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Exploring and Learning English: An Analysis of Baidu and Google Translation

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ABSTRACT

This paper presents the current status of Google as the world-wide popular search engine and Baidu as the top ranked search engine in China. Although Google is band in China mainland since 2010, it studies the connectivity of both platforms in China. Both the platforms are providing translation services where, being an international language English has been given crown priorities. The paper uses survey among the Chinese people (n=250) to identify user's English learning aptitude according to the coding of ACTLE. The code stands on A=Accuracy, C=Clarity, T=Time, L=Location and E=Environment friendly (emphasized on culturally appropriateness). The article finds a big margin for Baidu from Google translation services in terms of the coding category of time, location and culturally appropriateness. On the other hand, Google is little bit ahead in respect of accuracy and clarity to carry English meaning through its translation services. Above all, both search engines are giving the exploring opportunities to their valued stakeholders and opening a new English learning window for latent talents.

1. INTRODUCTION

Translation is a linguistic art and passing a revolutionary phase in the current digital age. Digitize society is wrapping whole of our societal activities over the automatic technologies even the task of translation. Current century is the immense iconic era of translation (Gutt, 2014) . Artificial intelligence and human intellect have made the translation system as the art of the literature. Digital technology such as relevant Apps and Smartphone have confirmed the translation revolution everywhere (Cronin, 2012). It is not only the matter of words but also the circulation of languages. Captivatingly, it is also an alternative way to blend the language, literature and culture. Translation is always fertile for the cultural spirit. Even, it fulfills the textual and cultural expectations (Bassnett, 2007). Nowadays, learners, readers, and knowledge hunters are swimming in the virtual world. Fortunately, they are travelling globally through World Wide Web (WWW) specifically, by the Search Engines (SE). Contentiously, knowledge searchers never face any linguistic barrier while browsing these SE's. Google and Baidu translation support them to understand foreign languages in the form of real meaning. It is witnessed that translation process the language globalization (Weissbort & Eysteinsson, 2006). It is also a way to push language worldwide with the real meaning that hold the natives. Machine translation tunes language theme in various aspects. For example, "buffalo" is grammatically correct English word. By using translation service, the user enriches three meaning of buffalo such as the city of New York, the animal and a verb as intimidate. In addition, Machine learning system introduces

shortage pathway of educational atmosphere. Learning English trend is a world-wide phenomenon. Over 200 million children are learning English in the school and 13 million young people are learning English in the universities (Yajun, 2003). It has reduced the time and enhanced speed to acquire new linguistic knowledge in the light of accurate cultural guts. Ultimately, technology turn on the way of learning English (Chapelle, 2003). Sometimes, the learning process is difficult due to the variation of the language. For example, in Google Translation, the common problem in Chinese, Japanese and Korean languages is the lack of natural word boundaries (Xiaoning et al., 2008). Learning English from Chinese context is very difficult in a traditional learning process. There are more reasons in terms of grammar, tense, and word. Being an international language, English is leading the higher study materials, research journals, and books (Dhakar, Sinha, & Pandey, 2013). In this case, translation is the best alternative to learn English in online. Moreover, translation is the long term language learning strategies to the knowledge society (García, 2010). Considering the background of the study, English learning tendency through the modern technology and the Chinese context, the study addresses the following research questions:

A. What is the popular machine translation (Google or Baidu) tool used in China?

B. Is the Google or Baidu translation helpful to learn English to the Chinese learners?

To examine the effectiveness of the above mentioned research questions, the following hypothesis are taken into consideration:

$H_{o:}$ The service areas of Google Translation (GT) and Baidu Translation (BT) were same in Mainland China

H_1: The GT and BT are efficient in different areas according to the coding point of view such as accuracy, clarity, timing, location and environment friendly.

