Thesis Title Thai Natural Language Search Engine using Synonym

Approach: Case Study for Google Syntax

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Degree Master of Science (Strategic Management Information System)

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ABSTRACT

This thesis proposes the method used to convert Thai natural language phrase into search engine keyword pattern in order to list up the desired websites that are most matched to the query. The proposed method extracts user intention from the phrase, and converts it into keyword pattern with Google syntax so that the appropriate alternative search is obtained. The keyword pattern includes nouns, synonyms, and Boolean operators. The proposed method firstly determine keywords from Thai Natural Language Phrase input, and then find synonyms by using short semantic distance in the synonyms database in order to expand a chance for related websites. The keywords and weighted synonyms are finally converted into keyword pattern for search engine. To evaluate the performance of the proposed method, the comparison between the searched results using keyword pattern and without keyword pattern with 95 queries were conducted. This result has shown that the proposed system provides the average precision of 62.33%, whereas the search without keyword pattern provides the average precision of 36.1%.

Keywords: Search engine / Natural language / Semantic / Synonym