THE STUDY ON GREEN LOGISTICS AWARENESS AMONG SMEs IN KOTA BHARU, KELANTAN

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ABSTRACT

This study aims to examine the awareness of green logistics among Small and Medium Enterprises in Kota Bharu. There is great concern among traders about Malaysia's deteriorating environmental cleanliness. The objective of this study is to identify and analyse the level of awareness of traders in the use of green logistics. This study uses quantitative research, as many as 300 questionnaires have been distributed to participants. Data collection was done by contacting the participants through an online survey through social media and SPSS software was used to analyse the data collected from the respondents. The results of the study show a positive relationship between knowledge, advertising, government, and the environment that contribute to the awareness of the concept of green logistics among Small and Medium Enterprises in Kota Bharu. Implications and recommendations are also given to future researchers who will conduct studies like this soon.

Keywords: Awareness, green logistics, knowledge, advertising, government, environment

ABSTRAK

Kajian ini bertujuan untuk mengkaji kesedaran terhadap logistik hijau kalangan Perusahaan Kecil Sederhana di Kota Bharu. Terdapat kebimbangan besar dalam kalangan para peniaga mengenai kebersihan alam sekitar Malaysia yang semakin merosot. Objektif kajian ini adalah untuk mengenal pasti dan menganalisis tahap kesedaran para peniaga dalam penggunaan logistik hijau. Kajian ini menggunakan kajian kuantitatif, sebanyak 300 borang soal selidik telah diedarkan kepada peserta. Pengumpulan data telah dilakukan dengan menghubungi peserta melalui tinjauan dalam talian melalui media sosial dan perisian SPSS telah digunakan untuk menganalisis data yang dikumpul daripada responden. Hasil kajian menunjukkan hubungan yang positif antara pengetahuan, pengiklanan, kerajaan, dan persekitaran yang menyumbang terhadap kesedaran terhadap konsep logistik hijau dalam kalangan Perusahaan Kecil Sederhana di Kota Bharu. Implikasi dan cadangan juga diberikan kepada pengkaji akan datang yang akan menjalankan kajian seperti ini dalam masa terdekat.

Kata kunci: Kesedaran, logistik hijau, pengetahuan, pengiklanan, kerajaan, alam sekitar

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The term "green logistics" is defined as a set of supply chain management practices and strategies that reduce the ecological and energy footprint of goods distribution, which focuses on material handling, waste management, packaging, and transport. This ecological system carries various meanings. It is a logistics subsystem because it is oriented to the logistics process mainly to the process of collection, storage, and transportation. Solutions can be created with ecological activities that do not burden the environment and social waste (Stolka and Kubicka, 2018).

There is an increasing awareness of the environmental commitment of corporations because these commitments enhance competitive advantage. Customers in developed economies initially valued environmentally sustainable products more. Nowadays, most of the information is available on the internet. Consequently, consumers in developing economies are increasingly becoming aware of the environmental performance of corporations (Qayyum, Jamil, and Sehar, 2022). A business or organizational commitment is considered green marketing. Green marketing is considered in a commitment or business means the development of goods and services that are safe and environmentally friendly. More efficient use of energy and pollution prevention can be done by using recyclable and biodegradable packaging. entrepreneurs have been in the business world for a long time or young entrepreneurs, they need to focus on business or green entrepreneurship which is much better. Many firms are interested in green marketing. This green marketing is safer, and most business companies use this importance as their marketing strategy and compete more healthily among other business companies. (Eugine Tafadzwa Maziriri, 2020).

In the 1970s of the 20th centuries, when the relationship between economic development, the development of social relations, the environment, and natural resources were observed and characterised, the first distinct "green" notion emerged. This desire is primarily expressed in the Stockholm Declaration of the United Nations Conference on the Human Environment, which was adopted on June 16, 1972. (1972 United Nations Conference). As a result, efforts have been made to define what is meant by sustainable development in a political, ecological, economic, and social context. According to this definition, sustainable development is the ability to satisfy the development needs of the current generation without impairing the ability of future generations to do the same.