1.1 Concept Clarification

Translation is a globalised communicative word. Language is the heart of it. Scholarly, it is a way to transfer knowledge and exchange the literature (Freeman, 2009). It is also one of the way relating English to the students own language (Cook, 2010). The study has concentrated only the textual translation through specific Search Engine (SE) namely Baidu and Google in China mainland only. Non-textual translation such as images, videos and statistics (Savoy & Dolamic, 2009) was not considered in the current study . It is only considering Chinese native speaker's status of learning English through SE's based translation services.

2. LITERATURE REVIEW

2.1 Translation Trend

Translation studies of 21st century are passing the charming age with advanced technologies. Bassnett aimed to reveal the changing trend of translation according to the collective changes. The world has already changed a lot; people are moving frequently even their own territory. They need to various cultures, languages and other life issues (Bassnett, 2013). The writer tried to answer three key questions in translation trend such as (a) translation meaning, (b) importance of socio-cultural context and (c) the agency of translator. To enhance the translation spirit accuracy, clarity, timing and environment are also important in the new translation atmosphere.

Translation evaluation in the past history was specific purposeful. Benjamin's has evaluated the target text in four major categories. Those have consisted as suitability to the user, competence, level of cultural awareness and level of completeness (Adab, 2000). It was important to evaluate overall translation in the early stage of informative technological revolution. Today's scenario is totally different. We need to evaluate the translation trend in the support of Search Engine (SE) and user preference.

The Chinese scholar Wenjun Lu also opined to find out translation accuracy through cultural knowledge or intimacy. He believed that translation is not only a alteration of source language to target language, it is also the exchange of two cultures. Lu has given an illustration to upgrade translation accuracy involving the cultural knowledge. His example as "Dragon" is the heart of Chinese people and culture. Moreover, it is a symbol of wisdom and strength but western culture defines the dragon is an aggressive monster (Lu, 2013). Without considering this cultural spirit, translation accuracy decline definitely.

Machine translation system is the remarkable tool for learning English in China. Emerging media innovation is providing great privilege to the Chinese college students in learning English by translating Chinese to English instantly. The recent survey conducted by C Wang has revealed the truth. A total of 1000 Chinese college student took part the survey to find out the performance of machine translation specifically two major points as (a) readability and (b) acceptability (Wang, 2017). Other evaluative parameter like clarity, time, location and environment

are still demanding to survey among the native Chinese speakers.

2.2 Best of Baidu

Baidu is the first ever Asian machine translation service provider offered hybrid translation since 2011. In addition, it has launched Neural Machine Translation (NMT) global context oriented and off-line translation on mobile devices (He, 2015). Interestingly, It supports the Chinese traditional poem, dialects, idiom and phrases to the users. This is the pick time to find out whether it is important translation tool to the Chinese or not while the case is using translation service and learning English anyway.

Being a popular Search Engine (SE) in China, it has created by two computer engineer Eric Xu and Robin Li in January 2000. In June 2016, MIT (Massachusetts Institute of Technology) technology review ranked Baidu among the five most pioneering and smart companies in the world where other positions distributed to Amazon, Illus mina, Tesla Motors and Aquion Energy (Duong, 2017). Though Baidu had the monopoly in China since Google left in 2010, it has dominated by quality services than Yahoo and Naver & Daum of South Korea.

2.3 Google Gearing

English is dominating global journal article, printed books, research documents and advanced useful technologies. It is used as an operative language in western driven technologies. Being a western Search Engine (SE) Google has also launched Neural Machine Translation (NMT) in 2016. It is also an end to end learning approach for automated translation (Wu et al., 2016). This experimental research tried to explore various features of Google Translation (GT) through different models. Hence, our team enhances to analyze GT from social parameters such as location and cultural point of view and compared with Baidu Translation (BT) that is pioneering SE in the Chinese society.

A group of Chinese scholars researched on GT in terms of one source language to multiple target languages. Their major points are as (a) English to Japanese and Korean language even Chinese some common linguistic structural knowledge are required that totally absent in machine translation, and (b) it is important to improve translation quality (Dong, Wu, He, Yu, & Wang, 2015). They have also suggested improving the translation quality through multi-task model system. Social issues did not address to analyze the GT as a whole gear up condition.

