

RIS-integrated digital Speech Recognition - Customer Testimonial



The Radiology Centre in Hofheim, Germany, provides ambulatory radiological treatment for the residents of the Main-Taunus-Area, north of Frankfurt in Germany. It is owned and managed by two Radiologists, Dr. Bruch and Dr. Korff.

With a team of 17 employees the Radiology Centre covers the whole spectrum of Radiological Diagnostics, from X-Ray Diagnostic, Ultrasound, Mammography, Multi-Slice-CT up to MRT.

All Imaging Modalities are based on fully state-of-the-art digital technology, much of which was recently purchased with the opening of the new practice building in the summer of 2006, the result being that all images are read by the doctors on special, high resolution, high quality, Flat Screens.

Scenario

Because of the growing number of patients along with the increasing number of images per study due to modern imaging processing, an efficient, fast and “ergonomic” reading environment is a basic requirement for the 2 radiologists.



Dr. E. Bruch dictating with Digital Speech Recognition using a high performance Microphone

The dictated speech is automatically recognised by the system and is converted directly into written text

The written Text is available instantly for the secretary to check and edit if required and is automatically archived in the central Radiology Information System “electronic patient record”

Besides investing in a powerful **Radiology Information System (RIS)** that manages the complete patient information, appointment planning and reimbursement process, the innovative radiologists wanted to optimise the reading and report writing process.

The requirements for such an optimised Speech Recognition System were clearly defined as:

- Integration of digital speech recognition into the RIS
- Easy and intuitive management
- Obtaining the highest speech recognition rate possible

Solution

The decision to integrate Digital Speech recognition was taken as part of the Total Concept for the Digitising of the new Radiology Practice.

For the total Acquisition, Viewing, Analysing and Archiving of the large amount of Image Data the Radiology Centre Hofheim decided on VEDISYS¹. The reason being VEDISYS¹ as a Solution Provider for Radiology offers a complete Portfolio of all kind of Systems out of "one Hand", beginning with patient management (RIS) including Digital Speech Recognition, complete Image Archiving and Image Distribution (PACS), total Hardware from the highly complex Archive-Server with modern Storage Technology up to Paper and Film printers.

The decision for the JiveX PACS² as an overall Image Management System lead to the decision for the CARW RIS³ as the patient handling Management system. Both systems are working together fully integrated.

The digital Speech Recognition system Phoneidos⁴ from the Italian market leader GST was integrated into the CARW-Radiology Information System as a Pilot installation.

Interview with Dr. Bruch and Dr. Korff

"It is becoming extremely difficult to handle the increasing number of daily examinations and the subsequent increasing number of Images without optimal, digital systems", claims Dr. Korff.

"We are pleasantly surprised about how well the systems are working together and how a high speech recognition rate has been obtained in a short period of time. We found the Phoneidos Speech Recognition System very easy to use, with the recommended high-performance Microphone allowing for a high recognition rate to be achieved even when there is a lot of background noise in the room", says Dr. Bruch.

"The time we spend on the transporting and searching for tapes on which we have dictated so far, is eliminated .The reports are available directly after the dictation in our secretary's office and can be sent out immediately via faxed letter to our referring physicians. We have reduced report correction times to a minimum and the written report is directly archived in our RIS in the patient record. Now finally, we have the fast and efficient digital workflow that we set out to accomplish for our new Radiology Centre", agree the two Radiologists.

Crown International of Bloomington, Illinois is the exclusive United States distributor of complete line of PhoneidoS products. For more information on PhoneidoS products and integration into any RIS or PACS, call Crown International at (800) 715-4227 see www.PhoneidoS-USA.com or call the PhoneidoS dealer in your area.

¹Vedisys Medical Solutions GmbH is a German RIS, PACS and PhoneidoS Dealer

²JiveX is a registered product name of Visus Technology Transfer

³CARW RIS is a registered product name of Penta Services

⁴Phoneidos is a registered product name of GST