CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides and explains research design and methodology of this thesis. The thesis aims to develop a structured, systematic, practical, and easy to use risk management process for micro businesses in Malaysia. To achieve the aim, this thesis has the following research objectives (RO):

1. To explore and analyse the risk management processes developed for businesses;
2. To propose a risk management process for micro businesses using ISO 31000: 2018 Risk Management Guidelines as the basis; and
3. To evaluate the practical usability of the risk management process for micro business.

3.2 Research Design

To achieve the research aim, this thesis conducts an in-depth analysis of literature from previous studies on risk management processes for businesses. This thesis also uses focused-group data collection approach to evaluate the practical usability of the risk management process.

Focused-group respondents are chosen because the data collection process has to be as detailed as possible. The sample size of the focused group is small because the objective is to go deep rather than wide. Feedbacks from each respondent is important to develop the risk management process. The quality of each feedback is fundamental to contribute to developing the practical and easy to use risk management process. In addition, face-to-face data collection process is not doable because of the movement control order. The face-to-face interview session is replaced with messaging applications. It is more challenging to explain the risk management process to the respondents.

3.3 Data Collection

Data is collected in two stages to achieve the objectives of the thesis. The first stage aims to produce a risk management process for micro business owners based on the analysis of risk management processes developed from previous studies. The second stage aims to evaluate the practical usability of the risk management process for micro business. The data collection process is as presented in Figure 3.1. The details on each stage are explained in the next paragraphs.

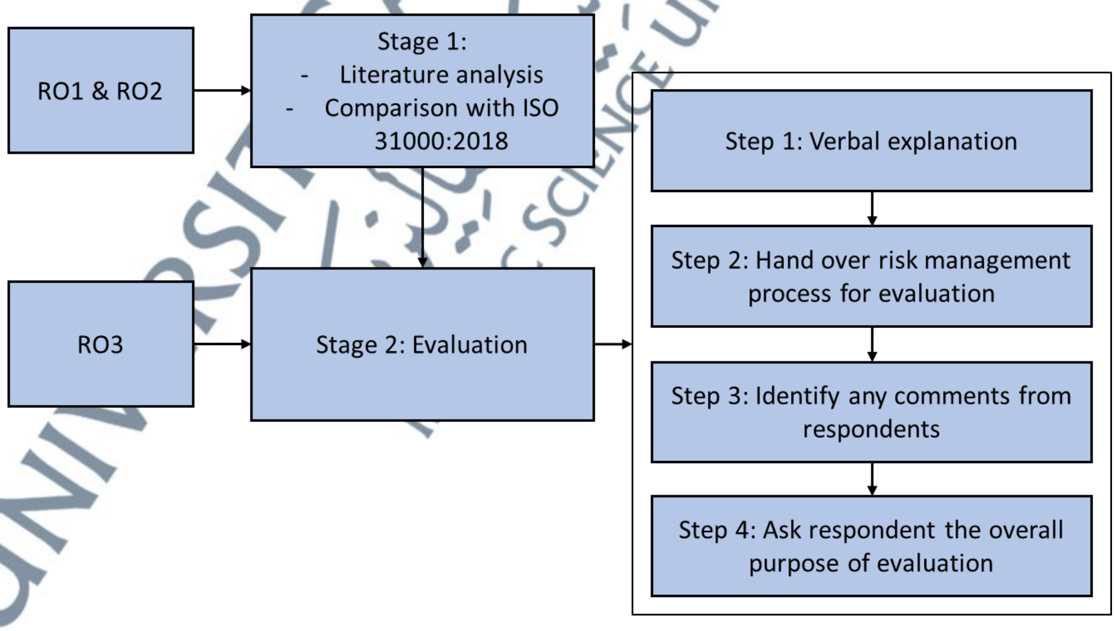

Figure 3.1: Data collection process

Stage 1:

RO1: To explore and analyse the risk management processes developed for business.

To achieve RO1, relevant academic articles which focus on developing risk management process are chosen. Initially, there are 62 articles with the keyword 'risk management' selected. The platforms used are Google Scholar, ResearchGate, Academia, and Elsevier. Out of these 62 articles, 11 relevant studies that developed risk management model, processes, frameworks, and steps relating to business and SMEs are chosen.

