This paper presents a methodology for text-to-speech by using syllable analysis system. This system was adopted from Thai phonology to solve the syllable segmentation problems for Thai written words. According to each letter is not a simple one-to-one matching, especially for the loaned words. Therefore, the linguistic rules are used to generate syllable pronunciation symbols called syllable analysis rules. These rules describe an advantage method for converting letter to sound. The proposed model is successfully tested. The designed system first transcribes Thai word to phonetic symbols and then converted these phonetic symbols to be speech.