The above studied gave a scope to try to search Chinese people's English learning trend through machine translation such as Search Engine (SE). This study concentrated on the comparative study of BT and GT i.e. which is preferable to learn English in China.

3. METHODOLOGY

3.1. Research Design

Discover English learning trends in China by Google and Baidu translation was the principle target of the study, in specific which machine translation is needful according to the code ACTLE. The coding of ACTLE stands on A=Accuracy, C=Clarity, T=Time, L=Location and E=Environment friendly (emphasized on culturally appropriateness). Using quantitative approach 5 tier code (ACTLE) has been applied to reveal the English learning scenario through Baidu and Google translation.

3.2 Participants

The native Chinese speakers who are living in the mainland helped to analyze the data in the study. The sample participants have expressed their English learning preference through machine translation. A total of 250 participants took part in the survey. Some used translation by computer, personal laptop and other gadget. Others used the same services through their smart phones.

4. RESULTS AND DISCUSSION

4.1 Result

The Chinese learners included in the study showed that most translation service users were in touch with the Machine Translation service from one to six years and recurrently the participants used the translation services.

This study revealed that the BT service is more effective in China in terms of Timing, Location and Environment Friendliness whereas GT services are more ahead in terms of Accuracy and Clarity in the code of 'ACTLE'. When the participants were asked if you suggest others to use for exploring and learning English, which one they prefer for their suggestion was Baidu Translation. It was selected as the prime and popular tool for the purpose of translation service in the mainland of China. But both SEs were helpful to learn and explore English to the Chinese learners.

The study rejected the null hypothesis as was shown in z-test. The code of 'ACTLE' resulted that the more accurate and clearer the SE will be, the more popular the SE will be to the Chinese people as the study found. In this sense, accuracy and clarity in the

meaning searching, if close to English parlances could enhance the great possibilities of BT using. In the same tone, GT would be pervasive in mainland in China and if managed the time, location and users' friendly features.

Accuracy is vital in translation process. To get better and accurate translation Google has recently launched Neural Machine Translation (NMT) (Wu et al., 2016).It is a combination of human intelligence and technological advancement. But Google Translation has a common problem in Chinese, Japanese and Korean language due to lack of natural word boundaries that lead the ambiguity (Xiaoning et al., 2008). It means, clarity is also important in translation process. The third code emphasize on time. Machine translation convey the message as a quick service for millions of people (Helft, 2010). Chinese traditional thinking oriented translation is well fitted in China. For example, the Chinese word " Lao shangji" (老上司) translated by Baidu as "Old Superior" but Google translated as " Mentor" (Chan & Pollard, 2001). The Baidu translation is more close to the traditional Chinese literature and context. It is directed that location and cultural environment are also imperative in the translation process.

It is well mentionable that to develop English translation and improve learning capacity, Ministry of Education of the People's Republic of China (MOE) has published college English curriculum requirements in 2014(Bin, 2016). In line with the MOE, these two SEs are playing a vital role in picking up the capacity of English learning.

4.2 Discussion

The designated survey questionnaire with close ended questions was analyzed to understand the answers of the two research questions of the popular machine translation (Google or Baidu) tool used in China, and whether the Google or Baidu translation helpful to learn English to the Chinese learners.

The current study included 250 participants from the Chinese mainland. They were of various ages as follows:

(Figure-1)

The above figure-1 portrayed that 149 were ages of 21 to 30 years, 68 were of 31 to 40 years, 19 were of 41 to 50 years, 10 were of below 20 years and 4 were of over 50 years as well as Male and Female participants were of 137 and 113 respectively.

(Figure-2)

The study got 137 male participants whereas 113 were female (figure-2). They were of various profession groups like 119 of private sector, 70 of government sector, 17 of business sector and 44 of others

(Figure-3)

They were from different educational backgrounds such as 91 of Doctoral level, 97 of Graduate level, 52 of Undergraduate level and 10 of below undergraduate (figure-4). This study was conducted on the people from rural area, semi-urban area and urban area and the participants showed that 35, 43 and 172 respectively.

