

## Abstract

Speech recognition is a technique that allows a system to accept input in the form of words and speech engine that can recognize words spoken by digitizing the words and match the digital signal with a specific pattern stored in a device. Speech recognition can be implemented in a variety of cases, for the example Speech Recognition can be implemented in speech to text translator from Korean into English. The input is sound of Korean native speakers into English text. Korean language has its own uniqueness which are very different to the structure, the difference lies in the phonology of Korea that is rich in the assimilation of consonants.

Problems with speech recognition languages Korean can be solved using methods of Hidden Markov Model (HMM) to find the optimal model. Speech Recognition consists of two important processes of training and testing. In the process of training, system do a formation model and how to conduct training to some sample sounds. Data voice trained and tested on this system, the sound data is derived from the native Korean speakers, with total sample of 450 words, 18 different kinds of words, spoken by 20 different people (11 female speakers, and 9 male speakers).

After testing the system with several scenarios, the best accuracy is obtained 67.97% when system recognize 18 words. Accuracy is obtained from the results of testing with the size of codebook 16 and 20 state HMM.

**Kata Kunci:** *Speech recognition, Hidden Markov Model, Korean Speech Recognition.*