CHAPTER 2 LITERATURE REVIEW

This chapter summarizes the findings of previous studies exploring the strengths and weaknesses of Kamusku application research. Several issues are discussed in this chapter, including: Kamusku application as MALL and the use of NMT systems, translation process of Kamusku application, strengths and weaknesses of using machine translation, framework.

2.1 Kamusku Application as MALL and the Use of NMT system

Since Chickering and Ehrmann (1996) coined the term Mobile-Assisted Language Learning (MALL), the technology has gained tremendous currency. According to Miangah & Nezarat (2012), "MALL deals with the use of mobile technology in language learning." The term MALL has changed the nature of language learning. "This is due to its mobility feature, the convenience it offers in terms of time management, and the ability to work in groups" (Anarki, 2009; Deng & Shao, 2011; Tai, 2012; L-H Wong & Looi, 2010). Thus, students no longer need to learn manually. They can use their mobile phones to access all information and do group work outside the classroom virtually or via video conferencing.

The spread of technology brings people to the idea of developing an application that could help people all over the world to learn languages. In the 20th century, people have managed to develop MALL. There are Google Translate, Duolinggo, and Kamusku application. The application that is the focus of this research is the Kamusku application. Kamusku application is an available android application. "Kamusku application includes MALL because it is only available on the smartphone" (Kodelokus, 2013).

Kamusku application is an offline dictionary of English-Indonesian. According to Kodelokus (2013), "Kamusku application is an offline English-Indonesian dictionary and vice versa." Even though Kamusku application is an offline application; however, it can be converted into an online machine translation. According to Kodelokus (2013), "although Kamusku is an offline machine translation, Kamusku application can also be converted into an online translation with turn on the mobile data." Therefore, this application is useful for students. Students who do not have a quota of mobile data can use Kamusku application in offline mode. But in this mode, the users or students cannot translate the data. Students must turn on the mobile data to translate the sentence.





Figure 2.1 Kamusku application in offline mode

Figure 2.2 Kamusku application in online mode

In online mode, Kamusku application activated the system for translating the sentence. The name of this system is Neural Machine Translation (NMT). According to Wu (2016), "NMT is an automatic translation that can translate sentence by sentence." This system is automatically activated when the users or students turn on the mobile data. Therefore, Kamusku application also using NMT system because this application can translate the words and sentences when the user turned on the mobile data. According to Kodelokus (2013), "In case can't translate the words or sentences, the user can use online translation service through this application to translate the words or sentences."

2.2 Translation Process on Kamusku Application

The term translation is described as "the process of transferring meaning from the source language to the receiver language at a structurally simple level, stylistically and semantically, so that it corresponds to the corresponding expression in the receiver language" (Shaheen, 1991). Based on this definition, translation is about transferring meaning from the source language or the original text to the target language, adapting the style to the current target language.

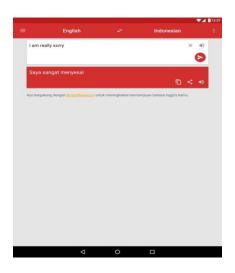


Figure 2.3 Translation Process on Kamusku application

The process of transferring the L1 (Indonesian) to the L2 (English) in Kamusku application also adapts the style to the current target language. In the figure above, each language follows its own grammatical rules. Kamusku application has a number of systems to adapt the L1 or source language to the target language and vice versa without changing the grammatical rules.

2.3 The Strengths and Weaknesses of Using Machine Translation

The term MT is seen as an innovative machine that is especially useful in academic contexts. Ali and Alireza (2014) stated that "MT helped students write faster and produce more fluent and natural writing with fewer errors." MT helps students to express themselves better in writing. The previous study by Nino (2009) titled "Machine translation in foreign language learning: language learners' and tutors' perceptions of its advantages and disadvantages" shows the advantages and disadvantages of using MT in language learning. The article shows that there are three aspects strength aspects that can encourage students to use the free online programmed MT. These are widely available online, immediacy, multilingualism.. First, machine translation is widely available online. Nino (2009) stated that "MT is widely available as a language resource through search engines such as Google or Alta Visa" (p. 245). The students or the users can use many types of machine translation on the Internet through search engines such as Google Translate, Instatext, and others. Second, MT is immediacy. According to Nino (2009), "the user only needs to select the source language and the target language, cut and paste the text or web page to be translated, and with click of the mouse, the user gets instant output" (p. 245). This means that MT is ready to use right away. Third, MT is multilingual. Nino (2009) stated that "MT is available in multiple language pairs and allows the user to translate a single text into multiple languages" (p.245).

MT serves all language skills from all countries in the world. Therefore, MT is good for language learning.

However, MT also has some disadvantages. First, using MT often causes grammatical inaccuracy. As Nino's (2009) study pointed out, the students with a stronger command of the language do not use these systems as grammar references because they were aware of their many grammatical inaccuracies which include various kinds of errors with prepositions, determiners, agreement, pronouns, verb form, verb tense, verb mode, number and sentence structure. In line with Lommel et al. (2014a) state that, "accuracy errors are related to how well the content of the target text represents the content of the source." The most probable grammatical inaccuracy or accuracy errors occurring in using MT are because of the fallibility of the users in choosing or presenting the source language. Latief's (2020) study proved that using Google Translate (GT) also often produces grammatical errors in translating the sentences.

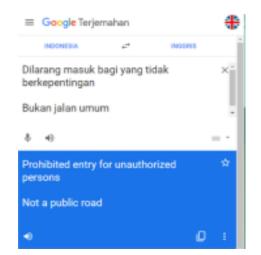


Figure 2.4 GT sentence translations (SL-TL)

SL: Dilarang masuk bagi yang tidak berkepentingan, bukan jalan umum

TL: Prohibited entry for unauthorized persons, not a public road

SL= source language

TL= target language

According to the oxford dictionary (2019) [5], road means a hard surface built for vehicles to travel on. Therefore, "*bukan jalan* umum" is supposed to be translated as *not for public* access. Latief et al. (2020) pointed out; GT often produces translations that contain significant grammatical error. This is because Google's translation system uses a method based on language pair frequency that does not take into account grammatical rules. Second is MT often produces spelling errors. Nino (2009) stated that "in MT these errors are produced when entering terms into the system's dictionaries" (p. 6). Although this is rare due to the integration of spell checkers in many commercial MT systems, the output of MT also has orthographic inaccuracies such as punctuation and capitalization errors.

2.4 Framework

Machine Translation (MT) has evolved considerably over the past decade, offering much improved grammatical and lexical accuracy. MT can be defined as "the process of translating from L1 to L2 through computer software and is compatible with PC and smartphone" (Alhaisoni & Alhasysony, 2017, p.73). Since MT has been available on PCs and mobile phones, the use of MT has become more widespread due to its free cost, convenience, immediacy, efficiency, and multilingualism.

With innovative technology, many people have created various MT. Kamusku Application is one of the MT that people use in translating the language. Kamusku application is an available offline translation where the user does not need to create an account first, but can operate the application anytime and anywhere.

The framework of this study leads to the phenomenon that occurred in the researcher's environment. The students used the machine translation, Kamusku application. The phenomenon as found at one of the universities in Tasikmalaya that the students used Kamusku application as a machine translation for translating from Indonesian to English.

Based on this phenomenon, the researcher focused on exploring the strengths and weaknesses of Kamusku application in translating from Ind onesian into English. The data was collected through semi-structured inte rview. The interview was combined with Nino (2009) theory. The data w ere analyzed using Braun and Clark's (2006) thematic analysis.