(Figure-4)

The study revealed that among the participants (total 250), 213 persons took part in translation activities in some parts of their life whereas 37 were not involved in translation practice. Out of 213, 82 persons used Google Translation (GT). On the other hand, 131 persons used Baidu Translation (BT). The participants were not same in terms of their usage behavior of Machine Translation Service.

Out of the machine translation service users, 97 persons used it from 4 to 6 years, 41 persons used more than 6 years, 39 persons used 1 to 3 years whereas 36 persons used up to 1 year (Figure-5).

Figure-6 showed that 54% participants used it once a week, 41% of the participant used it almost every time whereas 3% and 2% of the participants used it once a month and once within 1 hour respectively.

(Figure-6)

Figure-7 described that most of the participants (total 144) using machine translation by searching the meaning of the word. On the other hand, 16 participants used the service for searching the meaning of sentences whereas 62 participants used it for understanding the meaning of other things. This study also reveals that 209 participants used the service for exploring the meanings of new words. Only 4 persons searched for the meaning of known words.

((Figure-7)

4.3. Two Tailed Z-Test

The study has used two tailed Z – test for calculating the research questions (RQ) and hypothesis. Firstly, we have analyzed the coding components of ACTLE and secondly, the Z-test to comply the RQ and Hypothesis.

(Table-1)

The above table depicts that the GT users got the translation services more accurately and clearly than the service of BT. The BT users got the big margins in the areas of timing, location and environment friendliness to 108, 112 and 104 participants in positive mood and 23,19 and 27 in less positive mood respectively. BT users liked it due to the respond time, location and environment friendliness of the SEs.

$$Z = \frac{(\hat{p}_1 - \hat{p}_2) - 0}{\sqrt{\hat{p}(1-\hat{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Here, $\hat{p}_1$ = Proportion of Participants in favor of GT

$\hat{p}_2$= Proportion of Participants in favor of BT

$\hat{p}$ = Average of Proportion of Participants in favor of GT and BT

n_1= Total number of participants in favor of GT

n_2= Total number of participants in favor of BT

The study revealed z-tab> z-cal in the areas of clarity and accuracy of GT were 2.989 and 2.307 respectively whereas z-tab < z-cal in the areas of timing, location and environmental friendly of BT was the same which is-14.22. According to the result of two tailed Z – test, null hypothesis (H_0) has rejected and alternative hypothesis (H_1) has clearly proved.

5. CONCLUSION

Current era is the great witness to see the easy access of machine translation in China. Baidu is the mostly popular one to translate Chinese to English quickly through free internet use (Yao et al., 2012). Google also provides a billion of translation in a day for 200 million users (Li, Graesser, & Cai, 2014). British council is conducting four special modules to develop English skills globally. It is consisted with listening, speaking, reading and writing. Han Min and Yan Ping added new module to improve English skills and that is translation (Min & Ping, 2016). The study revealed the most preferred SE as a material to learn English in Chinese mainland.

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8. Tables and Figures

Table 1 Participants' Status on English Learning Aptitude by using BT and GT

Coding Components of ACTLE	BT in terms of Scale on 5 where 1=really Disagree to 5= really Agree					GT in terms of Scale on 5 where 1=really Disagree to 5= really Agree				
	1	2	3	4	5	1	2	3	4	5
A=Accuracy	-	19	17	95	-	-	-	10	19	53
C=Clarity	-	19	21	91	-	-	-	9	21	52
T=Timing	-	-	-	23	108	21	57	4	-	-
L=Location	-	-	-	19	112	27	51	4	-	-
E=Environment Friendly	-	-	-	27	104	14	65	3	-	-

