The Impact of Recycling Practices in Food and Beverage Industry Towards Young Entrepreneurs Business Performances

SRI VASHNAVI A/P SURESH

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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SRI VASHNAVI A/P SURESH

This thesis is submitted in partial fulfilment of the requirements for the award of Bachelor of Technopreneurship with Honours

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I hereby acknowledge that this project paper has been accepted as part of fulfilment for the degree of Bachelor of Technopreneurship (Hons)

SIGNATURE : 

NAME OF SUPERVISOR : DR NOR AZAH BINTI ABDUL AZIZ

DATE : 22 JANUARY 2023

SIGNATURE : 

NAME OF PANEL : ASSOC.PROF DR. JUHAINI BINTI JABAR

DATE : 22 JANUARY 2023

DECLARATION OF ORIGINAL WORK

I hereby declare that all the work of this thesis entitled “The Impact of Recycling Practices in Food and Beverage Industry Towards Young Entrepreneurs Business Performances” is original done by myself and no portion of the work encompassed in this research project proposal has been submitted in support of any application for any other degree or qualification of this or any other institute or university of learning.

SIGNATURE : 

NAME : SRI VASHNAVI A/P SURESH

DATE : 22 JANUARY 2023

DEDICATION

I would like to appreciate the dedication of my beloved family members who educated me and motive me to learn until degree level. And also, I express a deep sense of gratitude to my lecturer whom also my supervisor for my final year project, Dr Nor Azah Binti Abdul Aziz and my fellow friends. They have provided me fully support and advice throughout this research. Without their blessing and encouragement, this research is impossible to complete within short period of time.

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ABSTRACT

Malaysia generates a lot of food waste, which might eventually cause major issues. It is recommended that relevant institutions or authorities concentrate more on developing food waste reduction and recycling programmes since food waste is both biodegradable and recyclable. The food and beverage industry faces a significant challenge in reducing food waste. In spite of its importance to the global food industry, recycling practices have received little attention. This paper finds some of factors of recycling practices that impact young entrepreneur's business core value. The point of this exploration is because young entrepreneurs have less knowledge on recycling practices. Hence, it is fascinating to focus the study on the impact of recycling practices in food and beverage industry towards young entrepreneur's business performances. The recycling practices are composting, anaerobic digestion, animal feeding and food packaging. The study adopts a quantitative approach whereby a questionnaire survey was used to gather data. The questionnaires were distributed to sample selected using data by the Department of Statistics, Malaysia. The examination was completed using a Pearson connection to assess the relationship between free components and variables. The relapse inquiry was used to evaluate theories. Consequently, this examination paper could be beneficial for business professionals and an academician would be substituted as a future reference.

Keywords: Composting, Anaerobic digestion, Animal feeding, Food packaging, Young entrepreneurs, Business performances

ABSTRAK

Malaysia menjana banyak sisa makanan, yang akhirnya boleh menyebabkan isu besar. Adalah disyorkan agar institusi atau pihak berkuasa yang berkaitan menumpukan lebih pada pembangunan program pengurangan dan kitar semula sisa makanan kerana sisa makanan boleh terbiodegradasi dan boleh dikitar semula. Industri makanan dan minuman menghadapi cabaran besar dalam mengurangkan sisa makanan. Di sebalik kepentingannya kepada industri makanan global, amalan kitar semula kurang mendapat perhatian. Kertas kerja ini menemui beberapa faktor amalan kitar semula yang memberi kesan kepada nilai teras perniagaan usahawan muda. Tujuan penerokaan ini adalah kerana usahawan muda kurang pengetahuan tentang amalan kitar semula. Oleh itu, adalah menarik untuk memfokuskan kajian mengenai kesan amalan kitar semula dalam industri makanan dan minuman terhadap prestasi perniagaan usahawan muda. Amalan kitar semula ialah pengkomposan, penghadaman anaerobik, pemakanan haiwan dan pembungkusan makanan. Kajian ini menggunakan pendekatan kuantitatif di mana tinjauan soal selidik digunakan untuk mengumpul data. Soal selidik telah diedarkan kepada sampel yang dipilih menggunakan data oleh Jabatan Perangkaan Malaysia. Peperiksaan telah diselesaikan menggunakan sambungan Pearson untuk menilai hubungan antara komponen bebas dan pembolehubah. Siasatan berulang digunakan untuk menilai teori. Oleh itu, kertas peperiksaan ini boleh memberi manfaat kepada profesional perniagaan dan ahli akademik akan digantikan sebagai rujukan masa depan.

Kata kunci: Pengkomposan, Pencernaan anaerobik, Makanan haiwan, Pembungkusan makanan, Usahawan muda, Prestasi perniagaan

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LIST OF SYMBOLS

$\bar{x}$	Sample mean
N	Number of Item
σ	Standard Deviation (S.D.)
c	Length of Class Interval
X^2	Squares of The Deviations of Scores from the Assumed Mean
f	Frequency of Class Interval
c^2	Square of Correction
N	Total Number of Score
v	Average Variance
X_i	The *i*th Independent Variable

LIST OF ABBREVIATIONS

F&B Industry	Food and Beverages Industry

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter will discuss about the background of the research regarding the impact of recycling practices in food and beverage industry towards young entrepreneur's business performances. The background of study, problem statement, research questions, research objectives, scope and limitation of the study, significant of study and summary would be discussed in this chapter.

1.2 Background of Study

Recently, the problem of proper management of trash disposal has attracted a great deal of attention across almost all of Malaysia's states. The amount of materials that are being thrown away is being condemned by opinion leaders as being environmentally and ethically irresponsible, and lawmakers are struggling to find solutions that are sustainable. As a result, pressure is mounting on the manufacturers and packagers of consumer goods to reduce the amount of refuse that is produced. In the midst of these shifting conditions, some laws that make waste management a national problem were recently passed in Malaysia, and many other countries have similar laws on their agendas. (Innocent A. Jereme, 2015)

According to Innocent A. Jereme he stated that recycling, on the other hand, refers to the composting and regeneration of materials for their original or additional purposes. As a result, recycling should be viewed as a means of reducing the environmental impact of both raw material production and waste disposal. In most industrialised nations, recycling has evolved to signify the widespread collection and reuse of numerous objects such as newspapers and

beverage bottles. They are gathered and divided into common sorts so that the raw materials from these goods can be reused to make new products.

Moreover, the young entrepreneurs value the recycling practices in their business and eager to have it as business core value. These people have less knowledge of recycling practices and wish to improve their business performances. Hence, it is fascinating to focus the study on The Impact of Recycling Practices in Food and Beverage Industry Towards Young Entrepreneurs Business Performances. Furthermore, any small actions performed by the young entrepreneur to implement recycling practices can bring positive impact to the overall food & beverage industry.

The food and beverage industry faces a significant challenge in reducing food waste. In spite of its importance to the global food industry, recycling practices have received little attention. Therefore, this research would help to find out the ways to reduce the food waste by adopting recycle practices. Thus, the aim of this research is to investigate the impact of recycling practices towards young entrepreneur's performance and also aim to identify type of recycling practices implemented for food and beverage industry to reduce food waste.

1.3 Problem Statement

Malaysia has a high rate of food waste generation, which could become a serious problem in the future. Given that food waste is both biodegradable and recyclable, it is suggested that relevant institutions or authorities focus more on implementing food waste reduction and recycling programmes. (Lim, W. J.,2016).

According to Ramdzan et al in 2018, food and beverages are regarded a basic necessity by Malaysians, accounting for more than half of all daily consumer purchases. According to the Department of Statistics' Household Expenditure Survey Report (2019), this amount is divided into two categories: the first is non-alcoholic food and beverages such as fresh vegetables, fish, and raw meat, and the second is cooked food in restaurants that is ready to eat by customers. Food wastes are the most common waste component in Malaysia, accounting for 32 percent of total garbage, followed by paper and plastics, which account for 21 percent and 14 percent of total waste, respectively. Due to the rise in food waste in Malaysia, the food and beverage industry must apply a number of measures in order for young entrepreneurs to improve their performance.

Furthermore, due to the living nature of humans, food waste is discarded on a regular basis through agricultural, industrial, and home operations. Food losses, i.e. food materials lost during the preparation, processing, and production phases of the food supply chain, unavoidable food waste, i.e. inedible parts of food materials lost during the consumption phase (pineapple peel, fruit core, etc), and avoidable food waste, i.e. edible food materials lost during the consumption phase (pineapple peel, fruit core, etc), and avoidable food waste, i.e. edible food materials lost during the consumption phase (surplus and wastage). (Thi and colleagues, 2015).

In addition, the landfill and incinerator are the most prevalent techniques for disposing of food waste. Landfilling is a common and widely accepted method for disposing of food waste since it is cost-effective and easy to implement. However, because many landfills in Malaysia have reached capacity, food waste disposal via landfill has grown more problematic. Moh and Manaf (Moh and Manaf, 2014). Incineration, on the other hand, is expensive and requires a lot of energy and technology. Because it pollutes the air, the incineration process is rarely used to treat food waste (Zhang et al., 2014). Both of these strategies are unsustainable in terms of food waste management because they have major environmental consequences. As a result, cost-effective and environmentally acceptable recycling processes and management systems are required.

In the future years, food waste creation is predicted to skyrocket, while landfill space is in short supply. In 2018, Malaysia had just 146 operational landfills, with only 18 of them being classed as sanitary landfills (SWCorp, 2019; Moh and Abd Manaf, 2017). The world's concern for a better environment has grown as a result of bad agriculture sector production management, which has resulted in negative changes to the ecosystem and a decline in human well-being. 2021) (Zain & Rahman). Because food waste has greater negative effects on the food and industry sector as well as the environment, we should introduce recycling measures in the food and beverage business to assist reduce food waste. As a result, the difficulties in this study include that many young entrepreneurs are still unaware of how to handle food waste in the food and beverage business, and that implementing recycling techniques would have an impact on their performance.

1.4 Research Questions

The researcher determined three research questions in this study:

i. What are the recycling practices towards young entrepreneur's business performances?
ii. How the recycling practices impact the young entrepreneur's business performances?
iii. What are the most influencing recycling practices towards young entrepreneur's business performances?

1.5 Research Objectives

In this research, there are three research objectives to be figured out:

i. To examine the recycling practices toward young entrepreneur's business performances.
ii. To investigate how the recycling practices, impact the young entrepreneur's business performances.
iii. To evaluate the most influencing recycling practices towards young entrepreneur's business performances.

1.6 Scope and Limitation of the Study

This research paper is focusing on the impact of recycling practices in food and beverage industry towards young entrepreneur's business performances. This study had conducted among 384 respondents from all states of Malaysia. In order to collect data, questionnaires are distributed to respondents.

Researchers chose the respondents at random, so the data is inaccurate because they were unreliable. The research may not have covered all states in Malaysia. Also, the researcher had a time limit for conducting the research. There were time constraints, as the study had to be completed in a short period of time 10 months.

1.7 Operational Definition

Factors	Definition
Composting	controlled conversion of degradable organic products and wastes into stable products with the aid of microorganisms (Lasaridi et.al , 2018)
Anaerobic Digestion	natural biochemical process that converts organic materials into combustible biogas (Uddin & Wright, 2022)
Animal Feeding	Utilizing food loss and waste in animal diets to be used as food for animals (Dou, Toth & Westendorf, 2018)
Food Packaging	products containment, protection, preservation, convenience, toprovide information about the product, brand communication, among others. (Coles.R, 2003)
Young Entrepreneurs	the capacity or willingness of young personnel to create a business venture, taking on financial risks to make a profit. (Liñán, 2004)
Business Performances	the operational ability to satisfy the desires of the company's major shareholders" (Smith& Reece, 1999, p. 153)

Table 1.1: Operational definition

1.8 Significant of Study

The findings of the study benefited young entrepreneur's business performances in food and beverages industry. They also understand the impact of recycling practices towards the young entrepreneur's business performances. In addition, can learn about what are the most influencing recycling practices towards young entrepreneurs through this research. Moreover, the study adds to existing knowledge that already exists about impact of recycling practices in food & beverage industries and how they can affect the business performance of young entrepreneurs in Malaysia through empirical literature sources.

1.9 Summary

In this chapter, the first section described about recycling practices in food and beverages industry and their impact on young entrepreneur's business performance. The statement of problem was dealt with the measurement of recycling practices and impact on young entrepreneur's business performance that has not been fully explored. There are four objectives in this research and fully described the significance of study, scope of study and limitation of study**.** The researcher conducts the study's literature review in the following chapter. The information is more comprehensive and understandable.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter will act as the basis for the development of the research. It will literature on the impact of recycling practices in food and beverage industry towards young entrepreneur's business performances to illustrating about young entrepreneurs, young entrepreneur's performance, theory of recycling practices, reason to adopt the recycling practices, benefits of recycling practices and independent variables included composting, effective packaging, animal feeding and anaerobic digestion. In addition, this chapter will explain the development of this hypothesis with each independent variable. The research will illustrate theoretical framework which will shows the relationship between the variables. The final section will summarize all of this chapter.

