

RAWEDDE LIMPICHOTIKUL : IMPROVEMENT OF THAI TEXT COMPRESSION.
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An objective of this research is to search for the efficient methods of data compression and improve the methods to increase the efficiency when compressing Thai text. The two efficient methods, Huffman algorithm and LZW algorithm have been found to gave a high compression efficiency and suitable for use with Thai text. An further improvement, words that are frequently found in Thai text which is obtained from Thai Word Analysis, a research of Kasetsart University, will be used to create a Thai word file for use with these two methods.

From the experiment, examples of various file sizes are presented to demonstrate the increasing performance of improved methods, give a compression efficiency of about 40-55 percents. The increasing performance depending on file sizes and Thai semantics in files. When comparing the improved methods in terms of compression time and algorithm complexity, it show that improved Huffman algorithm take more time than improved LZW algorithm because it is more complex. Therefore the improved LZW algorithm is suitable method in compressing Thai text.