RO2: To propose a risk management process for micro business using ISO 31000:208 as the basis.

To achieve RO2, the information gained from RO1 is used to develop a risk management process for micro business. The risk management process is compared to ISO 31000: 2018 Risk Management Guidelines.

Stage 2:

RO3: To evaluate the practical usability of the risk management process for micro business.

To achieve RO3, the thesis uses a focused group approach. Initially, in-depth face-to-face interviews are planned to be conducted to evaluate the practical usability of the micro business risk management process. However, given the pandemic situation, the in-depth interviews are done through messaging applications. The interview questions are in English. However, the questions are translated to Malay for better understanding of the respondents who prefer to answer in Malay.

The micro business owners are first contacted through messaging application. Once agreed, each respondent is briefed with the research aims and objectives, and the data collection process begin. The practical usability evaluation feedbacks collected from the respondent is used to improve the risk management process.

Each respondent takes around four to six weeks to give their feedbacks on the risk management process. The respondents are contacted once in two to three days to ensure they have no problem in giving evaluations. Some respondents asked for explanations through phone calls for better understanding of the data collection process.

The data is collected in three steps. The steps are:

Step 1: Verbal explanation to respondent. The chosen respondents are contacted through messaging application. The respondents are briefed about the risk management steps. The transcriptions of the messages are attached in APPENDIX B.

Step 2: Hand over the risk management process for evaluation by respondent. The risk management process for evaluation process is as attached in APPENDIX A. The risk management process is handed to the respondent in Word document through messaging application. Word document is given so that the respondent can type in their evaluation on each step of the risk management process. Since the briefing in Step 1 is done through messaging app, the risk management process is passed to the respondent in between the explanation so they can go through the document while the reading the explanation for each step.

Step 3: Identify if respondent raise any comments or questions throughout the evaluation process. Along the evaluation process, the respondent is welcome to ask any questions or give any comments, verbally or through messaging application, relating to the risk management steps to the interviewer. The evaluation questions are based on the evaluation criteria.

Step 4: Ask respondent on the purpose of the evaluation. After the risk management steps are evaluated by the respondent, the interview asks on the overall risk management process. The questions are based on the purpose of this thesis that is to develop a practical and easy-to-use risk management process for micro businesses.

3.4 Respondent Selection

To evaluate the risk management process for micro business, the respondents selected through convenience sampling. Convenience sampling is a method of collecting samples that are conveniently located around a location or internet service (Edgar & Manz, 2017). The sole proprietor micro businesses selected is as defined by SME Corporation Malaysia, which is a company that has an amount of sales turnover less than RM 300,000 and the number of employees less than five.

Respondent 1: An agent of a local skincare brand, “Bougas Beauty”. The 26-year-old respondent is currently working fulltime for a courier service after finishing her postgraduate school. She registers as an agent around one year ago to gain extra income. The respondent begins selling skincare products through Instagram. She also actively promotes her product on other platforms like WhatsApp and Facebook. The respondent is currently based in Terengganu.

Respondent 2: The second respondent is an artist. The 26-year-old lady just finished her postgraduate school last year and is going to start her first job with an insurance company in September. The participant sells her arts commissions on social media and e-commerce platforms. She sells customized drawings on different objects like calendar, wall clocks, and notebooks, depending on the customers' request. The respondent is based in Terengganu.

Respondent 3: The next participant is a 25-year-old man who breeds quails. He sells quail meat and eggs. He also delivers quail meat and eggs to customers if there are any orders. Sometimes, he opened order for quail eggs 'rendang'. His mom usually helped him with the cooking process. The business idea is initially by his father, and initially funded by the father. He ran the business after finishing diploma in farm management. The farm, which is in Johor, currently can occupy 2500 quails at one time. The respondent manages and runs the farm together with an employee.

Respondent 4: The respondent is an agent of supplement products, "Shaklee". She is 25 this year and currently have a fulltime job as a project secretary. The respondent is also currently pursuing her Master's degree. She registered as an agent last year to generate side income apart from her full job. The respondent uses social media platforms like Instagram and Facebook to promote and sell the health supplement products. The respondent is based in Kuala Lumpur and Selangor.