2.1 Malaysia's Food and Beverage Industry

The food and beverage industry plays an important role and contributes significantly to Malaysia's economy. In 2018, the Malaysian food and beverage business was estimated to be worth approximately €22.12 billion, with annual growth of 7.6 percent (Flanders Investment & Trade, 2020). Malaysia's food and beverage (F&B) business is diversified, offering a wide variety of dishes for Asian palates, dietary needs, and western recipes. The F&B industry includes a variety of establishments, including full-service restaurants, street stalls/kiosks, fast-food cafés/bars, and self-service cafeterias. This industry is dominated by small and medium-sized businesses (Italian Trade Agency, 2017).

Malaysia's food and beverage market are not constrained by its domestic agricultural output. Malaysia's food processing industry is estimated to account for more than one-tenth of its manufacturing output (European Commission, 2018). According to the Malaysian Investment Development Authority (2019), processed food exports have contributed around RM21.76 billion to more than 200 nations.

Moreover, Quoquab et al. (2019) reported that the demand for fast food among Malaysians is increasing, whether for American franchised meals like KFC, Pizza Hut, and McD or for local fast-food franchises like Secret Recipe, Hot & Roll, and Manhattan Fish Market. Also increasing is the demand for organic, natural, and fresh foods (LNG, 2019). Hassan et al. (2015) and See & Shaheen (2012), for instance, reported that the demand for organic food consumption in Malaysia has increased greatly due to numerous factors, such as the food's affordability and the customers' acceptance and knowledge. The expansion of Malaysia's food and beverage (F&B) industry is mostly influenced by consumers' ever-changing preferences.

Last but not least, increasing meal delivery apps such as Grab Food, Food Panda, Delivereat, and Dahmakan contribute to the rising demand for food and increase consumer accessibility, hence contributing to the F&B industry's rapid expansion. It also caused an increase in the number of eateries and fast-food businesses throughout the nation. (Maizaitulaidawati Md Husin, 2021)

2.2 Recycling Practices Implementation

Composting, anaerobic digestion, and animal feeding are some of the more popular and environmentally friendly food waste disposal methods. These are some sustainable food waste management alternatives that could be implemented in Malaysia in the future instead of incineration or landfilling, both of which have negative environmental consequences (Thi et al., 2015).

The most preferred method of recycling food waste is conversion to animal feed or industrial products, followed by composting, and finally conversion to energy (through incineration or anaerobic digestion). Composted food waste from the food service industry appears to convert to high-quality fertiliser, according to evidence. Recycling is less expensive and less harmful to the environment than disposal. Both the volume of garbage created and the manner of disposal determine the cost of waste management. In theory, recycling food waste can lower waste management costs by reducing the volume of garbage sent to landfill. (Ellen Fogarty,2021)

Recycling is beneficial for the environment because it minimises the quantity of garbage transported to landfills and the demand for fresh raw resources. Recycling is the third-best method for waste management, after reducing waste and reusing trash. This is due to the fact

that energy and resources are required to reprocess garbage before it can be reused. However, recycling is a viable alternative for many forms of commercial waste, and you should maximise the benefits that recycling waste can bring your company and the environment. Here are the recycling practices that should apply at company and environment.

2.2.1 Composting

Food waste composting is typically accomplished through two methods, the in-vessel system and the windrow system (Cekmecelioglu et al., 2005; Chikae et al., 2006; Kumar et al., 2010). In the in-vessel system, food waste is covered in a closed system for composting, such as a silo, drum, agitated bed, closed or batch container (Rudnik, 2008). This technology is a better composting system than the windrow system since it takes up less space and allows for better gas and leachate management (Cekmecelioglu et al., 2005). This technology also helps to reduces food waste retention time in the mesophilic and thermophilic phases (Cekmecelioglu et al., 2005). According to Kim et al. (2008), created a pilot size in-vessel system for food waste treatment and proposed approaches to improve the efficiency of this in-vessel system.

Moreover, the windrow system is generally time-consuming, with an average solid retention duration of more than 60 days, but it is the least expensive. There is a significant need for land for maturing and curing in the windrow system. The windrow composting is a mechanically-aerated outdoor composting device. Organic wastes are combined, piled, and turned with a compost turner. This system is the least advanced. Always the first choice when composting a large amount of organic wastes. Windrow composting requires more land and takes longer to mature. (Li Yee Lim,2017). To sum up, proposed practices has found that composting is important for the young entrepreneurs to implement in their food and beverages industry to enhance their business performance. If young entrepreneurs expect that implementing recycling practices in food and beverages will help in gaining competitive advantage and to ensuring sustainable consumption of their products in the market, they are more likely to adopt these practices.

2.2.2 Anaerobic digestion

According to (Zhang et al., 2014) Anaerobic digestion of food waste is a biological process that uses four primary processes to transform putrescible organic substrate into biogas: hydrolysis, acidogenesis, acetogenesis, and methanogenesis.

Anaerobic digestion has been used successfully for many years to stabilise organic solid waste from cities and make useful end products like methane gas and fertiliser. (Gabb and Gray, Donald M.D., 2008).

Donald M.D. Gray mention that anaerobic digestion is a common method for converting organic biomass (such as wastewater solids) into stable biomass. Biomass is transformed into methane gas, carbon dioxide, and water during the stabilisation process. Stabilization is assessed by a decrease in volatile solids as well as a decrease in faecal coliforms. Anaerobic refers to a process that occurs in the absence of oxygen. Bacterial interactions are complex throughout the stabilising process.

Hydrolysis is the first step in which extracellular enzymes change complex organics into simple organics that can be dissolved in water. Carbohydrates, proteins, and lipids are all examples of complex organics. Glucose, amino acids, and fatty acids are all examples of soluble organics. Then, acid-making bacteria, called acetogens, change soluble organics into volatile fatty acids through a process called acetogenesis. The end result is acetic acid. The next phase is methanogenesis, which converts volatile fatty acids to methane and carbon dioxide. (Donald M.D. Gray (Gabb), 2008). So, from this we can concluded that this anaerobic digestion represents a best practice for food waste in food and beverages industry. As a result, young entrepreneurs who use anaerobic digestion in their firm would have a positive impact on their business by decreasing food waste, as well as lowering energy expenses owing to on-site power generation and tipping fees for collecting food waste.

2.2.3 Animal feeding

Animal feeding practices is play's an important role in food waste. Excess food waste can also be recycled into animal feed, which is beneficial to food businesses such as grocery stores, restaurants, bakeries, and university dining halls. Many bakeries currently offer defective baked items for use as animal feed. Besides, food waste conversion into animal feed benefits the environment by lowering methane emissions. In an ideal world, at least some of the food waste from businesses should have to be used to feed animals. People who raise animals and use recycled feed should get tax breaks. These include tax breaks and tax deductions for recycling equipment. These kinds of tax breaks could be used to help companies that recycle food scraps and producers of animal feed (Samantha Alpert, 2014).

Furthermore, only bones from deceased animals and egg shells can be used to feed cattle in Malaysia, according to the FEED Law (Act 698) (Law of Malaysia, 2009). This is done more

often than harvesting other food waste. Most of the food waste that goes into animal feed comes from bone meal, eggshells, and seashells, which are good sources of calcium, phosphorus, and more (Lim, W. J.,2016). According to Maeda, 2008, p. 1. Yakou also mention that people tend to like his pork better because the feed makes the fat sweeter. He also had said that his hens lay more eggs when they eat recycled feed than when they eat regular feed. Not only does he recycle food waste, but his company actually makes profit, and not simply because of the money saved by not having to remove food waste. To summarise, proposed techniques have discovered that animal feeding is vital for young entrepreneurs to use in their food and beverage industry to improve business productivity and profitability.

2.2.4 Food packaging

According to Marsh, K. and Bugusu, B, any assessment of the environmental impact of food packaging must reflect the positive advantages of reduced food waste throughout the supply chain. Many countries have reported significant food waste, ranging from 25% for food grains to 50% for fruits and vegetables (FAO 1989). Food waste has been linked to poor preservation/protection, storage, and transportation. Packaging minimizes total waste by increasing the shelf-life of foods and thereby extending their usability.

Obersteiner, G. (2021) define Food packaging was intended to contain food products, protect food quality, and notify consumers about the enclosed product's attributes. According to a study, these basic functions are frequently stated as follows:

Protection - to keep the product from leaking or breaking, and to keep it safe from potential contaminants.

Communication - to convey critical information about the contained food product and its nutritional value, as well as to provide cooking methods.

Convenience - to make it easier for customers, such as allowing them to reheat the included meal in a microwave.

Containment - - to provide enclosure in order to facilitate transport and handling.

To summarise, the purpose of food packaging is to hold food in a cost-effective manner that meets industry needs and consumer expectations, preserves food safety, and reduces environmental impact. Packaging should also be developed to optimise the product's logistical and productive efficiency. The impact of package design on activities such as supplying, packing, processing, storing, and transporting could be considered. (Obersteiner, G.,2021)

As a result, packaging reduces waste across the supply chain. The use of specifically optimised packaging technologies that provide a high level of protection and actively enhance shelf life is an important aspect of preventing the premature spoilage of a variety of different food product groupings. Despite widely held critical opinions on the excessive use of plastic in all aspects of life, increased adoption of innovative, active, and intelligent food packaging technologies should be encouraged. Food waste could be minimised by improving packaging functions, which could help to efforts to fulfil the sustainable development target SDG 12.3. It is unclear whether optimal packaging materials will reduce environmental impacts by minimising food waste. (Obersteiner, G.,2021)

Therefore, food packaging also a best practice that young entrepreneurs should implement and practice in their food and beverage business. So, it can be more protective, convenience, and prevent the product from leaking or breaking, and to protect it from possible contaminants. This would increase customer loyalty and compliments so this would increase reputation of the industry.

2.3 Young Entrepreneurs in Malaysia

According to the Institute of Youth Research Malaysia (IYRS), the number of Malaysian youths aged 15 to 30 in 2014 was 9.1 million, or 30 percent of the total population. There is a significant demand among youth to become entrepreneurs. Based on the United Nations, youth consists of young people between the ages of 15 and 24. Nonetheless, according to a research by, youth in Malaysia consists of persons aged 15 to 40. This is comparable to the criteria established by the Malaysian Youth Council in 2007, in which young individuals aged 15 and older, but not older than 40, shall be considered youths. At this age, they are intellectually mature, tolerant, and highly competitive. In addition, entrepreneurial experts have determined that a successful entrepreneur possesses personality, socio-cultural, and business activity diversity, as well as a strong desire to grow their business. This characteristic is owned not only by adult entrepreneurs, but also by young entrepreneurs. In other words, these features distinguish whether a youngster is an entrepreneur or not. (Ridzwan, R, 2017)

In addition, the majority of research indicate that young people are now more interested in entering the retail and commerce industries than the agriculture industry. Ministry of Youth and Sports Malaysia and The Institute of Youth Development Research Malaysia (Institute

Penyelidikan Pembangunan Belia Malaysia/IPPBM) provide a variety of programmes, training, research, and other activities connected to young entrepreneurs.

Moreover, based on the Ninth Malaysia Plan for 2006 to 2010, the government has also established an entrepreneurial programme with the aim of identifying talents among school- and university-level entrepreneurs. According to, "RM5.4 billion has been given by the government under the Ninth Malaysia Plan (RMK9) for youth development through various young skills training and leadership." As a continuation of the earlier Malaysia Plan, the 2014 budget continues to place a strong emphasis on fostering entrepreneurship in a variety of ways, including by investing extensively, fostering innovation, and developing more entrepreneurs. Among the initiatives was the development of the Malaysian Global Innovation and Creative Centre (MaGIC), a one-stop centre designed to foster entrepreneurship and assist creative multimedia firms. To push innovation in Malaysia to the next level, Yayasan Innovasi Malaysia (YIM) is focusing on mainstreaming a new culture of innovation among SMEs, NGOs, and communities. Thus, Gathering of Rising Entrepreneurs Act Together (GREAT) was also launched by the Malaysian Prime Minister, Datuk Seri Najib Tun Razak. GREAT is a forum for budding entrepreneurs to network with existing entrepreneurs and possible investors.

In addition, it was emphasised that the success of young entrepreneurs is crucial to the growth of the national economy. This is because the younger generation is a valuable asset that contributes to the industrial growth of a country. Young generations can be a good source of entrepreneurs to implement changes in our economy provided they possess characteristics such as an open mind, a willingness to take risks, and a high degree of initiative. Based on the challenges faced by youth entrepreneurs, it is crucial that this study explore and investigate what and how recycling practices in food and beverages industry help them achieve successful in their business.

