CHAPTER 3

RESEARCH METHODOLOGY

This chapter outlines the application of the research methodology in the present study. This includes the research method, data collection, data analysis, and concluding remarks. This study investigates the phenomenon of code switching in *Internet* articles of *Know-How* rubric in three editions of *PC Media* magazine. This study was conducted to discover and reveal what types, functions and readers' perceptions on code switching which are used in *Internet* articles of the *Know-How* rubric in *PC Media* magazine.

3.1. Research Method

The present study primarily used a descriptive qualitative method in obtaining and analyzing the data. This method was employed in order to describe and explain the phenomenon of code switching in *Internet* articles of *Know-How* rubric in *PC Media* magazine and the readers' perceptions on the use of code switching in the articles.

Alwasilah (2002:17) states that a qualitative study involves description and analysis. Wray (1998) also argues that a qualitative study involves preferably description and analysis than counting features. In line with them, Moleong (1989, p.11 in Djajasudarma 2006) argues that there are eleven characteristics in a qualitative study; one of those characteristics is descriptive. Furthermore, according to McMillan and Schumacher (2001, in Sukmadinata 2009), state that

qualitative research has two major aims: to describe and to explore; to describe and to explain.

Moreover, the application of this method was suitable in this study because this study did not emphasize on numbers but on words. Maxwell (1996:17) argues that qualitative emphasizes on words. The data which were used in this study were taken from *Internet* articles of *Know-How* rubric in *PC Media* magazine and the number of the articles was not emphasized in this study. The data, which were collected, were not a form of numbers but in the form of words or description about something (Djajasudarma, 2006:16). In addition, Maxwell (1996:17) argues that strengths of qualitative research derive from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than numbers.

3.2. Data Collection

The data were taken from *PC Media* magazine. The data consisted of seven *Internet* articles of *Know-How* rubric which were collected in three editions of *PC Media* magazine on January, March and April 2011, and the readers' perceptions to the phenomenon observed through a set of questionnaires.

3.2.1. Data Source

The data source was a set of texts taken from *Internet* articles of *Know-How* rubric in *PC Media* magazine. *PC Media* magazine is an Indonesian computer magazine which is published monthly (retrieved from: http://en.wikipedia.org/Wiki/PC_Media). *PC Media* magazine was first published

in April 2001. *PC Media* gives useful information about computers from A to Z. It consists of 10 rubrics in every edition (*Prologue*, *First*, *Cover Story*, *Virus*, *Know-How*, *Game Test & Walkthrough*, *Step by Step*, *On the Disc*, *Super Promo*, and *Epilogue*).

Know-How rubric tells about useful computer tips and tricks which consist of 7 up to 13 articles in every edition (*Core PC*, *Windows*, *Windows 7*, *Internet*, *IT Service*, *Software*, *Hardware*, *General*, *Technology*, *Web Development Technology*, *Security*, *Reverse Code Engineering*, and *Coding*). These articles are useful for people, especially to prevent their computers from damage and to expand their knowledge about computers. One of those useful articles is *Internet* article which explains about tips and tricks to handle and manage problem in computers which is caused by Internet. These articles are generally written using a combination of Indonesian-English.

Table 3.1
List of the *Internet* Articles of *Know-How* Rubric in *PC Media* Magazine

Months	Titles	Writers
January 2011	Mencari Provider Web Hosting	Gunung Sarjono
	Black Hat Vs White Hat Pada SEO	Joko Nurjadi
	Tools Sysinternal Untuk Mengelola Sistem	Gunung Sarjono
March 2011	Cybercrime	Joko Nurjadi
	Melindungi Privasi Online	Gunung Sarjono
	Menjadi Detektif dengan Bantuan Browser (Bagian 1 dari 2 Artikel)	Joko Nurjadi
April 2011	Menjadi Detektif dengan Bantuan Browser (Bagian 2 dari 2 Artikel)	Joko Nurjadi

3.2.2. Instrument

In this study, a questionnaire was used as an instrument in order to explore the readers' perceptions to the use of code switching in the articles. A questionnaire is extensively used to collect the data about phenomena that are not observable, such as inner experience, opinions, perception, values, interests, and the like (Alwasilah, 2003). The questionnaire consisted of 20 closed-ended statements which were set based on both factors and aspects of perception. There are advantages of using closed-ended questionnaire which is proposed by Fraenkel and Norman (1993: 351): enhances consistency across respondents, easier and faster to tabulate, and more popular with respondents. Some statements (no.8, 11, 12, 13, 14, 15 and 20) in the questionnaire were adapted from Triani (2011).

