



# Voice Data Mining

## - Index & Retrieve Spoken Documents

### Key Features:

- Indexing for effective search & retrieval
- Facilitate creation of telephony applications
- Reduce operational cost
- Improve operational productivity and efficiency of call centers
- Real world application, allowing telephony information retrieval and medical appointment booking.

### Overview

Society is ever changing in the advancement of technology and in order for enterprises, telecommunication service providers and law enforcers to keep up with the pace, recognition and retrieval of speech or conversational information is crucial to satisfy a broad range of users and applications.

By having the intelligence to tap into voice or speech recognition, it helps major enterprises to realize better effectiveness and efficiency when processing related audio information from meetings, conferences, seminars, etc.

### Technology

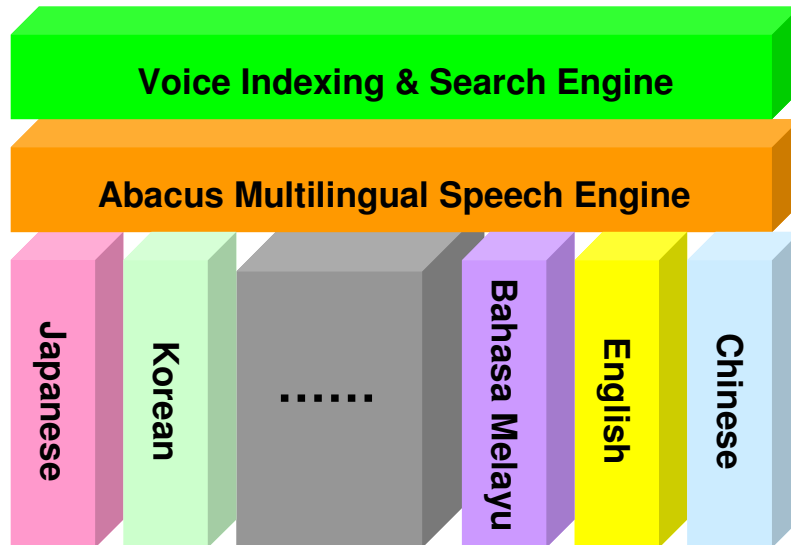
#### Voice Data Mining (VDM)

VDM is a state-of-the-art multi-lingual voice processing system that is proficient in mining specific keywords from a large audio repository. It deals with the need to organise, search and retrieve collections of spoken documents such as recorded lectures, recorded telephony conversations, TV or radio archives in an effective, efficient and economical manner. The technology can be very useful when handling with highly secured audio information and documents in major enterprises.

By recognizing critical speech portions that contain keywords of interest, speaker of interest or language of interest, it assists human operators in real-time voice monitoring deployment that greatly improves operational efficiency by reducing the time, cost and effort required in telephone surveillance. Generally, it automatically extracts portions of a speech or conversation that are of interest or importance.

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### Benefits

- Large Vocabulary speech recognition
- Voice enabled deployment for intelligent services
- Segments voice queries and extracts the important keywords
- Identifies category of voice recordings for primary organisation of the audio documents prior to human processing
- Avoid the need for manual, tedious and time-consuming processing of the raw speech or conversational documents to extract useful information
- Rapid prototyping with multilingual capability
- Highly scalable across applications

### Applications

- Voice document retrieval and indexing
- Multimedia and telephony applications
- VDM technology will open up new opportunities for innovative ICM services
- Aim to deploy the VDM systems that allow users to automatically categorize telephony conversations in Chinese Mandarin and English
- VDM broadens the technology offerings to new languages and new media types.

### Awards

#### Spoken Dialogue Technology

- Won TEC Innovator's Award 2004