2.4 Performance of Young Entrepreneurs

The return on investment (profit), return on assets (ROAs), net sales, net income, and the present value of the firm can be used to explain business performance. Moreover, nonfinancial factors of success are concerned with market survival (competition), such as the number of new employees, new stores opened, and new items offered (Blythe, 1992). According to Organization Development of Canada, BDC (2015), performance will also be monitored using efficiency ratios, which provide further insight into areas of your business such as collections,

cash flow, and operational performance. On the other hand, according to GE Capital, America (2015), the strategic planning team measured performance to set more detailed execution targets.

An example of a one-year target could be to increase annual sales growth from 3 percent to 5 percent. The strategic planning team would derive more detailed execution objectives from this objective. In order to promote the company's overall sales growth, one division's target for the upcoming year could be to increase sales by 6 percent. According to Randoy and Goel (2003), based on their observations of several small and medium-sized businesses from 1996 to 1998, the effect of the entrepreneur on company performance is both positive and significant, implying that better monitoring by the managers will increase the value of the shareholders. (Khan, S. J. M, 2016)

Youth are a resource with enormous potential that may be developed by fostering youth entrepreneurship. Definition of Youth Entrepreneurship demonstrates their capability where the practical application of enterprising qualities such as initiative, innovation, creativity, and risk-taking into the work environment (either self-employment or employment in small start-up firms), utilising the requisite skills for success in that environment and culture. These characteristics are essential for competitiveness because new entrepreneurial efforts boost productivity, heighten competitive pressure, and foster innovation. Small and Medium Enterprise (SMEs) programmes have enabled Malaysia to foster entrepreneurship among young people. Small and Medium Enterprises (SMEs) in Malaysia contribute significantly to the nation's growth. (Shazida Jan Mohd Khan,2016)

2.5 Theoretical background

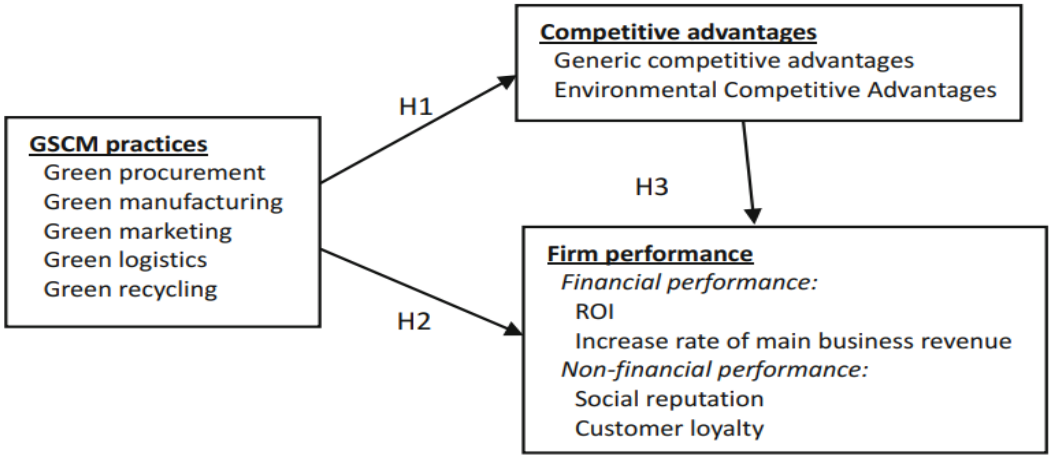

Figure 2.1:Potter's theory of competitive advantage (1985)

According to Prahalad and Hamel, a company's competitive advantage stems from its core competence, and changes in core competence lead to variations in efficiency and profitability.

According to Potter's (1985) theory of competitive advantage, enterprises primarily obtain in two methods, competitive advantage is achieved. The first is the cost-driving approach, which accounts for a major amount of an organization's total costs. If businesses effectively manage cost drivers, they can get a cost advantage over rivals. The second step is to restructure the value chain, which entails modifying the relative cost of company status. Firms can use more effective methods of developing, manufacturing, distributing, and selling their products, which entails reconstructing the value chain to achieve cost advantages. The deployment of GSCM will strengthen organisations' core competencies and bring about related cost, innovation, and environmental impact benefits. In addition, competitive advantages have an impact on corporate performance, which is also the theoretical foundation of this study.

2.6 Research Framework

In this research, factors are the independent variables while impact of recycling practices in food and beverages industry as the dependent variable.

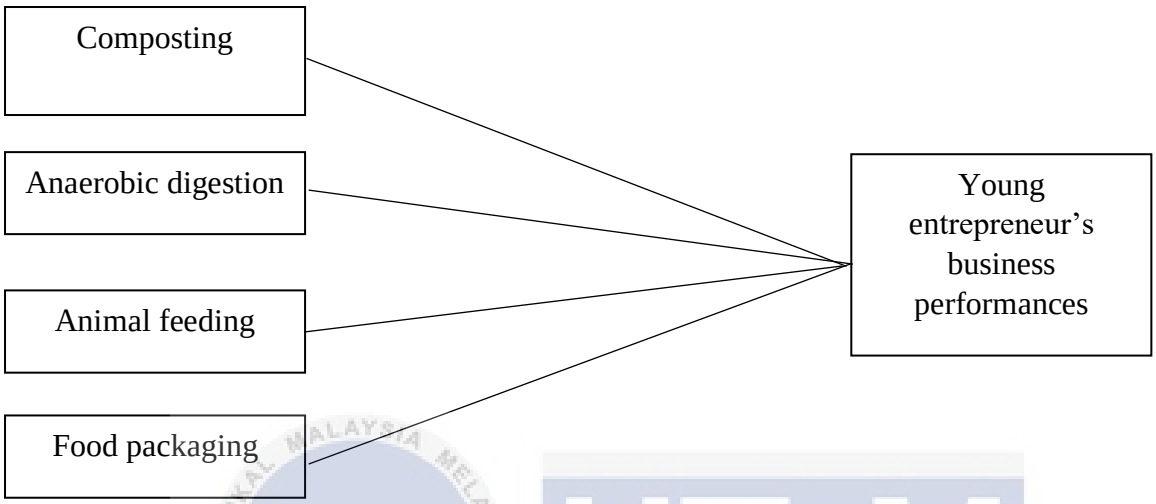

Figure 2.2: Research framework

2.7 Hypothesis Testing

There are a number of hypotheses that could be generated according to the proposed research framework as shown above. The hypotheses were as follows:

H0: There is no significant positive relationship between composting practices towards young entrepreneur's business performance.

H1: There is a significant positive relationship between composting practices and young entrepreneur's business performance.

H0: There is no significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance.

H2: There is a significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance.

H0: There is no significant positive relationship between animal feeding practices and young entrepreneur’s business performance.

H3: There is a significant positive relationship between animal feeding practices and young entrepreneur’s business performance.

H0: There is no significant positive relationship between food packaging practices and young entrepreneur’s business performance.

H4: There is a significant positive relationship between food packaging practices and young entrepreneur’s business performance.

CHAPTER 3

METHODOLOGY

3.1 Introduction

In this chapter, the researcher will cover the methods used to gather data and information for this study. The explanatory research design is initially developed to explain the link between the variables. The quantitative method is chosen in terms of methodology. The data came from both primary and secondary sources. The subsequent aspects to be discussed are study site, research plan, time horizon, reliability and validity, and method of data analysis. Using these research technique procedures, the outcomes of this study can be analysed and comprehended more effectively.

3.2 Research Design

The research design is the researcher's general strategy for answering the research questions. It includes the objectives that are developed from the study questions. In addition, it describes the sources from which the researcher intends to collect data, as well as the methods by which the data has been collected and analysed. Next, research design addresses the ethical difficulties and limitations the researcher will invariably face, such as access to data, time, location, and money (Saunders et.al, 2016).

There are a variety of research project types, including exploratory, descriptive, explanatory, evaluative, or a combination of these. An exploratory investigation is conducted to explain a problem, topic, or phenomena. The objective of descriptive research is to develop an accurate profile of events, individuals, or situations. The purpose of an explanatory study is to investigate a scenario or issue in order to explain the relationships between variables. An evaluation is conducted to examine the efficiency of a commercial or organisational strategy, policy, initiative, or procedure.

The researcher selected the explanatory study since it corresponds to the character of this investigation. As previously noted by the researcher, an explanatory study focuses on the relationships between variables. The researchers were going to find out what recycling practices are implemented into food and beverages industry and how its impacts the young entrepreneur's business performance in Malaysia.

3.3 Measurement Development

The order of the questions is crucial. The development of measurement will enable open, accurate, and dependable responses to the goals, questions, and hypotheses of study. When conceptualising this objective, it is important to take into account three different aspects: instruction, demographics, and question writing. At the beginning of the survey instrument, general instructions must be presented.

Most of the time, researchers' descriptions of their studies are limited to a few pages. Then, the researcher should include detailed instructions in each questionnaire section. Additionally, the researcher in demography needs to comprehend how the views and behaviours of various groups of individuals vary. In this study, factors including age, gender, educational level, and others were taken into account. Additionally, make sure the respondents are familiar with the vocabulary. The areas of this study are respondent demographics, respondent profile, composting, anaerobic digestion, animal feeding and food packaging. A five-point scale with the options strongly disagree, disagree, neutral, agree and strongly disagree is applied at each stage.

The question divided into two (2) main parts, the first of which will cover the demographics of the respondent and the second of which will cover the specifics of the study. The entire survey will take roughly 10 minutes to complete. For each question in this question, respondents may only choose one answer. In order to express their agreement with particular questions, respondents were given questionnaires with answer options ranging from strongly disagree to strongly agree on a Likert scale with a score of 1 to 5. The scale measurement survey questions are listed in Table 3.1.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Table 3.1: The scale measurement survey question

3.4 Measurement of Variables and Construct

The variables and constructs in this questionnaire are measured. The table below lists the questionnaire's items along with the appropriate responses available for the respondents.

Constructs	**Original Measurement**	**Sources of Measurement**	**Measurement Items Adopted and Adapted for this study**
COMPOSTING	1. I have the intention to compost kitchen waste/food waste.	Rastegari Kopaei, H.; Nooripoor, M.; Karami, A.; Petrescu-Mag, R.M.; Petrescu, D.C (2021)	1.I have the intention to compost kitchen waste/food waste.
	2. I know what items can be composted among my food waste.		2.I know what items can be composted among my food waste.
	3. Many of my friends find food waste composting is useful.		3. Many of my friends find food waste composting is useful and good way.
	4. I believe composting can increase business performances.		4. I believe composting can increase business performances.
	5.I think we have the technology to implement this method.		5.I think we have the technology to implement this method in Malaysia F&B Industry.

Table 3.4.1: Items for composting (Independent Variable)

Constructs	Original Measurement	Sources of Measurement	Measurement Items Adopted and Adapted for this study
ANAEROBIC DIGESTION	1.anaerobic digestion renewable energy technology	O'connor, S., Ehimen, E., Pillai, S. C., Power, N., Lyons, G. A., & Bartlett, J. (2021). Lin, C., Wu, E. M. Y., Lee, C. N., & Kuo, S. L. (2011). Lucia Varga1 , Ioana Ionel2 , Gheorghe Zaman3 , Emilia Dunca4 , and Ramon Mihai Balogh5 (2021)	1. I understand that anaerobic digestion is a renewable energy technology that manages organic waste.
	2.Additional source of revenue		2.I find anaerobic digestion can lowering greenhouse gas emission.
	3.Lowering green house gas emission.		3.I know this anaerobic digestion will earn additional source of revenue.
	4.Easy to control the odor problems.		4. I find this would be an easy way to control odors problems.
	5. Anaerobic digestion is the technology of recovery of biowaste considered the best and environmentally friendly		5. In my opinion, anaerobic digestion is the best and most environmentally friendly method for recovering biowaste.

Table 3.4.2: Items for anaerobic digestion (Independent Variable)

Constructs	Original Measurement	Sources of Measurement	Measurement Items Adopted and Adapted for this study
ANIMAL FEEDING	1. I have the intention to compost kitchen waste/food waste.	Rastegari Kopaei, (2021) Leib, E. B., Balkus, O., Rice, C., Maley, M., Taneja, R., Cheng, R., ... & Alvoid, T. (2016)	1.I have the intention to animal feeding kitchen waste /food waste.
	2. I know what items can be composted among my food waste.		2. I know what items can be animal feed among my food waste
	3. Business can save money in divert food scraps as animal feed.		3. I believe business can save money in diverting food scraps as animal feed.
	4. retailer donate food waste		4.I find retailers donate food waste to farmers as animal feed.