As a result, it has been determined that the state's primary function is to protect the environment. A collection of sustainable rules and procedures aimed at minimising the environmental damage brought on by the operations of this industry are referred to as eco-logistics or green logistics. This idea of logistics has an impact on how systems, equipment, and structures are set up for the movement, distribution, and storage of commodities. The definition itself demonstrates that the present generation's economic advancement and civilization should not be made at the expense of the environment's devastation and the depletion of non-renewable resources for the benefit of future generations, who have a right to their own advancement.

This study is to reveal the knowledge and awareness of green logistics among SMEs. This study aims to put valuable inputs for the literature for the SMEs in Kota Bharu. Specifically, this study addresses three objectives: (1) To evaluate the relationship between knowledge and awareness of green logistics among SMEs influence of knowledge on the awareness of green logistics among SMEs. (2) To determine the relationship between influence of advertising on the awareness of green logistics among SMEs. (3) To evaluate the relationship between influence of government regulation on the awareness of green logistics among SMEs. (4) To

determine the relationship between the influence of the environment on the awareness of green logistics among SMEs.

1.2 PROBLEM STATEMENT

Team Albert Arnold (Al) Gore Jr. and the Intergovernmental Panel on Climate Change (IPCC) receiving the 2007 Nobel Peace Prize prove that the modern economic world takes the phenomenon of global warming seriously. This is a very clear indication that environmental awareness is increasing, which serves as a motivation to increase attempts to identify effective, yet affordable ways to reduce greenhouse gas emissions in the first place. Due to its sole focus on the economic sector, today's corporate world is no longer enlightening. Other aspects of sustainable development are raised more often when green is given unique characteristics. Cities suffer from the same problem.

The company's supply chain activities have resulted in greenhouse gas emissions, improper waste management, the production of non-biodegradable products, inappropriate storage of hazardous and explosive materials, and excessive resource use, which have all contributed to environmental pollution, global warming, and climate change, as well as the termination of human life. Businesses use green and social practices in their supply chains to lessen the environmental impact of their operations, maintain community safety, increase efficiency, gain a competitive edge, satisfy stakeholder demand, and open new market opportunities. (Mensah, Ahenkorah, Afum, Dacosta & Tian, 2020)

In Malaysia, one of the key elements stressed by most businesses to ensure they maintain their competitiveness is supply chain management. Concerns about sustainability are just one of many concerns that need to be resolved in respect to supply chain management. The concept of sustainability is still crucial in the age of industry 4.0 since it can guarantee both the proper

implementation of supply chain management and the mitigation of adverse environmental effects generally. (Amni Husna Mohd Nashir, Syaimak Abdul Shukor, Aida Sheikhi 2020)

The first problem is pollution. Technological progress and the implementation of innovative solutions have been taken as the best step in reducing pollution. The pollution involved is water pollution. It is the main source in the daily life of living beings. So, it is necessary to take action to protect water resources. (Stolka & Kubicka, 2018. According to some previous researchers such as Kusi-Sarpong, Bansah, and Jermsittiparsert reverse logistics activities are one of the ways for their firms to continue to progress in their firm performance as well as firms that practice environmental management also improve brand sustainability performance. Based on Kusi-Sarpong, green information systems and technology can modify green supply chain management practices. (Antwi, Agyapong & Owusu, 20220. Sewage and sewage sludge are old waste. The sewage treatment process is one of the uses of environmental technology that is used for the good of the environment and living beings.

Numerous companies in South Africa have embraced the idea of "becoming green" and integrated green marketing into their operations. Yee (2016) notes that because of issues with environmental sustainability, green marketing is relevant to both small and medium-sized businesses. Additionally, green marketing has emerged as a crucial strategy for organizations looking to thrive in the marketplace and maintain their competitive advantage (Chahal, Dangwal, & Raina, 2014).

