

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter provides additional information regarding the approach applied to this research. This section covers and summarizes the research design, including the population and sample, instrumentation, the data collection technique, and the analysis of the results.

#### 3.1 Research Design

Many considerations and decisions must be made while doing research, depending on what or who is engaged in the study and how one would approach the problem (Johannessen, Tufte, & Christoffersen, 2011). Research philosophy is among the factors to examine, which reflects the researcher's design regarding ontology, epistemology, methodology, and techniques (Easterby-Smith, Thorpe, Jackson, and Jaspersen, 2018). From a philosophical point of view, the method and design used to answer the research question must be the best way to explore the research objective. As the philosophical information about the study will explain the researcher's role in the research process and how to choose an appropriate design, this information must be included in the research proposal (Easterby-Smith et al., 2018). The effect and the adoption of technology in journalism is the central topic of this thesis. As a result, the research might be seen as a case study at the Sinar Harian. Important are research methods and designs that show what joirnalist talk about and share about their experiences as they work to manage and publish the stories by using various types of technology.

To better understand modern phenomena in their actual setting, case studies are the best method to use (Yin, 2003). This study uses mixed-method data from a single case to show how those in various organisational positions perceive the same changes in the newsroom (Robinson, 2011). Results from a survey and interviews with staff members of Malaysia's news distributor were used to write this study. This news organisation is an excellent choice for my study because it has explored and invested in innovation regularly and efficiently. In the last few years, it has experimented with frequent and significant changes to its products, mission, workforce, management, organisational structure, and audience engagement activities. 45 journalists have participated in this study who have answered questionnaires and

are involved in interview sessions. Synthesis of the two parts of the investigation was performed during data analysis (Christ, 2009).

This study consisted of the two following components:

- a) An online survey will be conducted for this study. The quantitative findings were formed from this section of the investigation;
- b) a qualitative interview session with participants from the same organisation also will be include.

### **3.2 Data Collection**

First-hand information or primary data sources can be gathered in three ways, as described by Soulsby (2005): personal experimentation, observation, and direct communication with others. Individuals were interviewed, and their answers were used to compile a database of information. This research uses the online survey method and semi-structured interview approach. Hence, this approach is a standard data collection method in mixed method research. Quantitative research refers to numerical research, which is the collection of facts; meanwhile, qualitative research refers to gathering and analysing non-numerical data from the research. Quantitative research can give participants space to answer the question without being precipitous. Cridland *et al.* (2015) stated that a semi-structured approach could create a relaxed environment. The company representatives were asked to participate in semi-structured interviews in the first round. The interviews were conducted to get participant opinion about the current technology development. This data collection method will suit this research, and it hopes to discover the changes among journalists and newsrooms.

#### **3.2.1 Survey**

The researcher collected the data by using a set of questionnaires. The method of quantitative research of this study to collect the data, which was a questionnaire. The data are collected through an online survey tool or survey based on Google Form. Once the web questionnaires have been completed online, the data will be automatically will be recorded in a Google spreadsheet in an analysable format and follow for tabulation and graphical representation of data statistics. The participants were asked to provide demographical data and completed the questionnaires. The questionnaire is divided into 17 questions. So each

respondent can complete all the questions are given. There are 2 sections that respondents must answer including the demographic parts. All question need to be answered by the respondent so that it can be analyse by the researcher. The respondents are given a questionnaire by the researcher via WhatsApp. There are 43 respondents for this study which is editor and also journalist. As required, the researcher assigns the questionnaire herself and offers clarification to assist individuals who are unable to read and write to collect information effectively. All signed consent authorization forms were kept secure as the entire questionnaire and inventories collected were stored.

