before formal project documentation exists, needs to be captured and published to share with a changing and growing project team.

Tacit knowledge in an organization is typically communicated laterally and verbally in dynamic people-to-people situations such as team meetings, live presentations, expert consultations, and peer reviews, but also in informal written form in E-rooms, intranet fora, and emails.

For the organization as a whole, much of the developed knowledge becomes practically irretrievable once discussions are closed out. The tacit knowledge is lost upon departure of its carriers from the project or from the organization and cannot be applied to other projects or even in later stages of the same project.

Capturing Tacit Knowledge

Clearly, a major business requirement is to capture and retain organizational tacit knowledge from its carriers and to use the most efficient methodology and technology for that purpose. The Speech-Over software was designed to fill this need.

Live Presentations – an ideal medium for expressing tacit expert knowledge

The Speech-Over methodology recognizes that a live presentation is an ideal medium for expressing and communicating tacit expert knowledge. There are several compelling reasons for this:

- Natural expression - the lack of formality and the minimum written language requirements allow experts to express their knowledge in their own natural way.
- Group communication – The audience's obvious interest in the information motivates the expert to express his knowledge.
- Visuals – experts find it easier to explain a difficult subject when referring to the simple text bullets and graphics that they have created.

- Interactive response – questions from the audience leads the expert add details and expand on his explanations

Methodology of tacit knowledge capture

Speech-Over technology is based on the following methodology in which expert knowledge is captured either before or after the presentation event, or in combination:

1. **Knowledge capture prior to the presentation event:** In preparing the lecture, the expert presenter enters his explanations as informal speaker's notes via the easy Speech-Over text entry technology, which can include dictation. Special slide selection functionality allows the user to associate separate explanatory note sections with specific text and graphics on the slide. The note sections can be ordered in their order of delivery. Speech-Over stores the notes internally and can automatically write them on the notes pane for use by the speaker.
2. **Knowledge capture subsequent to the presentation event:** The presenter – or anyone else who heard the presentation – uses the Speech-Over text entry technology to enter the information that was delivered in the presentation, associating it with the appropriate text and graphics. After the presentation there will usually be more knowledge available for capture than before, for example, the presenter's answers to the audience's questions.
3. **Combined Capture:** For best results, stages 1 and 2 can be combined. The presenter enters his explanations prior to the event and subsequent to the event the stored explanations are edited and expanded to take into account the additional knowledge that was expressed during the presentation.

The knowledge is now captured and is ready for sharing and transfer to others.

Technology of tacit knowledge capture

As mentioned above, Speech-Over technology makes creating notes easy. Specifically:

- Speech-Over gives a presenter multiple options for speaker's notes text entry: by typing in text, by pasting text, or by dictating into an embedded voice-recognition system.
- Speech-Over allows the presenter, in the presentation design mode, to associate an explanatory notes section with a specific text or graphic on a slide. When the specific text or graphic is selected, a dialog box appears, and the presenter enters his explanations concerning that text or graphic. In the slide show, the explanations are published together with the specific screen item to which they relate, making the explanations more effective, continuous and logical than if they related to the slide as a whole.
- Speech-Over lets you adjust the order of the notes sections.

The notes are automatically generated in order in the notes pane for the presenter's use. The notes text is also stored internally for subsequent presentation and publication.

Publishing Tacit Knowledge to Consumers

There are many consumers for the tacit knowledge that has been captured and stored: current project team members who need it now, workers who join the project subsequently, workers in other similar projects, writers documenting the project, and others.

Using the presentation slide show, Speech-Over publishes the stored tacit knowledge in forms that simulate the actual presentation event – and succeeds in transferring the expert knowledge to its consumers in a very effective way.

In the slide show, the Speech-Over technology automatically animates the text and graphic items that had notes stored for them. The animation can be sequential or interactive, as determined in design mode. As a text or graphic item is animated in order, the explanatory note for that item is communicated to the viewer as subtitles and/or speech, as described below.

In addition, the slide show can be converted to Flash for Web presentations by available PPT-to-Flash tools.

The following publication options are available, separately or in combination:

- **Notes in Notes Pane** –Speech-Over causes the explanatory notes associated with a text or graphic element to be written in the notes pane in the order of appearance of the associated screen item. The notes can be printed with the screens by a standard PowerPoint command.
- **Subtitles in slide show** –Speech-Over causes the explanatory notes associated with a text or graphic element to be displayed as subtitles when the element appears. The effect is one of a silent movie.
- **Voice-over in slide show** – In design mode, Speech-Over allows a user to record his explanatory notes. Speech-Over transforms his recordings into a sound track that is synchronized with the text and graphic visuals in the slide show. The effect is one of a recorded presentation.
- **Speech-over in slide show** - In design mode, Speech-Over uses high-quality speech synthesis to convert the explanatory notes into a sound track that is synchronized with the text and graphic visuals in the slide show. Again, the effect is one of a recorded presentation. This option supports users who don't want to record their own voice.
- **Flash Presentation on Web** – It is easy to convert a speech-empowered slide show to Flash using standard PPT-to-Flash tools such as Articulate, Camtasia and ViewCam for use on the Web..

Tacit Knowledge in Work Flow

Capturing and Using Expert Knowledge in a Project

The following diagram shows how the capture and use of expert knowledge can fit into the work flow of an enterprise project. Expert knowledge is captured in Speech-Over presentations and are immediately published to be shared among the project team. As the team grows and changes, this information is always available for transfer to new members. It also serves as input to the formal project documentation being developed in parallel. The expert presentations are archived for use in similar projects.

Capturing and Using Expert Knowledge in a Project