Other than that, to encourage the use of green logistics, the responsible parties especially the government and business organizations need to implement the use of recycled goods such as recycled bags. These recycled bags can be used for shopping, and they can also be used many times. In fact, it is also easily available in stores and supermarkets. With global environmental issues on the rise, companies and policymakers are facing increasing pressure to reduce the

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negative ecological impact of logistics activities and make them more environmentally sustainable. Without additional environmental measures, carbon dioxide (CO2) emissions from transport activities will increase by 60% by 2050, and emissions from global transport alone will increase by 160% (Robaina and Neves, 2021)

The majority of manufacturing SMEs in Johannesburg have forgotten to form large and significant organizations despite the South African government's efforts to support the development of the SME sector. Lekhanya (2010) looked into how small businesses used marketing systems, and the findings showed that owners and managers of rural SMEs lacked advertising knowledge and expertise and used showcasing techniques sparingly. There are many shortcomings in accessible writing when it comes to green marketing techniques, competitive advantage, and SME business success. Surprisingly, the majority of international investigations into SMEs have focused on crisis management and strategic orientation, with research done in, among other places, Peru, Mexico, and the United States of America (Parnell, 2015).

Next, environmental problems. Environmental problems can be solved with the existence of dynamic urban development. These problems often occur due to the logistics process of supply, production, and distribution. Through logistics activities, green activities are carried out to minimize the negative effects of economic activities. (Agata Mesjasz-Lech, 2016) In Malaysia, consumers adopt the concept of green packaging products.

1.3 RESEARCH QUESTION

The research questions proposed are aligned with the main objective of the study on the awareness of green logistics among SMEs in Kota Bharu, Kelantan. The research questions are as follows:

1) What is the relationship between knowledge and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?

2) What is the relationship between advertising and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?

3) What is the relationship between government regulation and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?

4) What is the relationship between environment and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?

1.4 RESEARCH OBJECTIVES

This research was done to evaluate the awareness of green logistics among SMEs in Kota Bahru, Kelantan. In this study we will:

1) To evaluate the relationship between knowledge and awareness of green logistics among SMEs in Kota Bharu, Kelantan.

2) To determine the relationship between advertising and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.

3) To study the relationship between government regulation and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.

4) To investigate the relationship between the environment and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.

1.5 SCOPE OF THE STUDY

The area of this research only will focus on the awareness of green logistics among SMEs in Kota Bharu Kelantan. Moreover, the respondents only focus on 300 workers of SMEs company in Kota Bharu Kelantan. The questionnaire will distribute to the employees that work in SMEs in Kota Bharu Kelantan. The reason the researchers choose workers in SMEs is that worker that works here will have basic knowledge about the overall processes and system in SME companies and can answer the questionnaire without any bias.

1.6 SIGNIFICANCE OF THE STUDY

The role of logistics in contemporary transportation networks is crucial. While forward distribution, or the transport, warehousing, packaging, and inventory management from the producer to the consumer, is what traditional logistics aims to coordinate. Environmental concerns created a brand-new industry called "green logistics," which opened up markets for recycling and waste disposal. A significant new market has emerged around the integration of logistics into waste management and recycling, including the disposal of poisonous and hazardous products. Reverse distribution is a continuous embedded process in which the company (maker or distributor) is in charge of both the take-back and delivery of new products. This would entail taking into account environmental factors over a product's whole life cycle.

1.7 DEFINITION OF TERMS

The terms included in this research study are awareness, green logistics, Small and Medium Enterprises, and Kota Bahru, Kelantan.