3.5 Data Analysis

The thesis aims to develop a systemic, structured, practical and easy to use risk management process for micro businesses in Malaysia. Data analysis for each objective are explained as the followings:

RO1: To explore and analyse the risk management processes developed for businesses.

The thesis begins with extensive search of article journal on different open repository sites using keywords (Parviainen et al., 2021). The keywords used for this thesis are “risk management”, “risk management process”, “risk management model” and “risk management framework”. 62 academic articles from 15 years back relating to risk management processes, models, and frameworks of different sectors are selected. Then, the abstract of the article journals are manually scanned the abstracts to narrow down the scope (Ali et al., 2017). The abstracts of the selected articles are scanned to find studies that developed risk management process. The risk management process developed by previous articles is discusses later in Chapter 2 and Chapter 4 of this thesis. The exploration and analysis of the article journals result is an extensive knowledge on different steps of risk management processes developed for businesses.

Then, the common purposes of each step of the risk management process is identified by grouping statements (Barafort et al., 2019). The common steps from previous studies of the same purpose are grouped together. The purpose of each step follows the purpose of the steps in risk management process by ISO 31000: 2018. For example, Author 1 uses the term “risk analysis” and Author 2 uses the term “risk assessment”. The authors use different terms, but the terms have the same purpose which is to analyse risks. The thesis uses the risk analysis definition defined by ISO 31000: 2018. Referring to ISO 31000: 2018, both terms belong to “risk analysis”.

Hence, the terms “risk analysis” by Author 1 and “risk assessment” by Author 2 is grouped under “risk analysis”.

This thesis develops a benchmark to determine the most commonly used risk management steps in all eleven risk management processes. The benchmark is steps that appear in at least ten of the articles will be included in the common risk management steps from previous studies. Any steps that appear less than ten articles are not included. The output is as presented in Figure 4.1.

RO2: To propose a risk management process for micro businesses using ISO 31000: 2018 Risk Management Guidelines as the basis.

A comparison between the risk management processes from previous studies against the standard ISO 31000 Risk Management Guidelines is done. The risk management processes developed by previous researchers is outlined and compared to the risk management process by ISO 31000. At this stage, the ISO 31000 risk management steps is the benchmark for the risk management processes. Therefore, any risk management steps from ISO 31000 guidelines that does not appear in the risk management process by previous studies is added. The output of this objective is the risk management process developed by this thesis for micro business owners as presented in Figure 4.2.

RO3: To evaluate the practical usability of the risk management process for micro business.

As suggested by Lalonde & Boiral (2012), risk management should be a practice-based approach, a strategy that managers do, not a strategy that managers have. Hence, the thesis will collect real-life experiences from respondents through interviews

(Onu & Mbohwa, 2019). Therefore, Research Objective 3 is taken to ensure the risk management process can be used by micro business owners.

This thesis uses formative evaluation method. Formative evaluation method is an evaluation to provide feedbacks to people trying to improve something (Md. Sum, 2015). Particularly, this thesis will use utilisation-focused evaluation (UFE) approach developed by Patton in 1978 (Patton, 1997). The details on UFE are explained in the following sub-section.

This thesis uses UFE approach to evaluate how useful the risk management process developed for micro business is to the intended users, which are micro business owners. The data collected form stage 2 are analysed through criteria set up for the whole evaluation and each risk management process. The respondents are asked whether they understand the purpose of evaluation. The purpose of the evaluation is to propose a practical and easy-to-use risk management process for micro business owners which they can use without help from risk advisors or consultants. For each step of risk management process, the respondents are asked questions to identify whether they fulfil the evaluation criteria for each risk management step. For example, for Step 3 – Risk analysis, the respondents must be able to score the risk likelihood and risk impact according to the given risk assessment scale of 1 to 5. Then, any comments and questions from respondents are identified. Any risk management steps and explanations of the steps that raise questions and comments from respondents are modified.