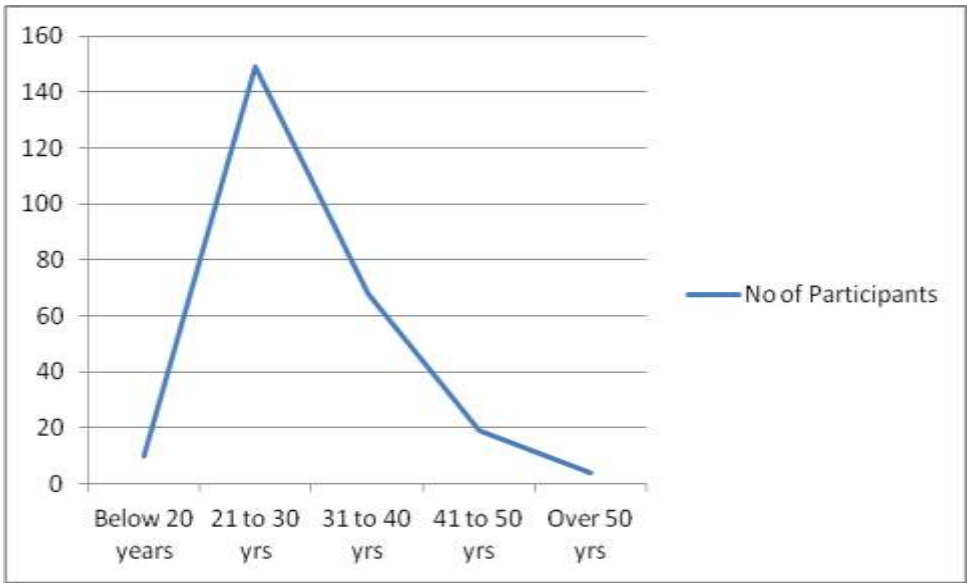

Figure 1 Age group of the participants

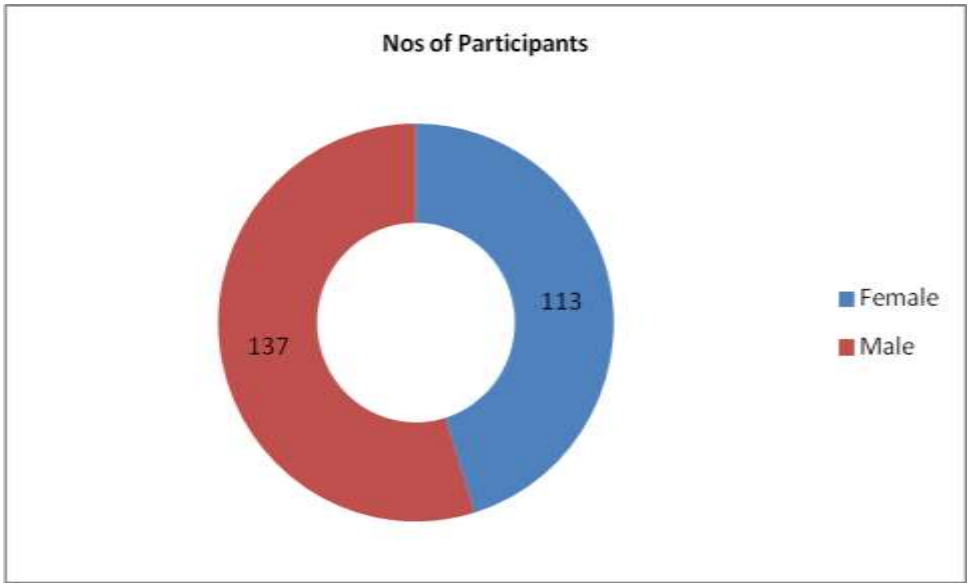

Figure 2 Gender of the participants

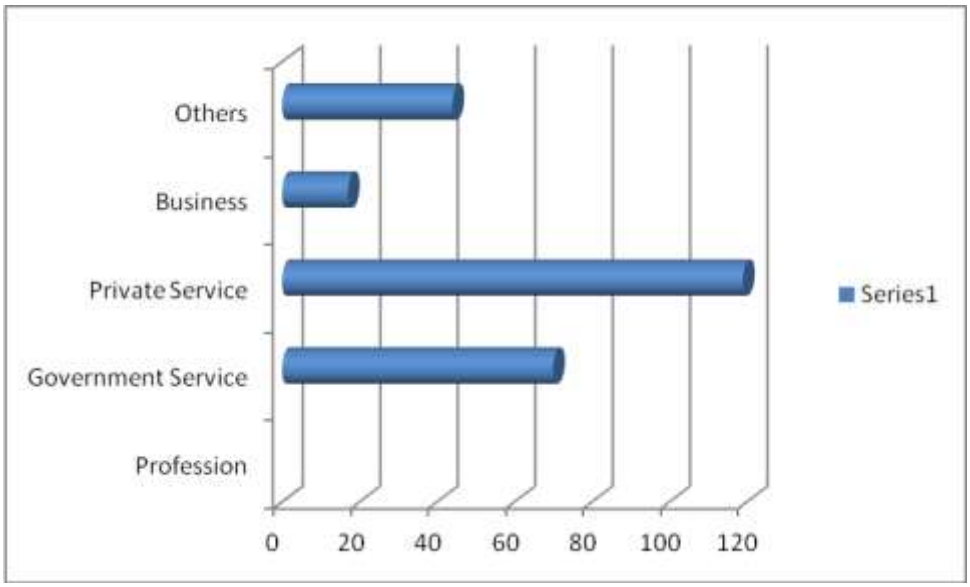