	5. gain sales growth	Truong, L., Morash, D., Liu, Y., & King, A. (2019). Ajay K. Garg, R.J.O. Joubert & ReneÂ Pellissier (2004)	5. In my opinion, this method can gain sales growth

Table 3.4.3: Items for animal feeding (Independent Variable)

Constructs	**Original Measurement**	**Sources of Measurement**	**Measurement Items Adopted and Adapted for this study**
FOOD PACKAGING	1. Does the optimized packaging influence the purchase decision?	Obersteiner, G. (2021)	1. I truly think that effective packaging influences purchase decisions.
	2.Does the consumer perceive the optimized packaging (positively or negatively)?		2.I found that consumers perceive the optimised packaging positively.
	3.Does the consumer use the optimized packaging correctly?		3. I believe the optimised package is being used correctly by the consumer.
	4.Is the food stored in such a way as to maximize shelf life?		4. I think food should be stored in a way that maximises expiry date.
	5.Is the product actually longer lasting under household conditions?		5. I believe the product lasts longer in a household conditions.

Table 3.4.4: Items for food packaging (Independent Variable)

Constructs	**Original Measurement**	**Sources of Measurement**	**Measurement Items Adopted and Adapted for this study**
YOUNG ENTREPRENEUR'S BUSINESS PERFORMANCES	1. I am willing to take the risk to start my own business	Manissha Lai, Nur Nailah Nisrina Binti Mohd Azlan, Asyherra Ainur Azwa Binti	1. I believe young entrepreneurs willing to take risk.
	2. net profits after taxes.		2.I believe these methods will increase net profits after taxes.

	3. Customer loyalty	Khas-Rin and Betrisia Parrow @ Robert (2021) Ajay K. Garg, R.J.O. Joubert & ReneÂ Pellissier (2004)	3.I believe the young entrepreneurs can earn the customer loyalty.
	4. Reputation of industry		4. I think solving food waste issues can increase reputation of the industry.
	5. To what extent are new ideas converted into viable business opportunities in your organisation?		5.I think these methods can pathway to new opportunities in the business.

Table 3.4.5: Items for young entrepreneurs' business performances (Dependent Variable)

3.5 Methodological Choices

There are quantitative, qualitative, and hybrid research design methodologies available. Quantitative method typically employs a questionnaire for data collection and graphs or statistics for data analysis. It generates or uses numerical data. The qualitative method employs interviews for data collecting and data categorization for data analysis, both of which generate or utilise non-numerical data.

The researcher employs quantitative methods to evaluate the relationship between the variables in this study. This method measures and analyses the independent variable and dependent variable using a variety of statistical and graphical tools. Typically, quantitative research employs a deductive method that focuses on utilising facts to test theory. This technique hypothesises well-formed theories by linking them to general principles and definitions via observable evidence (John Dudovskiy, 2010). As the radical association has already been established, the researcher will reaffirm whether it exists or not.

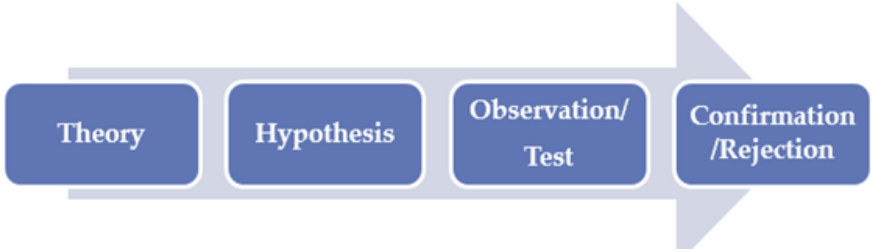

Figure 3.2: Deductive Approach by Dudovskiy, John

3.6 Primary and Secondary Data Sources

The primary data and secondary data were applied in this research. Primary data are the data obtained by the researcher through surveys, interviews, or experiments especially for the study's research concerns (Ghauri et al., 2020). The researcher provides responders with questionnaires. Respondents were needed to answer questions based on their characteristics (demographic), personality and way of life, awareness and knowledge, objectives, motives, and behaviours.

Secondary data are publicly accessible information collected by government agencies, market research firms, businesses, or other organisations or individuals (Ghauri et al., 2020). They are economical and efficient. The researcher gathered secondary data from websites and library databases in order to pick relevant journals, articles, reports, and newspapers as data sources for this study. In addition, the data came from books such as "Research Methods for Business Students" by Saunders, Lewis, and Thornhill.

3.7 Research Location

The researcher is going to conduct this study in every state of Malaysia. This is because youngsters are started to create their own business. The target audience consists of young entrepreneurs. The respondents are people between the ages of 15 and 30, and they have minimal knowledge of recycling practices.

3.8 Research Strategy

According to Saunders et al. (2016), a research strategy is a plan that outlines how a researcher would approach solving his or her research topic. Experiment, survey, archival and documentary research, case study, ethnography, action research, grounded theory, and narrative inquiry are some of the methodologies used. In this study, a survey method was chosen. Using the questionnaire in survey approach, it was simple to compare data from a large population. The researcher also decides on an archive or documentary research technique because these materials are easily accessible online.

3.8.1 Questionnaire Design

Typically, questionnaires are employed for descriptive or explanatory research (Saunders et al., 2016). Prior to quantitative analysis, it provides an effective method for collecting responses from a large sample size. The questionnaire was administered via the internet (an

online Google Form), regardless of whether respondents used a desktop or mobile device to respond.

In this investigation, the researcher utilised organised inquiry to conduct the research. The first component, section A, consists of demographic questions like age, gender, level of education, current position, and years in current position. While part B will inquire into the factors influencing the recycling practises in the food and beverage industry. Section C focuses more on the impact on young entrepreneurs' business performances. After the questionnaire has been written and reviewed, analysts do a preliminary test of each survey and implement clear modifications prior to conducting the review. Table 1.3 demonstrates questionnaire development.

Section	Item
A	Demographic categories • Age • Gender • Educational level • Which of the following best describes you? • Are you involved in the entrepreneurship sector? • Is recycling the best management option for business performances?
B	Factors that implementing recycling practices. • Composting • Anaerobic digestion • Animal feeding • Food packaging
C	Impact on young entrepreneurs' business performances

Table 3.7.1: Questionnaire development

Multiple choice questions and Likert scale are used in the questionnaire. The second and third sections of the Likert scale are based on a five-point rating scale, with 1 representing "strongly disagree," 2 representing "disagree," 3 representing "neutral," 4 representing "agree," and 5 representing "strongly agree."

3.8.2 Sampling Design

The sampling technique that has been used is simple random sampling. In simple random sampling, each member of the population has an equal and known chance of being the subject of the sample (Kumar et al., 2012). The researcher distributes the questionnaire to the respective respondents via WhatsApp, Instagram, Facebook and Telegram. The sample frame is made up of every individual who answered the questionnaire and was recorded as a respondent for this study.

The sample size is the number of respondents that the researcher chooses from the population. The sample size is sufficient to conduct the research (Sekaran & Bougie, 2013). A study by The Institute of Youth Development Research Malaysia on youth index scores of 4673 of Malaysia youth, the youths are found to have a relatively high score of 68.6 in 2011 and have increased significantly from the score of 51.6 in 2006 to 63.3 in 2008. (Anuar, A. R. (2016). In this study, the researcher had chosen the sample size consists of 384 respondents using Krejcie and Morgan (1970). In order to acquire information about their better understanding on recycling practices in their F&B industry, this study looking for young entrepreneurs in Malaysia.

The analysed micro SMEs were obtained from Malaysia Department of Statistics database that provides entrepreneur characteristics and their business profile. A random sample was distributed to F&B industry in Malaysia as a sampling population that includes a micro-enterprise only inclusive of 384 respondents. Non-probability sampling is used as the sampling design involving the individual of micro enterprise.

The researcher selected a representative sample from the total population due to time, financial, and management difficulties to address the whole population. Therefore, the non-probability sampling design was the preferred technique of the researcher to use in this study which is the convenience sampling technique. The rationale for using this sampling method was attributed to easy accessibility and availability of respondents, as well as a less time consuming and economical way of gathering the required data.

Population Size (N)	Sample Size (S)
100	80
200	132
300	169
400	196

500	217
600	234
700	248
800	260
900	269
1000	278
2000	322
3000	341
4000	351
5000	357
6000	361
7000	364
8000	367
9000	368
10 000	370
15 000	375
20 000	377
30 000	379
40 000	380
50 000	381
75 000	382
1 000 000	384

Table 3.7.2: Determining sample size of known population.

Source: Krejcie and Morgan (1970)

3.8.3 Sampling Techniques

This analysis use probability inspection to steer the reviews. A testing methodology is any method of examination that employs a random choosing. According to (Saunders, Lewis, and Thornhill, 2016), probability testing (or delegate testing) is most regularly connected with review research systems where specialists must make inferences from the population sample to answer the examination question(s) and achieve the examination aim. According to (Simon, 1967), the consistently growing interest in research has necessitated a method for determining the sample size that is representative of a specific population. This examination would utilise Krejcie and Morgan's "Little Sample Techniques" to determine the test measure.

s=XNP(1-P) +(N-1) +XP(1-P)

s = required sample size

X= the table value of chi-square for 1 degree of freedom at the desired confidence level

(3.841)

N= the population size

P=the population proportion

d=the degree of accuracy expressed as a proportion

3.9 Time Horizons

There are two different sorts of temporal horizons: longitudinal and cross-sectional research. Longitudinal studies involve the regular collecting of data over an extended period of time. Although cross-sectional studies are conducted and collect data only once, the process can take days, weeks, or even months. Due of time constraints, cross-sectional studies were chosen for this research. The researcher has 10 months to complete Chapters 1 through 5. The data gathering and analysis must be completed within one month.

3.10 Data Analysis Method

In this study, Statistical Package for the Social Sciences has been used to perform an information analysis (SPSS). The Statistical Package for the Social Sciences (SPSS) is a collection of products used for factual data analysis. It was developed by SPSS Inc. and acquired by IBM in 2009. In 2014, the product's name was changed to IBM SPSS Statistics. The product was primarily intended for sociology but has since become popular in sectors such as health sciences, marketing, statistical analysis, and data mining (Techopedia, 2018). In addition to factual investigation, the package contains information on the executives, allowing the user to do case determination, infer information, and undertake record reshaping. Information documentation is another component, which maintains a metadata lexicon with the datafile (Techopedia, 2018).

Favourable position of using SPSS in this analysis, as it supports a broad range of equations and factual schedules, data documents can be input through many projects, and it is annually updated to make progress. It is essential to remember that while the utilisation of various quantifiable programming and projects is necessary to avoid drawing outlines by hand or physically confirming, it is quite simple to abuse them. Using the collected data, one can easily comprehend the demand for a product and adjust their marketing strategy accordingly. Primarily, SPSS initially saves and sorts the provided data, and then gathers the data collection to provide the desired result. SPSS is designed to handle a broad range of changeable information positions.

3.10.1 Descriptive Statistic

Descriptive statistics is a branch of statistics that describes a variety of data characteristics that are typically included in a study. The primary objective of descriptive statistics is to summarise the study's samples and measurements (Lee & Rodney. 2018). In conjunction with a variety of graphical analyses, descriptive statistics are an essential component of virtually all quantitative data analysis. In essence, descriptive statistics describe the findings of the data researcher. The objective of descriptive studies is to develop an accurate profile of events, people, or circumstances. (Saunders, Lewis, & Thornhill, 2016).

In a scenario where the analyst essentially presented primitive information, it is difficult to visualise what the information looked like if there was an abundance of it; hence, expressive measurements are crucial. Clear measurements allow analysts to present information in an increasingly significant manner, making it easier to comprehend the information. Subjects or members are observed in their natural, unaltered state throughout expressive examinations. As it identifies testable variables, fascinating investigation can serve as a precursor to future research.

3.10.2 Multiple Regression Analysis

Different relapse is a development of direct relapse. It is utilised when the estimation of a variable depends on the assessment of at least two distinct elements. The variable we must anticipate is referred to as the needed variable (or here and there, the result, target or measure variable). When attempting to predict a constant ward variable from multiple free components, one utilises a distinct relapse assessment. When a different relapse condition has been constructed, its quality can be determined by examining the coefficient of assurance (R2). R2 consistently falls between 0 and 1. Every product provides it whenever relapse is conducted. The better the model and gauge, the closer R2 is to I. A related question is whether the independent variables have a significant effect on the dependent variable. Testing the flawed theory that the related relapse coefficient is zero is equal to measuring the theory. If the 1-trial relapse coefficient is high, it indicates that the variable in question has a significant effect on Y, even after allowing for other independent informative factors.

R: - coefficient of determination

3.10.3 Correlation

Connection investigation is a method for evaluating the quality of a relationship between two numerically approximated constant components. This type of analysis is useful when a researcher needs to see if there are potential correlations between elements. Connection investigation is a factual evaluation technique used to evaluate the validity of the relationship between two persistent, numerically calculated components. This type of analysis is helpful if a researcher needs to establish probable relationships between components. If there is a relationship between two variables, it means that if one variable change methodically, the other variable also changes effectively. Depending on the intentional numerical features, a positive or negative association may be found if one is present (DJS Research, 2018). One reason for conducting correlational research is to assess the degree of link between at least two variables. The second purpose of correlational research is to develop forecasting models that can predict the future estimation of a variable based on the ebb and flow estimates of at least one other variable.