### **3.2.2 Semi-Structured Interviews**

In qualitative research, interviews are a standard method of gathering information (Bryman & Bell, 2007). In qualitative research, the level of structure of the interviews is sometimes determined by the research goals (Easterby Smith, Thorpe, & Jackson, 2008). This study used semi-structured, in-depth interviews because it allows for more targeted inquiry (Bryman & Bell, 2007). Following the qualitative research guidelines, the researcher conducted semi-structured interviews to gather information for this study and to support the qualitative research data. Semi-structured interviews, as defined by Matthews and Ross (2010):

- a) Have a predetermined list of questions or topics for each interview
- b) The questions and topics discussed at the outset of each interview may vary.
- c) Allow everyone a chance to speak their mind and answer the questions or describe the topic in their own words.

The researcher was able to construct significant discussions of issues and follow-up questions that were nonetheless rooted in the proposed theoretical framework because of the semi-structured style of the interviews. In order to cover all bases, the semi-structured interviews were conducted using an existing interview framework. The interview questions were asked in roughly the same order and with similar language, allowing for some variation and a natural flow of conversation (Matthews & Ross, 2010). The researcher will employ the brief question as the data collection instrument because it is the most efficient method of collecting data and eliciting responses. There are 10 respondents that volunteer take part in this interview session.

### **3.3 Population and Sampling Method**

Polit and Beck (2006) state that a population is "the total number of people or elements that fit the specific set requirements of the study." This is also known as the target respondents. The grounds for being included or not should be expressed clearly." The target group for this study includes journalists, editors, and newsroom personnel of Sinar Harian, a media organization.

#### **3.3.1 Inclusion of the Criteria**

Burns and Grove (2001) define inclusion criteria as "the characteristics that respondents must have to be included in the study." Journalists, editors, and newsroom staff who worked at Sinar Harian and agreed to participate and interviewed by the researcher were included in this study.

#### **3.3.2 Exclusion of the Criteria**

Burns and Grove (2001:367) define exclusion criteria as "the characteristics that respondents lack in order to be excluded from the study." Respondents who were unwilling to engage in the study were omitted.

### **3.4 Sampling**

The sample type in this study research is non-probability, which means convenience sampling is used. The researcher conveniently chose Sinar Harian due to its proximity and availability for the research to be conducted. Sinar Harian represents the media organizations set up in Shah Alam. Convenience sampling was used to select the respondents in the study. Journalists, editors, and newsroom staff from different departments were selected for this study. Forty-three respondents participated in the survey and interview for this study. The researcher interviewed ten respondents from separate roles and departments according to their willingness. The researcher explained the purpose of the study, their rights and 43 participants volunteer to fill the survey and 10 are willing to be interviewed. The respondents then signed a written consent form. According to Polit and Beck (2006) as well as Burns and Grove (2001), convenience sampling uses readily available respondents in a study; for example, Journalist who works at media organisation and willing to participate. Consideration is required while applying this sampling method as the sample population may need to be more representative. Only participants who fulfilled the inclusion criteria were chosen.

The sample is small, but potentially a representative collection of units from the population used to evaluate the population's truth (Kumar, 2005). The sample of this study consists of journalists and editors which had various range of age and working experience.

### **3.4 Data Collection Method**

As a result of understanding the purpose and objective of this study, exploring previous research similar to this topic using a mixed-method data collection method would be suitable. Quantitative research refers to numerical research, which is the collection of facts meanwhile qualitative research refers to analysing non-numerical data. This data collection method will be suitable for this research, and it hopes to discover adoption of technology among journalists in their practice. Overall, the data will be used to obtain the relevant information for this research. The researcher collected the data by using a set of questionnaires and in depth interview.

For quantitative research the data are collected through an online survey tool or survey based on Google Forms. Once the web questionnaires have been completed online, the automatic data will be recorded in a Google spreadsheet in an analysable format and followed for tabulation and graphical representation of data statistics. The participants were asked to provide demographical data and completed questionnaire. The questionnaire is divided into 20 questions. So each respondent can complete all the questions given. There are 2 sections that respondents must answer, including the demographic parts. All questions need to be answered by the respondent so that the researcher can analyse them. The researcher gives the respondents a questionnaire via WhatsApp. The respondent for this study is 43 editors and journalists. As required, the researcher assigns the questionnaire herself and offers clarification to assist individuals unable to read and write to collect information effectively. All signed consent authorisation forms were kept secure as the entire questionnaire and inventories collected were stored.