Figure 3 Professions of the Participants

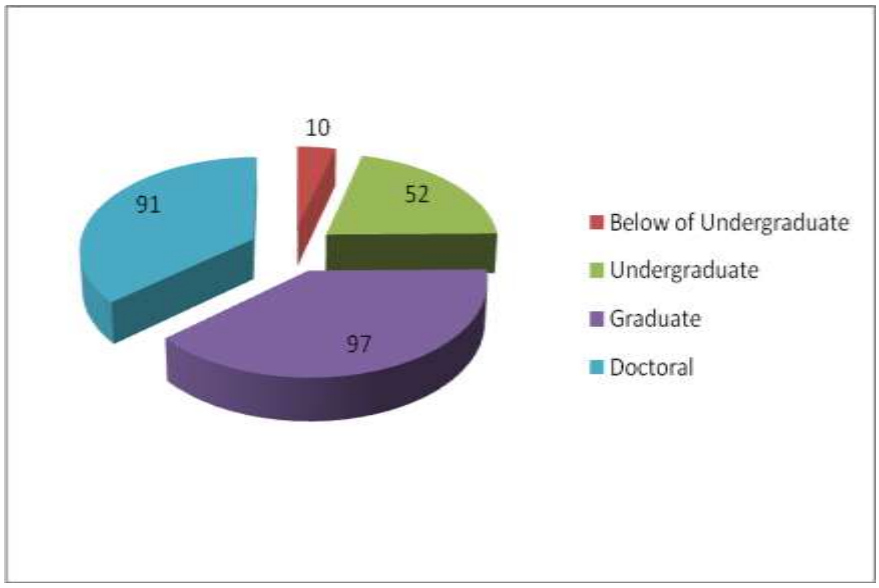

Figure 4 participants education level

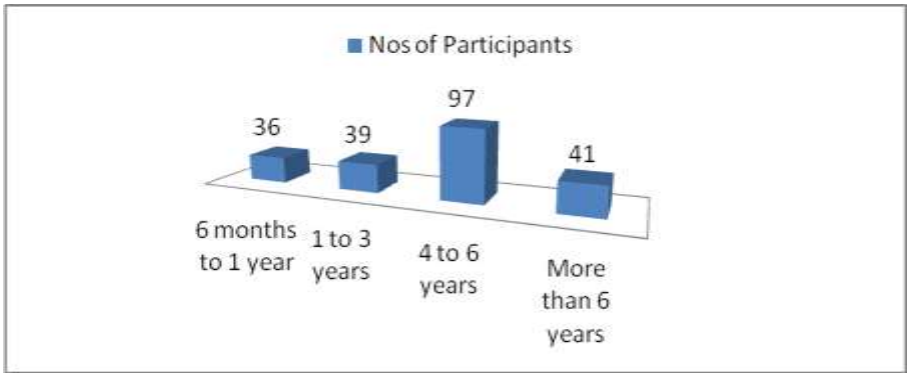

Figure 5 Time Span of using Machine Translation Service