3.11 Pilot Test

Prior to the execution of a full-scale research project, a pilot test is conducted to analyse plausibility, time, cost, unfavourable occurrences, and improve the investigation structure. A pilot review is a strategy for testing a survey with a smaller sample size than the sample size planned. In this overview phase, a survey is directed to a subset of the absolute example population or, in increasingly casual cases, to an accommodation test. The lead of a pilot review prior to the ebb and flow of a massive scale review offers the professional several advantages and benefits. One of these is the investigation of specific issues that could potentially have adverse effects on the review's outcomes. These include the quantity of questions for the target population.

A pilot research also evaluates the accuracy of the instructions to determine whether or not all respondents can follow the rules as demonstrated by the pilot test. It also provides further information regarding the effectiveness of the review kind in acquiring the research's motivation. Pilot examines, for all intents and purposes, spare money-related assets. In the event that errors are identified at the outset of a survey or interview, the likelihood of erratic results or, worse, the necessity to restart the study after it has been conducted, is diminished. In contrast, Baker (1994) stated that pilot testing responders should be treated as 10% to 20%

of the actual sample size. Therefore, a specialist will select 6 of 32 responders from 32 manufacturing companies to conduct the pilot test. Before the actual study is scheduled to be conducted, the specialist will consider the recommendation and feedback based on the results of the pilot test.

3.12 Issues of Reliability and Validity

According to Heale and Twycross (2015), unwavering quality refers to the consistency of a measure. Therefore, Heale and Twycross stipulated that a participant completing an instrument designed to evaluate inspiration should have essentially the same responses each time the test is taken. Despite the impossibility of providing a precise tally of dependability, it is possible to quantify unwavering quality using a variety of metrics. Cronbach's an is the most frequently utilised test to determine the internal consistency of an instrument whether a researcher is able to replicate a previous research plan and achieve identical results. In this test, the average of all connections in each split-parts combination is determined. This test allows the use of instruments with questions that require more than two responses. The Cronbach's a result is a number between 0 and 1 inclusive. A score of 0.7 or higher is deemed commendable for consistency (Wood G. 2013).

The degree to which an idea is exactly quantified in a quantitative report characterises its legitimacy. The fundamental category is content legitimacy. This class examines whether the instrument adequately includes all the content that it should for the variable (Heale and Twycross, 2015). The validity of the structure is determined by the ability to draw conclusions about the test results associated with the concept under consideration. According to Heale and Twycross (2015), the final proportion of legitimacy is foundation legitimacy. A basis is any other instrument used to estimate a comparable variable. Relationships can be manipulated to determine the extent to which different instruments assess the same variable.

The data incorporates experts' knowledge of the subject in these articles and further ensures the results' validity and dependability. To pass the examination and read as many articles as possible, it was necessary to comprehend the information. Several articles and research papers were referenced to determine the study's credibility. It has been collected from the official site for legislative and authority information and cross-referenced with other private sources to ensure that it is sufficiently reliable.

3.13 Summary

This topic was mostly discussed in relation to the research methods employed in the research direct, including the sources evaluated by the experts and the methods chosen by the analyst. The subsequent section is information analysis, which deciphers and clarifies in depth the information obtained from the survey.

3.14 Conclusion

The study was conducted in Malaysia with the participation of around 384 young entrepreneurs, taking all factors into consideration. The purpose of this study is to discover which aspects of the impact of recycling practices in food and beverage industry towards young entrepreneur's business performances. According to Krejcie and Morgan's table, this study will contain 384 respondents from the demographic of Malaysian Young Entrepreneurs, which accounts for 40 per cent of the country's total population. In order to determine the precise outcomes of this study, relapse and interpersonal techniques are be used.

CHAPTER 4

DATA ANALYSIS AND DISCUSSION

4.0 Introduction

The purpose of this chapter is to analyse the findings of the SPSS version 27 data obtained from 384 respondents. The results are illustrated with pie charts, graphs, or other appropriate tools. This chapter will present the descriptive analysis of demographic background, Pearson correlation analysis, and multiple regression analysis of the results.

4.1 Descriptive Analysis

For the demographic profile, it will measure in terms of age, gender, educational level, which of the following best describes you, are you involved in the entrepreneurship sector and is recycling the best management option for business performances. It consists of 384 total of respondent and all the data collected by google forms.

4.1.1 Age

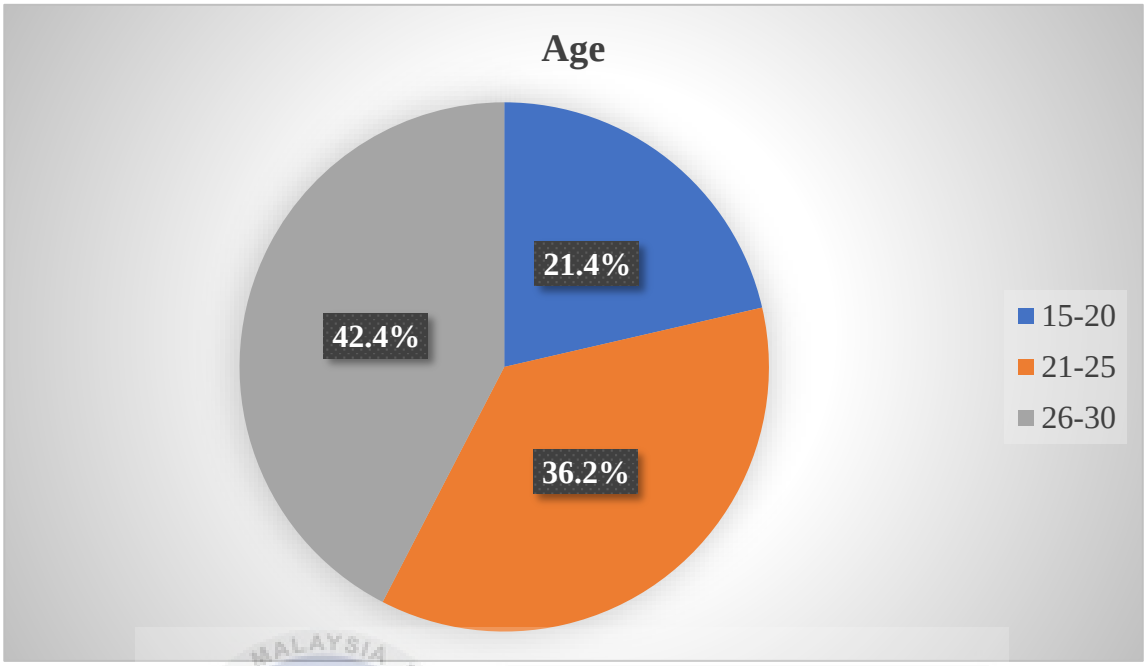

Figure 4.1: Pie Chart of Age

Age	Frequency	Percentage (%)
15-20	82	21.4
21-25	139	36.2
26-30	163	42.4

Table 4.1: Table Frequency and Percentage of Age

The focus group of this respondent are the person who are young entrepreneur aged 15 until 30 years old. Figure 4.2 shows the most of the respondents comes from the 15 to 20 years old which consists of 21.4% respondent while 36.2% respondents were aged 21 to 25 years old and another 42.4% were from 26 to 30 years old. This can be concluded as respondents from 26 to 30 years old are people who are young entrepreneurs in F&B Industry. This result shows that most of the young entrepreneurs working at F&B Industry in Malaysia.

4.1.2 Gender

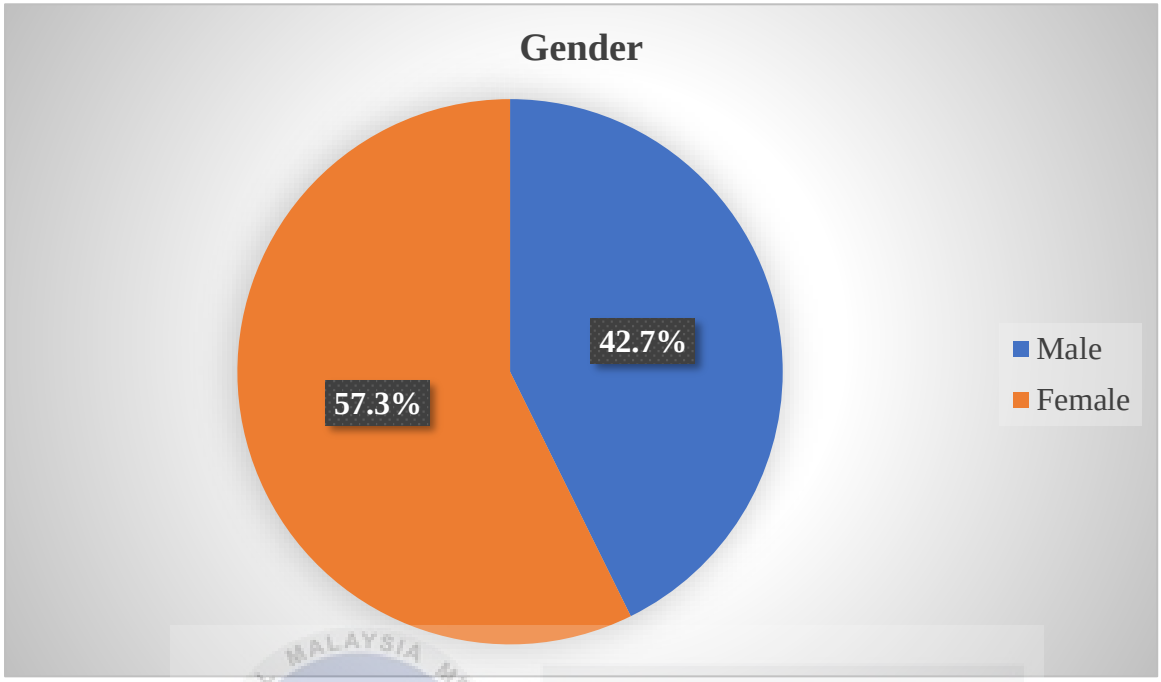

Figure 4.2: Pie Chart of Gender

Gender	Frequency	Percentage (%)
Male	164	42.7
Female	220	57.3

Table 4.2: Table Frequency and Percentage of Gender

Based on Figure 4.1, the sample of respondents being used was 384 which consists of 42.7% (164) from male and 57.3% (220) from female. The majority of respondents are female because female is working as entrepreneur in F&B Industry than male. Female are unlikely and most of them are young entrepreneurs working in F&B Industry.

4.1.3 Educational Level

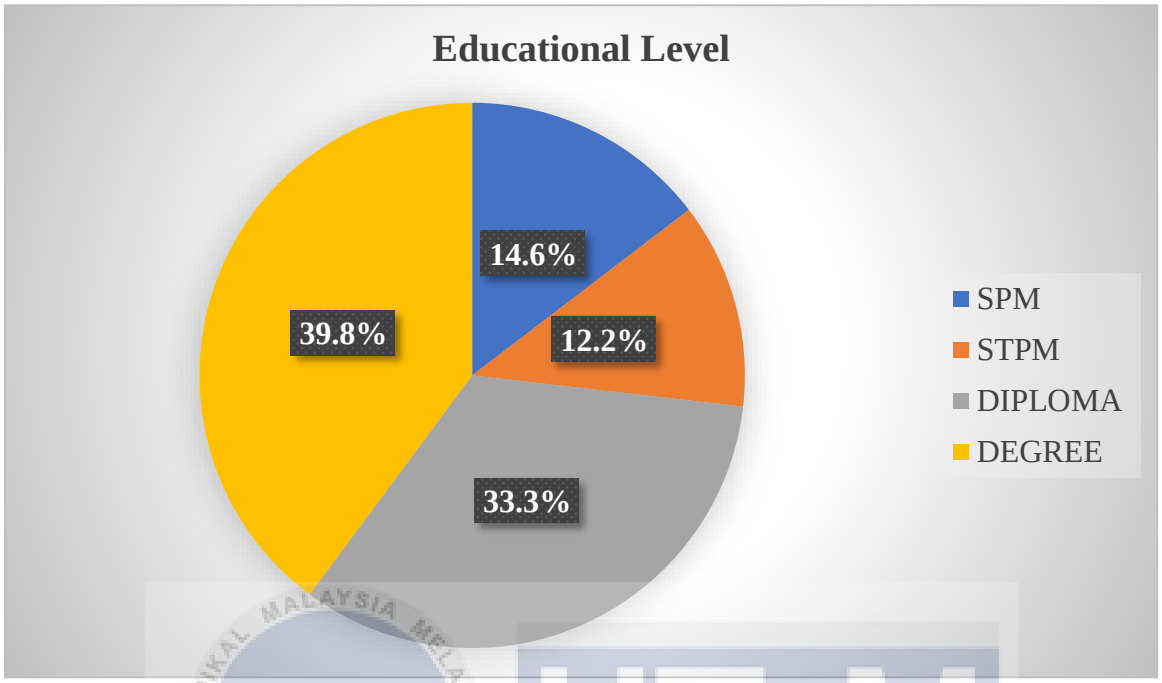

Figure 4.3: Pie Chart of Educational level

Educational Level	Frequency	Percentage (%)
SPM	56	14.6
STPM	47	12.2
DIPLOMA	128	33.3
DEGREE	153	39.8

Table 4.3: Table Frequency and Percentage of Educational Level

Through Figure 4.3, the result represents 14.6% of the respondent are SPM level, 12.2% of respondent are STPM level, 33.3% of respondent are diploma level and 39.8% of respondent are degree level. The results explain that most of the respondent are degree level. Majority of the young entrepreneurs that have a degree in their education level are working at F&B Industry in Malaysia.

