

## **Common Base Concepts of the 1st – the 3rd Order Entity WordNet of English-Thai- Vietnamese-Lao-Cambodian- Bahasa-Filipino- Burmese Languages for Internet Usage**

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**Abstract**— Common base concepts of the 1st – the 3rd order entity WordNet of English-Thai- Vietnamese-Lao-Cambodian- Bahasa-Filipino- Burmese Languages for Internet Usage was aimed 1. To examine the translation equivalent pairs of common base concept in English-Thai-Vietnamese-Lao-Cambodian-Bahasa-Filipino languages and 2. To develop the translation equivalence WordNet of English-Thai-Vietnamese-Lao-Cambodian-Bahasa-Filipino-Burmese Languages of common base concepts for internet usage. The research methodology consists of the procedure of bi-directional translation to examine translation equivalent pairs of common base concepts of the 1st – the 3rd order entity words in English-Thai- Vietnamese-Lao-Cambodian- Bahasa-Filipino- Burmese languages, the procedure of expanded approach and focus groups conducted in related expertise to develop selected translation equivalent pairs of common base concepts of the 1st – the 3rd order entity WordNet for internet usage, and the procedure of users' satisfaction towards the developed WordNet for internet usage. The results revealed that there are 1556 selected translation equivalent pairs of common base concepts of the 1st – the 3rd order entity of English-Thai- Vietnamese-Lao-Cambodian- Bahasa-Filipino- Burmese languages included in WordNet. The developed WordNet is the implementation of linguistic methodology as bi-directional translation to select the translation equivalent pairs in the development of multiple languages translation databases of major languages used in Southeast Asia Region. This method can be used to further development of multiple language translation databases in order to prove that the selected translation pairs are translation equivalent.

**Index Terms**— common base concepts, multiple languages, translation equivalent, WordNet

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### **1. INTRODUCTION**

Based on the Twelfth National Economic and Social Development Plan (2017-2021), in order to develop international standards and ability to integrate cultures into daily life of human capital, languages are the important instrument. Thus, the present investigation is aimed to develop a language innovation called “WordNet”. WordNet is initially developed by a group of researchers at Princeton University, the United States of America [1], [2].

The recent investigation is aimed to develop translation equivalence WordNet of English-Thai-Vietnamese-Lao-Cambodian- Bahasa-Filipino-Burmese Languages of common base concepts for internet usage. In order to develop the multiple languages translation equivalence, WordNet, the notion of common base concept proposed by John Lyons [3], [4] will be used to develop the multiple languages translation equivalence. The notion of common base concept has been applied and extended in the present studies of semantics and corpus development [5], [6]. In addition, the notion of common base concept has been accepted