Meanwhile for qualitative research the data are collected through in depth interview with volunteer editor and journalist. Interviews were conducted in Bahasa Melayu by the researchers themselves. In addition, the researcher taped the interviews and transcribed them accurately. Respondents were given access to their transcripts to review and approve the accuracy of the transcriptions. The interview will be recorded in Bahasa Melayu and then translated into English to analyse the information and data.

### **3.5 Data Analysis Method**

#### **3.5.1 Quantitative Method/Survey**

Data analysis is a method of putting facts and figures to solve the research problem. It is vital to finding the answer to the research question. This part will interpret all the data from the questionnaire given to the respondent. The data obtained from this study is in quantitative and qualitative form. In this study, there might be things that the researcher can make a difference. The quantitative data collected were evaluated using a Statistical Package for the Social Sciences (SPSS) and Microsoft Excel. The researcher has checked and coded the completed questionnaire. Presentation of data and tables has been used to condense and present information in a clear format, emphasizing relationships and trends. SPSS version 23.0 quantitative technology was used with clearly defined observable terminology. This software has been widely used by researcher to perform qualitative analysis. SPSS software can read and write data from other statistical package, database and spreadsheets. Descriptive analysis, such as percentage and frequency, explains each of the variables used in the online research. Frequencies and percentages of responses were measured and calculated using Microsoft Excel. To determine all the variables, the T-test are used to test whether there are significant differences between the adoption of technology according to gender and profession of the respondents.

#### **3.5.2 Qualitative Method/Semi-structured Interview**

The output of the interviewee is examined in this study from a fundamental viewpoint. The stages used in the analysis are transcript reading process; all verbal and audio interview data were transformed into a written form, making it suitable for process of data analysis. Transcription is a transformative process that must be considered. Through a process of decision-making, the researcher translates the interviewee's spoken words into a written transcript (Silverman, 2017). The researcher needs to consider how punctuation choices and misunderstandings of what was said might influence the results.

Next stage is annotating the transcripts; labelling significant words, phrases, sentences, or sections with codes is important. These codes help in the identification of relevant qualitative data kinds and patterns. Labels can be applied to actions, activities, concepts, differences, attitudes, procedures, or anything else researchers believe is relevant. From this study phrase or sentence that related to the technology adoption and it effects to the journalism are being coded accordingly. For conceptualizing the data, which is the process of connecting the data with the themes to publish the content, the research has created categories

by grouping the codes during annotation. Some codes were being eliminated and combined based on the needs.

Segment the data, arranging and linking the categories into one unit by describing their connection. In this study, researchers have created a spreadsheet to compile all the data into columns and highlight the important variables. At the stage of analyzing the segments, the researcher has determined the important data, put it into a hierarchy, and aligned it with the quantitative data results, and writes the result of the analysis. The process involves gathering data to provide explanations and produce discoveries which is to know what kind of data was gathered determines and how the data is analysed. The following is the conclusion. Following the explanation, some inferences will be drawn, and the research questions' solutions will be provided. When we speak of data management, we refer to the process of analysing qualitative data (Ritchie & Lewis,2003).

### **3.6 Conclusion**

In this chapter, researchers talked about various key features of research methodology. There are two initial research designs: quantitative and qualitative; two techniques are used for data collection: the first survey and semi-structured interview. This study will be conducted at the Sinar Harian, located in Shah Alam, Selangor. It will involve Sinar Harian employees with previous experience with technology development in journalism practice. The researchers will follow the steps to get all the information needed. Interviews are a necessary step for researchers to take to collect valid data.