4.1.4 Which of the following best describes you?

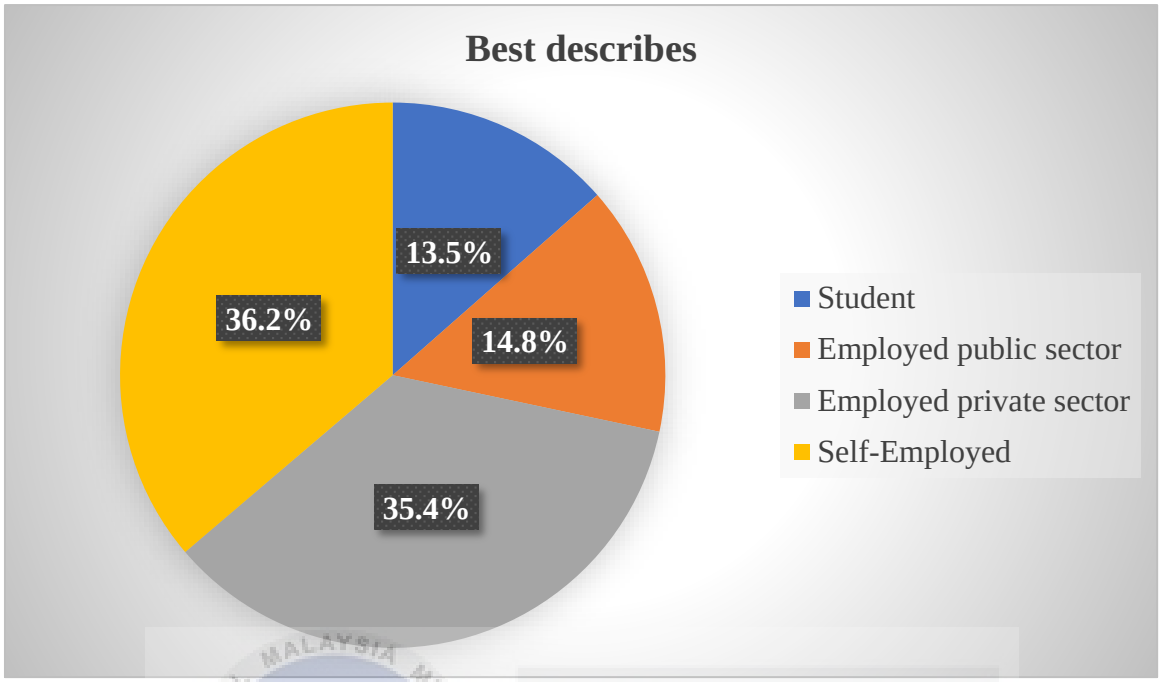

Figure 4.4: Pie Chart of which of following best describes you

Best describes	Frequency	Percentage (%)
Student	52	13.5
Employed public sector	57	14.8
Employed private sector	136	35.4
Self-Employed	139	36.2

Table 4.4: Table Frequency and Percentage of which of following best describes you.

Based on Figure 4.4, it shows there are 13.5% of respondents are students, 14.8% of respondents are employed public sector and 35.4% of respondents are employed private sector while 36.2 of the respondents are self-employed. From the total respondent, most of the young entrepreneurs are self-employed in F&B Industry.

4.1.5 Are you involved in the entrepreneurship sector?

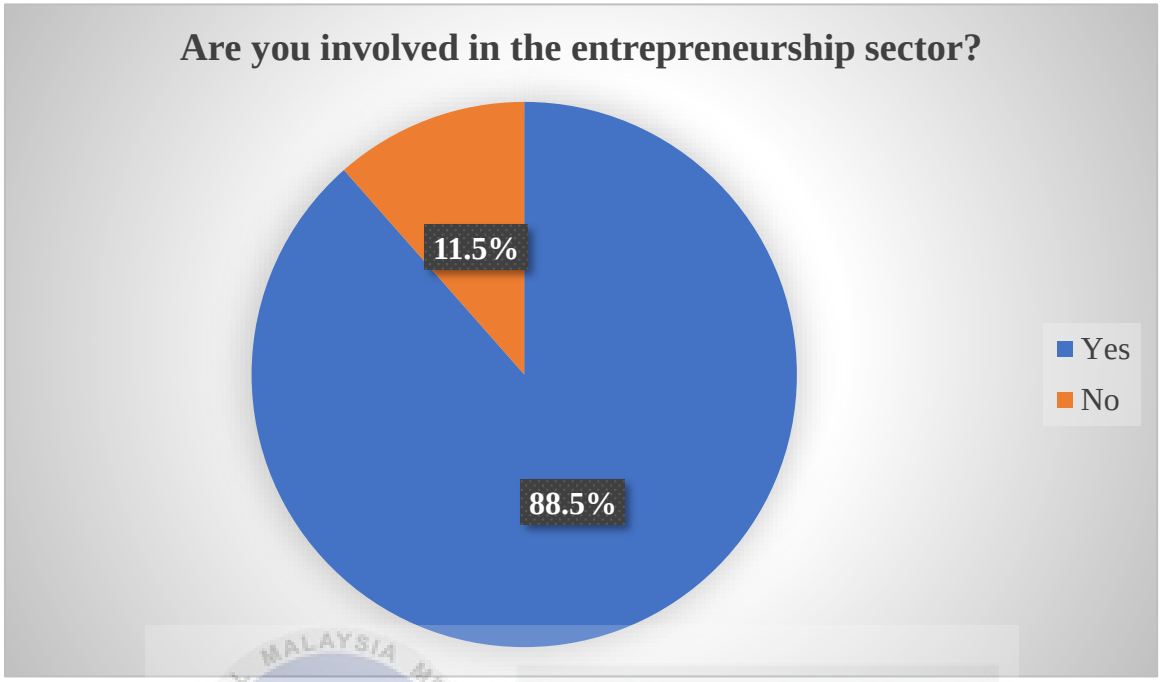

Figure 4.5: Pie Chart of are you involved in the entrepreneurship sector.

Entrepreneurship sector	Frequency	Percentage (%)
Yes	340	88.5
No	44	11.5

Table 4.5: Table Frequency and Percentage of are you involved in the entrepreneurship sector.

The result from Figure 4.5 represents the respondent involvement in entrepreneurship sector. It shows, 88.5% (340) of the respondents answer Yes while 11.5% (44) of the respondents answer No. The majority of respondents are said yes because most of the young entrepreneurs are involved in entrepreneurship sectors in F&B Industry.

4.1.6 Is recycling the best management option for business performances?

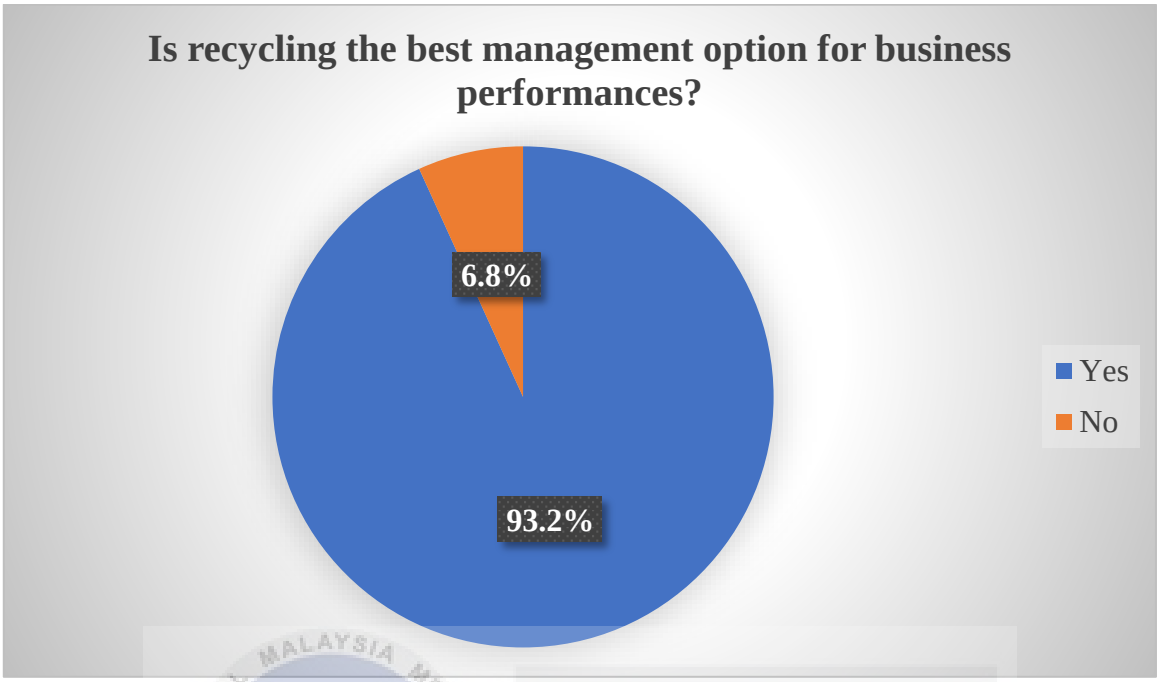

Figure 4.6: Pie Chart of is recycling the best management option for business performances.

Business Performances	Frequency	Percentage (%)
Yes	358	93.2
No	26	6.8

Table 4.6: Table Frequency and Percentage of is recycling the best management option for business performances.

Based on Figure 4.6 shows results of is recycling the best management option for business performances. It shows, 93.2% (358) of the respondents answer Yes while 6.8% (26) of the respondents answer No. The majority of respondents are said Yes, because most of the young entrepreneurs are acknowledge recycling is the best management option for business performances in F&B Industry in Malaysia.

4.2 Pilot Test

Pilot test is the initial steps before a researcher dispersed the survey. Essentially motivation behind pilot test for discovering the legitimacy of the inquiries structured by researcher to ensure the respondents comprehends the inquiries as well as can address the inquiries with great learning about this exploration. From the pilot test researcher can check whether the inquiries can make the respondents feel great or not with that question. For this examination, the respondent dispersed 31 set of questionnaires to respondents as the pilot test. The official poll just disseminated after the after effect of pilot test is dependable. The Cronbach's Alpha outcome for the pilot test are 0.950. In the pilot study, the basis is an incentive for each Cronbach's Alpha greater than 0.7. So, from the outcome, we can finish up the pilot test directed considered legitimate because of the acknowledged outcomes for unwavering quality test is more than 0.60.

Realibility Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
.950	.952	25

Table 4.7: Reliability Statistics for Pilot Test

4.3 Reliability Analysis

Analyzing reliability means being consistent. It is the degree to which an instrument at different times will deliver similar results for the same people, Reliability can take 0 to 1.0 values.

Variables	Number of Items	Cronbach's Alpha
Composting	5	.861
Anaerobic Digestion	5	.831
Animal Feeding	5	.830

Food Packaging	5	.879
Young Entrepreneur's Business Performances	5	.886

Table 4.8: Reliability Analysis for all Variables

Table 4.8 shows the reliability value for all variables that has been tested in this study. The Cronbach's Alpha for Composting is 0.861. Second, the alpha value for Anaerobic digestion and Animal feeding were 0.831 and 0.830 respectively which the both variables were used 5 items to measured. Furthermore, the 5 items from Food packaging we used to measure and the value for this variable is 0.879.

From this analysis, it shows that all 4 independent variables have a very good reliability in determine adoption as all value is more than 0.7. Lastly, the alpha value for dependent variable is 0.886 where it also used 5 items to measured. According to all the measurement for each item, all the items are reliable and consistent internally.

4.4 Descriptive Test

William and Trochiam, (2008) have stated that descriptive statistics are used to describe the basic features of the data in the study and helps to simplify large amounts of data in a sensible way. In this study, the purpose of descriptive analysis is a presented simple summary about the sample and the measure of this research.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Composting	384	2.00	5.00	4.0432	.63633
Anaerobic Digestion	384	2.00	5.00	4.0543	.61886
Animal Feeding	384	2.20	5.00	4.0382	.63420
Food Packaging	384	2.00	5.00	4.1327	.59394
Valid N (listwise)	384				

This descriptive statistics results shows, food packaging stands the higher mean of 4.13 where standard deviation with a 0.59. Anaerobic digestion has a mean of 4.05 and standard deviation

0.62. Composting has a mean 4.04 and standard deviation 0.63. Animal feeding found out to have a mean with 4.04 and standard deviation which 0.63.

