

Speech recording / managing / processing / forwarding system with dictation, speech recognition (speech-to-text) function for ground surface, (water, air) vehicles

Managing and processing information is a decisive factor in the competitiveness, viability and economic efficiency of the present and the future. The vast majority of our daily information flow is speech information generated in personal conversations, dictations via telecommunication and IT systems. Recognizing the importance of how speech information is used is an extremely significant strategic issue and especially to manage, process, evaluate, use and store this information according to an integrated concept. Our subject is an input device for this purpose.

Businessmen, managers, manager assistants, secretaries, salesmen, entrepreneurs, civil servants, public servants and individuals all spend more or less of their time in their cars where they also do their daily jobs. Especially on longer trips, of which dictation is an important part besides communication.

When processing dictation and conversations in a car, the following circumstances and conditions should be taken into consideration:

1. Dictations and conversations can be recorded onto portable (now digital) voice recorders, mobile phones, portable computers (notebooks, laptops or tablets) or built-in car computers.
2. The microphones used for recording dictations and conversations also pick up environmental noise in the car within the band of speech unless there is appropriate noise compensation in the microphone and/or voice recorders device. In case the dictation is intended for speech recognition, its proper quality is essential: noise filtering, normalization, echo removal etc. The goal, of course, is to filter out general vehicle noise. Removing extreme noises (e.g. heavy machinery etc.) might require the individual treatment of a record.
3. The dictation is stored on the device used or it can be automatically or manually loaded onto an (FTP) server or other target location using a mobile Internet connection during or after dictation.
4. If speech recognition (speech-to-text) is required, it can be done both on a device in the car and/or at the uploading location as well.
5. The already recognized text can be stored on the processing device in the car and/or it can also be forwarded to the uploading target location via a mobile Internet connection.
6. The speech management devices and functions can be operated using voice control.

The goal of the project is to develop dictation and speech recognition system models for cars optimized primarily for English but later on for any other, fundamentally Indo-European languages, including speech regeneration services and the points described above using the most up to date technological solutions and thus offering these systems in several price categories making it easier to spend time efficiently while driving and to effectively speed up organizational, management etc. activities for the sake of competitiveness, viability, interest protection, economic efficiency and security.