

ABSTRACT

Text to Speech is a technology that can convert text input into sound signal. Text to Speech technology helps in communication because it can produce sound that similar to human voice. In this final project, an application has been made using Text to Speech technology that can read short messages in cell phone with Symbian Operating System.

Generally, this technology is divided into two main sub-system, they are: NLP (Natural Language Processing) or Text to Phoneme and DSP (Digital Signal Processing) or Phoneme to Speech. Text to Speech Application (TTS) is made by using Symbian C++ Programming Language and designed to recognize text typing formation in SMS (Short Message Service), such as time, date, currencies, abbreviation, etc. This application also uses Indonesian diaphone that's already available, then generated into sound signal using Mbrola as speech synthesizer. The application was tested to 20 respondents to get MOS intelligibility value and result shows that TTS application can read short messages well with quite good intelligibility level, that is 4,19 and time need to read one short message (160 characters) is 21 seconds.

As Text to Speech Application be implemented, it will be very helpfull for those who have blind eyes or those with high mobility. As the result, the incoming short message must not always be read manually but we can use help from Text to Speech Application.

Keywords: Symbian, Speech, Mbrola, SMS.