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TuVox completes customer service system for TiVo

“Conversational” system provides answers to frequently asked questions

TuVox has been one of the early developers of telephone speech systems that take advantage of statistical language models rather than strictly defined grammars, avoiding the need for prompts which tightly constrain the caller’s response and “understanding” potentially unstructured spoken inquiries. While using Nuance’s Say Anything natural-language engine as its core, TuVox has built a development system that automates the creation of such dialogs with the help of a technical writer or domain expert.

On July 15, TuVox announced it has completed implementation of a customer support application for **TiVo, Inc.**, (Nasdaq: TIVO) the leader in television services for digital video recorders. The system is fully operational and supports the main technical support number at TiVo, handling spoken problems such as, “I just get a blue screen,” or “I’m having a problem with my channel lineup,” and taking the caller through a series of questions and possible solutions.

Tori Mortensen, TiVo director, customer services, said that 100% of calls are now being routed through the TuVox system. Initial results show that over 20% of the calls are being handled by the TuVox system, she indicated, although only the first phase of limited topics is in the system. Topics in the system will continue to be expanded.

The system can accept descriptions such as, “I just get a blue screen,” and take the caller through a series of questions and possible solutions.

The TuVox CVR Technical Support Application for TiVo includes recorded responses to typical questions, often re-written from text versions to sound natural when spoken. The TuVox solution also includes its CVR (Conversational Voice Response) Advanced Call Routing module which will allow callers to state why they are calling, engage them in dialogue to clarify choices, and direct them to either a TiVo voice knowledge base solution, or a live agent. Steven S. Pollock, TuVox executive vice president and co-founder, said, “Working with the TuVox CVR assures TiVo that it will be able to provide a compelling, branded caller experience that will fully integrate with its other key brand elements.”

Pollack indicated that TuVox’s focus is handling applications where the number of “dialogs”—prompts and grammars supporting each prompts—is in the thousands. He notes that the typical call-center application has much more limited interaction than applications such as technical support where there are many topics, exemplified in part by the Frequently Asked Questions section of Web sites. TuVox has an application-delivery environment licensed on a per-port basis, and tools licensed on a per-seat basis. For some customers, it provides applications on a hosted basis, charged by usage.

Pollock said that the company is enlisting partners to deliver and manage the TuVox delivery and development software, as well as to provide professional support to customers. TuVox solutions can work with many VoiceXML interpreters and with both **SpeechWorks** and **Nuance** recognizers. The system uses conventional speech recognition engines, not the statistical versions that the companies offer, Pollack said.

TuVox creates these complex applications with its application-development environment, which the company considers its key asset. Pollack characterizes the tool as “machine-assisted dialog generation.” Potential grammars and prompts are generated from text sources such as Frequently Asked Questions, and adjusted by a technical writer or subject expert—based on specific suggested alternatives. The tool also manages the complex set of prompts and grammars, using a Graphical

User Interface. Pollack said that deployments so far have taken 90-120 days. TuVox has delivered similar conversational systems to health benefit provider **Definity Health** for healthcare insurance customer support (SRU # 117, March 2003, p. 15) and other companies including a top-5 PC manufacturer, **Activision**, and **Handspring** (SRU # 116, February 2003, p. 1).

TuVox appoints Larry Miller president and CEO

On July 29, TuVox, which offers its Conversational Voice Response applications for call centers (p. 7) announced the appointment of Larry Miller as the company's new President and CEO. Prior to joining TuVox, Miller was President and COO of **WorldChain**, a leading supply chain software company he co-founded in 1999. While at WorldChain, Miller led the launch of the company, established a customer base of highly referenceable customers, including multiple Fortune 500 companies and raised a total of \$62 million in three rounds of financing from leading venture capital firms. Previously, Miller spent four years with **Aspect Telecommunications** and was with **IBM** for 17 years. With Miller's appointment, co-founder and Board member Steven Pollock will assume the role of Executive Vice President, Product Strategy and Development.