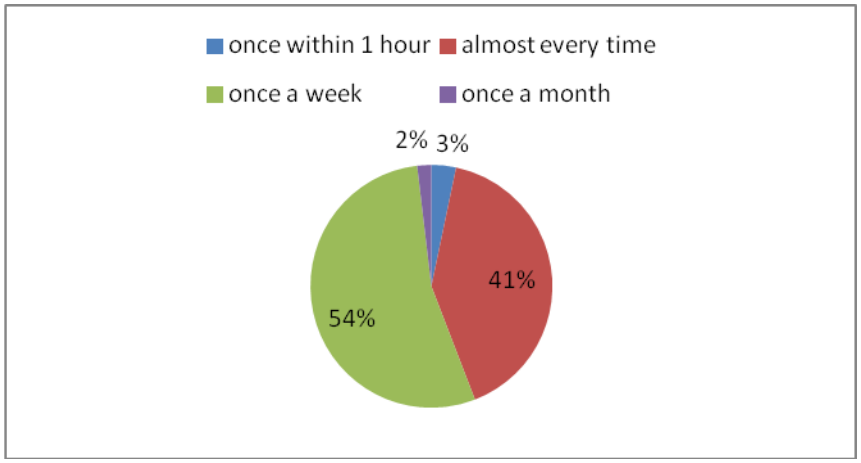

Figure 6 Frequency of using Machine Translation Service

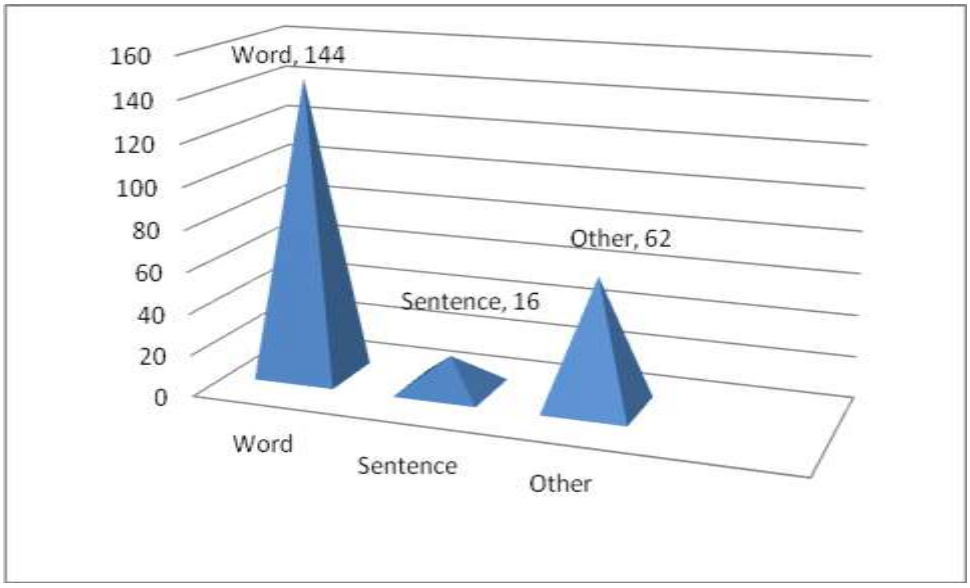

Figure 7 Item of Translations using Machine Translation Service