3.6 Utilisation-Focused Evaluation

UFE is used where the primary criterion by which a program or product is judged by the intended use of the program by the intended users (Patton, 1997). In simple words, utilization-focused evaluation (UFE) is done to evaluate how useful a model or program to the primary intended users. In this thesis, the intended users are the owners and managers of micro businesses. UFE is a guiding framework, as opposed to methodology, and people and context dependent (Ramírez & Brodhead, 2013). UFE can be used for a formative or summative evaluation; qualitative, quantitative, or mixed data; naturalistic or experimental research design; and processes, outcomes, effects, or cost-benefit evaluation focus (Patton, 1997).

There are four items that need to be clarified to conduct UFE that are: (i) the purpose of evaluation, (ii) the evaluation criteria, (iii) the evaluation method and (iv) the evaluation timeline (Patton, 2020; Ramírez & Brodhead, 2013). The purpose of evaluation could be to improve, terminate or to find strengths and limitation of a program. The evaluation criteria and method are the criteria and methodology to evaluate and judge the program. The methodology used can be quantitative such as historical data, or qualitative like interviews or questionnaires.

Certain indicators are set up to identify whether the business understands the risk management process and can manage risks using the steps and processes given. Dvorsky et al. (2020) highlighted indicators such as the respondents' ability to understand the most important aspect of financial risk, and the respondents' ability to effectively manage financial risk do not form financial risk in a business. Therefore, the ability of respondents to identify and manage a risk is the most important aspect of the risk management process. In addition, the ability to understand each step given is important to evaluate the practical usability of the risk management process.

3.7 Evaluating the Practical Usability of Risk Management Process Developed for SMEs

This third objective of the thesis is to evaluate the practical usability of the risk management process. It is to answer the research question of how practical and easy to use the SME risk management process in micro businesses is. There are four items that are to be clarified for the intended users to conduct utilisation-focused evaluation. The items are: (i) the purpose of evaluation, (ii) the evaluation criteria, (iii) the evaluation method and (iv) the evaluation timeline (Patton, 2020; Ramírez & Brodhead, 2013). The purpose of the evaluation and the evaluation criteria are explained in detail as following:

(i) The Purpose of Evaluation

The purpose of conducting the evaluation of the risk management process for micro business is to answer the following questions:

- Is the process practical and easy to be applied?
- Can business owners use the risk management process without help from a risk advisor or consultant?

(ii) The Evaluation Criteria

The thesis focuses to develop a risk management process for micro business which is to be used by micro business owners. The aim is so micro business owners can apply the risk management steps without help from risk consultant and advisors. Therefore, a criterion is set for every step of the risk management process for micro businesses.

i) Establish the business context.

- Respondent understands the background and objective of their business.
- Respondent knows who the stakeholders of their business are.

- Respondent understands the process of making their business products or services.
- Respondent knows their business capacity and available resources.

ii) Risk identification

- Respondent can identify the problems and issues faced by their business.
- Respondent can identify how the problems and issues impact their business.
- Respondent can identify how to overcome their problems and issues.
- Respondent can translate the problems and issues to risks.
- Respondent can translate the impacts of the problems and issues to risk impacts.
- Respondent can translate the methods to overcome the problems and issues to risk mitigation methods.

iii) Risk analysis

- Respondent can score the risk likelihood and risk impact according to the given risk assessment scale of 1 to 5.
- Respondent can calculate the risk score by multiplying the scores for risk likelihood and risk impact.

iv) Risk evaluation

- Respondent can map the scored risks into the modified risk matrix.

v) Risk response planning

- Respondent can decide risk mitigation plans and actions within the business' capacity.

- For the risks that have no mitigation plans yet, respondent can plan risk response with the guidance of the risk response quadrant according to the risk scores.

vi) Monitoring and review

- Respondent can monitor any changes in risk levels or risk scores.
- Respondent can identify whether the risk mitigation actions reduce the likelihood of the risks, or impact of the risks, or both likelihood and impact of the risks.
- Respondent can find alternatives if the risk mitigation actions does not reduce, or even increase the likelihood of the risks or impact of the risks, or both.
- Respondent can set a schedule to periodically review the risk treatments placed on each risk.
- Respondent can continue the risk management process cycle to ensure no new risks are left out, and existing risks are well attended.