4.5 Inferential Analysis

The main purpose of this analysis is to reach a conclusion from the sample observation and analysis about the population. This analysis is made up of Pearson Correlation Analysis and Multiple Regression Analysis and this being measured using SPSS version 23.

4.5.1 Pearson Correlation Analysis

The connection coefficient of Pearson is a factual proportion of the quality of a combined information direct relationship. This investigation has been utilized by analyst to gauge quality connection between free (relative preferred position, convenience, absorptive limit, similarity, supply-side advantage, request side advantage and monetary assets) and dependent variable (AM adoption) is critical at the 0.01 dimension (2-tailed). This demonstrates there are certain related between autonomous variable and ward variable. Table 4.9 demonstrates the outline of Pearson investigation.

Correlation Coefficient (r)	**Strength of the relationship**
<0.20	Slight, almost no relationship
0.21-0.35	Low correlation
0.36-0.60	Moderate Positive
0.61-0.80	Strong Positive
0.90-1.00	Very Strong Positive

Table 4.9: Strength of the Correlation Coefficient

Independent Variable	Correlation	Relationship
Composting	0.710**	Strong Positive
Anaerobic Digestion	0.676**	Strong Positive
Animal Feeding	0.691**	Strong Positive
Food Packaging	0.735**	Strong Positive

**Correlation is significant at the 0.01 level (2-tailed).

Table 4.10: Summary of Pearson Correlation Analysis

From the table 4.10 above, the result shows the correlations between all independent variables which are composting, anaerobic digestion, animal feeding and food packaging and the dependent variable which is young entrepreneur's business performance. Firstly, the correlation between IV1 (composting) and DV (young entrepreneurs business performance) is 0.710, thus it's indicated as a strong correlation among those variables, Secondly, the correlation between IV2 and DV is 0.676 which is indicates as strong positive between anaerobic digestion and young entrepreneur's business performances. Thirdly, the correlation between IV3 and DV is 0.691 which is indicates as strong positive between animal feeding and young entrepreneur's business performances. Lastly is the correlation between IV 4 (food packaging) and DV (young entrepreneurs business performance) is 0.735 which is also represent as strong positive correlation among those variables.

4.5.2 Multiple Regression Analysis

The multiple regression analysis has been done to determine the most significant factor or variable that affect business performances. There are four independent variables are tested (composting, anaerobic digestion, animal feeding and food packaging) and dependent variable (young entrepreneurs business performances) on analyse factors influencing on young entrepreneur's business performances in F&B Industry.

Objective 2: To investigate how the recycling practices impact the young entrepreneur's business performances.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837[a]	.743	.739	.36426

Table 4.11: Model summary

a. Predictors: (Constant), composting, anaerobic digestion, animal feeding and food packaging

b. Dependent Variable: Young entrepreneurs business performances

Based on the table 4.12, the result shows that the R = 0.837 and the R square is 0.743. it represents about 74.3% of the dependent variable (young entrepreneurs business performances) can be describes by the variance in all independent variables (composting, anaerobic digestion, animal feeding and food packaging).

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.852	4	14.963	112.773	.000[b]
	Residual	50.287	379	.133		
	Total	110.139	383			

Table 4.12: Anova analysis

a. Dependent Variable: Young entrepreneurs business performances

b. Predictors: (Constant), composting, anaerobic digestion, animal feeding and food packaging

Table 4.13 shows ANOVA table that compared only the intercept with the overall model's significance. Giving the model an F-test result. This is almost always significance, even though the model explains only a small amount of variance. The table- based meaning value is 0.000, which is less than 0.001. Thus, the overall significance model is (112.773). This section examines the third research objective which is to evaluate the most influencing recycling practices towards young entrepreneurs.

In order to determine relationship, the multiple regression analysis was used. The table Model Summary above shows the result of multiple linear regression analysis which is to test the hypothesis whether it is accepted or rejected. Based on it represent that the value of R is 0.837 and the value of R square is 0.743, that's mean 74.3% of the independent variables are related with the young entrepreneur's business performances. Meanwhile, from the ANOVA table above, shows that the significant value of p is 0.000 which below than 0.05. It is considered that the relationship between the independent variables and dependent variables are significant.

To confirm this finding, both independent and dependent variables are tested and the result found the most influencing recycling practices towards business performances and declare as significant.

Objective 3: To evaluate the most influencing recycling practices towards young entrepreneur's business performances.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.487	.138		10.772	.000
	Composting	.018	.052	.021	.347	.729
	Anaerobic Digestion	.057	.062	.066	.929	.353
	Animal Feeding	.013	.058	.015	.217	.828
	Food Packaging	.596	.052	.660	11.452	.000

Table 4.13: Coefficients analysis

a. Dependent Variable: Young entrepreneurs business performances

From the table 4.14 the most significance factor that influence the young entrepreneur's business performances been shown in the table. When the most significance value of certain

value is less than o.o5, means the variable can be used to predict the dependent variable (young entrepreneurs business performances.

Based on the coefficient table, the independent variable that influence towards young entrepreneur's business performance was food packaging, whereby the value is (β = 0.596, t = 11.452). This is because the beta value of food packaging is the highest value (0.660) among the other variables. The second variable influence towards young entrepreneur's business performance is anaerobic digestion (β =0.057, t = 0.929). The third variable which is lowest influence towards young entrepreneur's business performance is composting (β =0.018, t = 0. .347). Lastly is animal feeding which is lowest influence towards young entrepreneur's business performance of F&B industry (β =0.013, t = 0. 217).

Thus,

Regression equations:

$$\mathbf{Y = 1.487 + 0.018}X_1 \mathbf{+ 0.057}X_2 \mathbf{+ 0.013}X_3 \mathbf{+ 0.596}X_4$$

Y = Young entrepreneurs business performances

X_1 **= Composting**

X_2 **= Anaerobic Digestion**

X_3 **= Animal Feeding**

X_4 **= Food Packaging**

Overall, the result of standardized coefficient indicates that the most influential factor that affects young entrepreneur's business performances is food packaging which the β = 0.596, t (384) = 11.452, p<0.05.

4.5.3 Hypothesis Testing

	Hypothesis	Correlation Coefficient (R)	p-Value	Result
H1	There is a significant positive relationship between composting practices and young entrepreneur's business performance	0.710**	.729	Rejected
H2	There is a significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance	0.676**	.353	Rejected
H3	There is a significant positive relationship between animal feeding practices and young entrepreneur's business performance	0.691**	.828	Rejected
H4	There is a significant positive relationship between food packaging practices and young entrepreneur's business performance	0.735**	.000	Accepted

Table 4.14: Model testing

This study's primary goal is to determine whether the four factors (composting, anaerobic digestion, animal feeding and food packaging) significantly impact young entrepreneurs business performances. As was already indicated, four hypotheses are developed to address the research questions and produce the study goals.

Composting

H0: There is no significant positive relationship between composting practices and young entrepreneur's business performance

H1: There is a significant positive relationship between composting practices and young entrepreneur's business performance

In hypothesis 1, the relationship between composting practices and young entrepreneur's business performance is examined. A multiple regression analysis is performed, and the results are analyzed, to ascertain whether this hypothesis is accepted. H1 was rejected and not significant (β =0.018, t = 0. .347, p-value = 0.729). According to hypothesis testing, there was no connection between composting and young entrepreneur's business performances. As a result, the theory was rejected.

As a result of a deep lack of understanding between the phrases biodegradable, compostable, bio-based, etc., educating consumers presents a number of obstacles. Furthermore, many consumers and compostable biopolymer users lack a broad knowledge of the differences between composting and landfilling compostable plastics. Compost created using biodegradable bio-plastic feedstock has caused issues for organic crops due to the argument over whether compost made with these goods breaches USDA Organics label criteria. (Meeks, D. (2015).

H1: There is no significant positive relationship between composting practices and young entrepreneur's business performance.

Anaerobic Digestion

H0: There is no significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance.

H2: There is a significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance.

Hypothesis 2 the relationship between anaerobic digestion practises and young entrepreneur's business performance is examined. To determine whether this hypothesis should be accepted, a multiple regression analysis is conducted, and the results are analysed. H2 was rejected and not significant (β =0.057, t = 0.929, p-value = 0.353). According to hypothesis testing, there

was no connection between anaerobic digestion and young entrepreneur's business performances. As a result, the theory was rejected.

According to Hanum, F, anaerobic digestion is a complex system that involves numerous phases of organic matter biotransformation, including hydrolysis, acidogenesis, acetogenesis, and methanogenesis. Each of these stages has operational needs, particularly methanogenesis, which occurs when methanogenic bacteria convert acetate into CH4 and CO2. In terms of technology, incorrect anaerobic digestion operation will result in low biogas generation. In this area, there is still a lack of research and development work. Furthermore, the operation and maintenance of the anaerobic digestion facility will necessitate the use of skilled engineers and technicians, which may be in short supply in Malaysia because anaerobic digestion is still not commonly practiced (Ali et al., 2012).

H2: There is no significant positive relationship between anaerobic digestion practices and young entrepreneur's business performance

Animal Feeding

H0: There is no significant positive relationship between animal feeding practices and young entrepreneur's business performance.

H3: There is a significant positive relationship between animal feeding practices and young entrepreneur's business performance.

Hypothesis 3 the relationship between animal feeding practises and young entrepreneur's business performance is examined. To establish whether this hypothesis should be accepted, a multiple regression analysis is performed and the results are analysed. So, H3 was rejected and not significant (β =0.013, t = 0. 217=p-value = 0.828). According to hypothesis testing, there was no connection between animal feeding and young entrepreneur's business performances. As a result, the theory was rejected.

Processed feed and feed ingredients must be stored separately from unprocessed feed ingredients, and the proper packing materials must be utilised. Feed and feed ingredients should be received, stored, and transported in a manner that minimises the possibility of cross-contamination at a level that could impact food safety. (Codex Alimentarius Commission. (2008). Thus, from this statement shows that the young entrepreneurs need knowledge about

the animal feeding practices before implement in their businesses. Because, according Codex Alimentarius Commission it is essential that the correct feed is given to the appropriate animal group and that the feeding instructions are followed.

H3: There is no significant positive relationship between animal feeding practices and young entrepreneur's business performance.

Food Packaging

H0: There is no significant positive relationship between food packaging practices and young entrepreneur's business performance

H4: There is a significant positive relationship between food packaging practices and young entrepreneur's business performance.

Hypothesis 4 the relationship between animal feeding practises and young entrepreneur's business performance is examined. To determine whether this hypothesis should be accepted, a multiple regression analysis is conducted, and the results are analysed. H4 was accepted and significant ($\beta = 0.596$, $t = 11.452$, p-value = 0.000) and the p-value less than 0.05. Since of these findings, the hypothesis is validated because the majority of young entrepreneurs are aware of and knowledgeable about implementing food packaging recycling practises in their respective food and beverage industries. Consequently, the theory was accepted.

According to Norbisimi NordinIn, its fundamental functions, one of the contributions of sustainable packaging is to provide consumers with as much information and alternatives as possible, thereby encouraging them to make sustainable purchasing decisions and promoting lifestyle changes that lead to eco - efficiency. According to a report by Deloitte, around 85 percent of large manufacturers and merchants of consumer items and goods have already implemented supply chain sustainability initiatives. While priority areas and the level of sustainability maturity in their overall business models and practises varied widely, the majority of these organisations concentrated more on economic and environmental activities than social initiatives.

H4: There is a significant positive relationship between food packaging practices and young entrepreneur's business performance

4.6 Discussion on findings

From the reliability analysis, it shows that all 4 independent variables have a very good reliability in determine adoption as all value is more than 0.7. Lastly, the alpha value for dependent variable is 0.886 where it also used 5 items to measured. According to all the measurement for each item, all the items are reliable and consistent internally.

This descriptive statistics results shows, food packaging stands the higher mean of 4.13 where standard deviation with a 0.59. Anaerobic digestion has a mean of 4.05 and standard deviation 0.62. Composting has a mean 4.04 and standard deviation 0.63. Animal feeding found out to have a mean with 4.04 and standard deviation which 0.63.

The Pearson Correlation Analysis shows the correlations between all independent variables which are composting, anaerobic digestion, animal feeding and food packaging and the dependent variable which is young entrepreneur's business performance. Firstly, the correlation between IV1 (composting) and DV (young entrepreneurs business performance) is 0.710, thus it's indicated as a strong correlation among those variables, Secondly, the correlation between IV2 and DV is 0.676 which is indicates as strong positive between anaerobic digestion and young entrepreneur's business performances. Thirdly, the correlation between IV3 and DV is 0.691 which is indicates as strong positive between animal feeding and young entrepreneur's business performances. Lastly is the correlation between IV 4 (food packaging) and DV (young entrepreneurs business performance) is 0.735 which is also represent as strong positive correlation among those variables.