Table 3.2
Closed Questionnaire Framework

No.	Aspects	Number of Questions
1.	Readers' perceptions on general view about the use and effect of Internet.	2
2.	Readers' perceptions on the importance of articles which explain about Internet.	2
3.	Readers' perceptions on the use of English in the *Internet* articles.	5
4.	Readers' perceptions on the use of code switching in the *Internet* articles.	11
	Total	20

3.2.3. Respondents

The respondents consisted of 30 students (15 male and 15 female) who were chosen randomly. Both male and female respondents were chosen because nowadays the Internet and computers are not only used frequently by males but

also by females. All respondents were considered to be the readers of *PC Media* magazine and as the users of the Internet and computers. The sampling technique used in this study is purposive sampling in order to achieve representativeness or typicality of the settings, individuals, or activities selected (Maxwell, 1996:71).

3.3. Data Analysis

The data were analyzed through several steps. They were identifying the occurrences, classification, and analyzing the results of the questionnaire. The steps are divided into two sections.

3.3.1. The Documented Data

3.3.1.1. Identification of Occurrences

The seven articles of Internet articles were identified to gain the occurrences of code switching. I marked the word, phrase, and clause which contain code switching by underlining them. It helped me to identify the proceeding step, which was identifying the classification of code switching in the articles

3.3.1.2. Classification

I separated the sentences with code switching to be written in the tables. This step helped me to identify the types and functions of code switching easily. Then, I categorized each sentence into its types and functions. The theories of code switching types proposed by Poplack (1980) and Myers-Scotton (1989) and the functions of code switching proposed by Koziol (2000) were used as references to identify the types and functions which occurred in the articles. Table

3.3 below shows the analysis technique in order to investigate the occurrence of types and functions of code switching in the articles.

Table 3.3
The Analysis Technique of Code Switching Types and Functions

No.	Sentences	Types	Functions
1.	Solusi lainnya adalah menjadi *user* anonim untuk menjaga *privacy*, yaitu tampil dengan identitas samaran. (p.22)	Intra-sentential switching	Personalization

3.3.1.3. Quantification

The next step was quantification. Quantification was used to discover the most frequent classification of types and functions of code switching in the articles. The formula is proposed by Sudjana (1984:49):

$$P = \frac{fo}{n} \times 100\%$$

P = Percentage

fo = Frequency

n = Total of code switching

3.3.2. Readers' Perceptions

In analyzing the data from closed-questionnaire, this study used a Likert scale. Likert scale is a measurement which asks individual to check their level of agreement with various statements about an attitude object i.e. strongly agree, agree, uncertain, disagree, and strongly disagree (Gal et.al., 2003:628). Table 3.4 below shows the framework of Likert scale.

Table 3.4
Framework of Likert Scale

Statements	Strongly Agree (SA)	Agree (A)	Uncertain (U)	Disagree (D)	Strongly Disagree (SD)
	5	4	3	2	1

The data from the questionnaire were used to know the perceptions' of the respondents to the phenomenon of code switching in the articles. The data of the questionnaire were classified to know whether the perceptions' of the respondents on the phenomenon of code switching in the articles were positive or negative. The formula which was used to classify is:

$$\text{Interval Range} = \frac{\text{Range}}{\text{Total Level}}$$

(Sudjana, 1984:46)

To know the expected highest score and the lowest score, I calculated the number of respondents (30 respondents) to be multiplied by the highest scale (5). Thus, the expected highest score is 150, and the lowest score is 30. Then, the interval range is:

$$\text{Interval Range} = \frac{150 - 30}{5}$$

$$= 24$$

Based on the calculation, the classification is presented as follow:

Table 3.5
The Classification of Readers' Perceptions Questionnaire

Score	Categories
30 – 53.9	Extremely negative
54 – 77.9	Negative
78 – 101.9	Fair
102 – 125.9	Positive
126 – 150	Extremely positive

Furthermore, I also used the percentage of the respondents who answered an item. This helped me to classify the total respondents who answered an item. The following formula was used to know the percentage of the respondents' answers.

$$\text{Percentage (100 \%)} = \frac{\text{Total respondents who answer an item (fo)}}{\text{Total Respondents}} \text{ X } 100\%$$

To classify the average percentage into the form of interval, the categories are as follows:

00.00% : none
00.01% - 24.99% : a few of
25.00% - 44.99% : nearly half of
50.00% : half of
50.01% - 74.99% : best part of
75.00% - 99.99% : nearly all of
100.00% : all of

(Suryadi, 1987 in Firman, 2007)

3.4. Concluding Remarks

The present chapter has presented the research methodology which was employed in this study. The function of this chapter is as a guidance to determine the research subjects and sample size, the data collection steps and the data analysis used in the present study. The findings and discussions of the present study are explained in the proceeding chapter.