To determine the most significant factors that influence business performances, multiple regression analysis has been conducted. Based on the table 4.12, the result shows that the R = 0.837 and the R square is 0.743. it represents about 74.3% of the dependent variable (young entrepreneurs business performances)

The ANOVA table illustrates results by comparing only the intercept with the overall significance of the model. As a result, the overall significance is (112.773). This section examines the third research objective which is to evaluate the most influencing recycling practices towards young entrepreneurs.

According to the coefficient table, food packaging influenced young entrepreneurs' business performance by a coefficient of ($\beta = 0.596$, $t = 11.452$). As a result, food packaging has a beta value of 0.660, the highest value among the other variables. Anaerobic digestion is the second

variable affecting young entrepreneurs' business performance (β =0.057, t = 0.929). Composting is the third variable that has the least effect on the young entrepreneur's business performance (= 0.018, t = 0.347). Animal feeding has the least impact on young entrepreneurs' business performance in the food and beverage industry (= 0.013, t = 0.217).

To sum up, the standardised coefficient results show that food packaging is the most influential factor influencing young entrepreneurs' business performance, with the $\beta = 0.596$, $t(384) = 11.452$, $p<0.05$.

4.7 Summary

This chapter has been discussing about the data analysis and discussion. It consists of descriptive analysis, reliability analysis, inferential analysis which that includes Pearson correlation analysis and multiple regression analysis. The researcher used SPSS version 27 to analyse the data, and the results can be used in further discussion. For the next chapter, the researcher will explain on the conclusion of this research, implication and recommendation of the study.

CHAPTER 5

CONCLUSION, IMPLICATION AND RECOMMENDATIONS

5.1 Introduction

This chapter will provide discussion on the findings of chapter four. Furthermore, this chapter will also consider the recommendations that can address the impact of recycling practices in food and beverages industry towards young entrepreneur's business performances. Lastly, the limitations that were identified in the study will also be reviewed, as that can be used to identify areas for further research.

5.2 Conclusion

The first objective of this study has been met by conducting a literature review and developing a framework with four components: composting, anaerobic digestion, animal feeding, and food packaging. The second objective of this study to investigate how the recycling practices impact the business performances. This objective was accomplished through the use of SPSS for data analysis, and the study's findings demonstrate the relationship between the impact on the business performance of young entrepreneurs in the food and beverage industry. Lastly, the third objective was attained by multiple regression analysis (MRA) utilising SPSS, and the findings of the study indicate that food packaging is the most influential factor affecting the business performances of young entrepreneurs in the food and beverages industry. Through a quantitative method typically employs a questionnaire for data collection and graphs or statistics for data analysis and data was identified based on the data collected from 384 respondents through google form. Furthermore, based on the impact of recycling practices identified, this chapter will also discuss the strategies or recommendations that can improve the young entrepreneur's business performances in Malaysia.

5.3 Recommendations for the future researcher

The findings of the study were used as the basis for the following set of recommendations, which are presented below.

In this study, the researcher was focus on the impact of recycling practices in food and beverages industry towards young entrepreneur's business performances. Thus, the researcher suggests future researcher to study more onwards regarding the practices that promote sustainable behaviour through recycling.

Furthermore, the future researcher could use observation or qualitative method rather other than use quantitative methods to collect in order to know more about other factors impact young entrepreneur's business performance. This is because the future researcher can directly get the data from respondents by asking face to face, thus might know their true answers to the questions.

Second, the study only included young entrepreneurs between the ages of 15 and 30. These studies should be conducted in the future with a wider scope in order to generalize the findings to all age groups in Malaysia. Furthermore, all relevant population groups from diverse backgrounds and locations should be included in the sample size of the research study. In this way, robust comparisons of findings can be made.

5.4 Limitation of Study

Despite completing this study research, the researcher encounters various obstacles throughout the method. The following requirement is to continue collecting data. Because the researcher is aware that data gathering may be conducted incorrectly, he or she has little expertise collecting primary data. As a consequence, the researcher consulted with her supervisor and obtained information about the previous questionnaire survey approach. Before distributing the questionnaire survey to a large audience, the researcher conducted a pilot study to validate the survey's validity.

In addition, the researcher had difficulties with the research topic. Because the majority of research studies rely only on recycling practises or business performances. Fewer studies integrate the two components. The researcher must explore both topics in depth in order to combine them with accurate data, examples, scenarios, models, etc. Consequently, the researcher created a complete framework that gives theoretical and conceptual explanations.

The third limitation is the researcher's sample size of 384 respondents, which represents just 40 percent of the total population. The Malaysian Young Entrepreneurs target population is chosen from all throughout Malaysia, which the researcher finds troublesome since the study was done over the semester break a year after the previous one (3 months holiday). The researcher had to advertise and contact individuals every day in order to distribute the questionnaire survey link (Google Forms). The respondents' participation is good, although it is unclear if they thoroughly read the questions before replying. Respondents may provide dishonest answers, and emotional reactions cannot be represented adequately.

In addition, the researcher is concerned that the results would be misinterpret. This is because of the tools used to analyse this research study. The researcher noticed that there may have been technical difficulties with the SPSS programme while the application evaluated the entered data during data collection. As a consequence, the researcher did several computations and interpretations to guarantee the accuracy of the analysis. Nevertheless, if an analytical error happens, the researcher feels that it will not significantly affect the whole research study.

5.5 Implication

Based on the overall results, the study targeted all of the objectives by using descriptive analysis and multiple regression analysis to determine which variables were dominant. It would be useful for the food and beverages industry in Malaysia to understand the individual and organizational factors that lead young entrepreneurs to implement recycling practices, as well as the business performance outcomes of these actions. A major goal of this study is to identify how recycling practices in the food and beverage industry contribute to reducing food waste and enhancing young entrepreneurs' business performance.

5.5.1 Theoretical Contribution

Since the theory is founded on logic, it is often assumed that the anticipated event is possible in order to compute its likelihood. It requires gathering a collection of observations and generating a set of guidelines from them that control the subject's behaviour and energy use during the observations.

The findings contribute to theory through the Potter’s theory of competitive advantage (1985). The Potter’s framework has generally been used in studies dedicated to young entrepreneur’s

business performances. Regarding the Potter's theory, the most influential factor that affects young entrepreneur's business performances is food packaging. The deployment of GSCM will strengthen organizations' core competencies and bring about related cost, innovation, and environmental impact benefits. In addition, competitive advantages have an impact on corporate performance, which is also the theoretical foundation of this study.

5.5.2 Practical Contribution

In reality, the conclusions of this study can be used to develop the financial industry by the government, lecturers, politicians, and private firms. This study, in particular, can help lecturers construct teaching materials. The research report can then be used by policymakers and corporate organisations to help them build their business performances in food and beverages industry.

In order to constantly increase government revenue, the government has been attempting to provide adequate help for young entrepreneurs to implement recycling practises in food and beverages industry. The government was required to create a support mechanism that would be beneficial to the Financial department particularly in the Food and Beverages Industry.

5.6 Summary

The goal of this study was to acquire a better understanding of the factors affecting the business performances of young entrepreneurs in the food and beverages industry. The researcher achieved the research aim indicated in the early phases effectively. When doing this research study, the researcher encountered a number of obstacles. Due to these limitations, the researcher was forced to offer many recommendations for additional inquiry. According to past study, the researcher was able to fill in the gaps with detailed information. Finally, all of the independent variables impact the young entrepreneur's business performances in food and beverages industry. As a consequence, the researcher believes that this research would be beneficial to students, lecturers, the government, policymakers, private organisations, and academics.

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APPENDIX

GANTT CHART PSM 1

Task/ Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Briefing on FYP															
Formulating Title															
Topic Confirmation															
Formulating research objective and research question															
Find sources related chosen topic and reading article journal															
Identify the problem statement															
Writing Chapter 1															
Writing Chapter 2															
Writing Chapter 3															
Writing overall report and presentation slide															
Report presentation															
Submission															

GANTT CHART PSM 2

Task/ Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Continuation on FYP 2															
Forming & developing constructions of measurement for Questionnaire Survey															
Submit Questionnaire for checking															
Correction questionnaire															
Forming &developing Questionnaire survey using Google Form															
Amendment on FYP report															
Proceed to data collection															
Finishing data collection (384 respondents)															
Extract data and key-in at SPSS															
Writing overall report and presentation slide															
Report presentation															
Submission															

QUESTIONAIRE

SECTION A - DEMOGRAPHY

Age

☐ **15-20** ☐ **21-25** ☐ **26 - 30**

Gender

☐ **Male** ☐ **Female**

Educational level

☐ **Sijil Pelajaran Malaysia (SPM)**

☐ **Sijil Tinggi Persekolahan Malaysia (STPM)**

☐ **Diploma**

☐ **Bachelor's Degree**

Which of the following best describes you?

☐ **Student**

☐ **Employed public sector**

☐ **Employed private sector**

☐ **Self employed**

Are you involved in the entrepreneurship sector?

☐ **Yes**

☐ **No**

Is recycling the best management option for business performances?

☐ **Yes**

☐ **No**

SECTION B

Factors affecting young entrepreneur's business performance in the food and beverage industry.

PART 1 Composting: The impact of recycling practices of composting in food and beverage industry towards young entrepreneur's business performances

Instructions: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

1	2	3	4	5
Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

No		1	2	3	4	5
1	I have the intention to compost kitchen waste/food waste.					
2	I know what items can be composted among my food waste.					
3	Many of my friends find food waste composting is useful and good way					
4	I believe composting can increase business performances.					
5	I think we have the technology to implement this method in Malaysia F&B Industry.					

PART 2 Anaerobic Digestion: The impact of recycling practices of anaerobic digestion in food and beverage industry towards young entrepreneur's business performances

Instructions: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

1	2	3	4	5
Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

No		1	2	3	4	5
1	I understand that anaerobic digestion is a renewable energy technology that manages organic waste.					
2	I find anaerobic digestion can lowering greenhouse gas emission.					
3	I know this anaerobic digestion will earn additional source of revenue.					
4	I find this would be an easy way to control odors problems.					
5	In my opinion, anaerobic digestion is the best and most environmentally friendly method for recovering biowaste.					

PART 3 Animal Feeding: The impact of recycling practices of animal feeding in food and beverage industry towards young entrepreneur's business performances

Instructions: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

1	2	3	4	5
Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

No		1	2	3	4	5
1	I have the intention to animal feeding kitchen waste /food waste.					
2	I know what items can be animal feed among my food waste.					
3	I believe business can save money in diverting food scraps as animal feed.					
4	I find retailers donate food waste to farmers as animal feed.					
5	In my opinion, this method can gain sales growth.					

PART 4 Food packaging: The impact of recycling practices of food packaging in food and beverage industry towards young entrepreneur's business performances.

Instructions: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

1	2	3	4	5
Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

No		1	2	3	4	5
1	I truly think that effective packaging influences purchase decisions.					
2	I found that consumers perceive the optimised packaging positively.					
3	I believe the optimised package is being used correctly by the consumer.					
4	I think food should be stored in a way that maximises expiry date.					
5	I believe the product lasts longer in a household conditions.					

PART 5 Young Entrepreneurs Business Performances: The impact of recycling practices in food and beverage industry towards young entrepreneur's business performance in the food and beverage industry.

1	2	3	4	5
Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

No		1	2	3	4	5
1	I believe young entrepreneurs willing to take risk.					
2	I believe these methods will increase net profits after taxes.					
3	I believe the young entrepreneurs can earn the customer loyalty.					
4	I think solving food waste issues can increase reputation of the industry.					
5	I think these methods can pathway to new opportunities in the business.					

BAHAGIAN B (DIISI OLEH PENYELIA)
PART B (TO BE FILLED IN BY SUPERVISOR)

Saya , DR NOR AZAH BINTI ABDUL AZIZ akui telah mengesahkan tesis berjilid pelajar di bawah penyeliaan saya ini.

I, DR NOR AZAH BINTI ABDUL AZIZ admit that I have approved the student-bound thesis under my supervision.

Tarikh : 1/2/2023 Tandatangan & Cop :
Date *Signature & Stamp*

DR. NOR AZAH BINTI ABDUL AZIZ
PENSYARAH KANAN
JABATAN TEKNOUSAHAWANAN
FAKULTI PENGURUSAN TEKNOLOGI & TEKNOUSAHAWANAN
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BAHAGIAN C (DIISI OLEH PIHAK FAKULTI)
PART C (TO BE FILLED IN BY THE FACULTY)

Saya , _____ akui telah menerima **1 buah naskhah LAPORAN PSM II (BERJILID)** dan **1 CD** untuk diagihkan kepada pihak-pihak yang berkenaan.

I, _____ admit that I have received 1 copy FYP REPORT (BINDING) and 1 CD to be distributed to the relevant parties.

Tarikh : _____ Tandatangan : _____
Date: *Signature*