1.7.1 AWARENESS

Awareness is an understanding of the activities of others, which provides a context for your own activity. This context is used to ensure that individual contributions are relevant to the

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group activity as a whole and evaluate individual actions with respect to group goals and progress. In this study, awareness is considered as an individual's ability to directly know, feel, sense or be aware of events or happenings in their immediate environment. Therefore, it is argued that although people may have awareness in green logistics, however, if he lacks awareness about pollution, he is less interested in practicing green living as a concept of green logistics. Therefore, it is reported that awareness of green logistics is important among entrepreneurs to accept it.

1.7.2 GREEN LOGISTICS

Green logistics is using new technology and equipment to reduce damage during the working environment. Green logistics can concentrate on packaging, transportation, material handling, and waste management. The TPB can more precisely forecast a person's behaviour by taking into account expected obstacles and prior experiences by introducing the notion "perceived behavioural control." Consumer behaviour regarding green logistics awareness has been proven to be positively influenced by perceived behavioural control. And in Ajzen's TPB model, it is the only variable that has an immediate impact on behaviour. Additionally, it might be a significant variable in studies on the connection between the environment and advertising.

1.7.3 SMALL AND MEDIUM ENTERPRISES (SMEs)

Small and medium enterprises are businesses that handle or produce some workers under certain standards. Intentions and actions taken during behaviour are also governed by cultural norms (Cialdini et al., 1990). Previous research has covered how subjective norms affect SMEs' decisions regarding financial access (Al Balushi et al., 2018). Cholil (2015), Yanto et al. (2016), Din and Nuh (2019), and Turyahikayo (2019) all looked at the connection between subjective norms and an entrepreneur's inclination to seek financing (2015). Small and medium enterprises are different in each country due to culture, religion, and other issues. Small and

medium-sized enterprises (SMEs) are independent, non-self-employed companies with less than a certain number of employees.

1.7.4 KOTA BAHRU, KELANTAN

Kota Bharu (KB) is the capital of Malaysia's state of Kelantan. The city was founded in 1844 during the reign of Sultan Muhammad II and is the oldest city on Peninsular Malaysia's east coast. The city is close to the mouth of the Kelantan River. Kota Bharu became the administrative and commercial center of Kelantan.

1.8 ORGANIZATION OF THE PROPOSAL

This chapter provided an overview of this study. It described the background of the study, problem statement, research questions, research objectives, the scope of the study the significance of the study, the definition of terms, and the organization of the proposal. It was highlighting the awareness of green logistics among SMEs in Kota Bahru, Kelantan. Additionally, the next chapter will discuss top to bottom on every one of the variables and the proposed conceptual framework.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The supply chain and logistics are closely intertwined. The relationship has to do with processing raw resources and producing semi-finished goods. Consumer service is one of the most important components in the supply chain and it also is one of the keys to getting more profit. The system of green supply chains depends heavily on green logistics, which is a key element of the framework for logistics and environmental superiority. The Green Supply Chain Management (GSCM) component is measured based on green logistics. The literature offers several definitions for GSCM and numerous justifications for Sustainable supply chain management (SSCM). These varied descriptions include a wide range of supply chain network classifications and restrictions. There is a growing body of literature on many aspects of green logistics.

Competitors need to provide a product that is distinctive or unusual in a competitive business market to draw customers. One of the important components in promoting products for every company is packaging from a marketing standpoint. It has the power to sway a customer's choice at the point of purchase. It also functions as a channel of communication between a product's image and the history of the organization.

2.2 UNDERPINNING THEORY

According to Theory of Planned Behavioural, a person's attitude towards behaviour, coupled with common subjective norms, and with the perception of behavioural control factors, all work to influence the individual's intention to perform a certain behaviour (Ajzen, 1991). Using the TPB in the context of IT use, intention to use IT is assumed to influence individuals' subsequent IT use, while fully mediating the influence of subjective attitudes and norms on subsequent IT use. In addition, perceived behavioural control also directly affects the intention to use IT, as

well as ultimate IT use. In this theory, three factors are involved, namely attitude, subjective norms, and perceived behavioural control. All these factors must be closely related to behaviours.
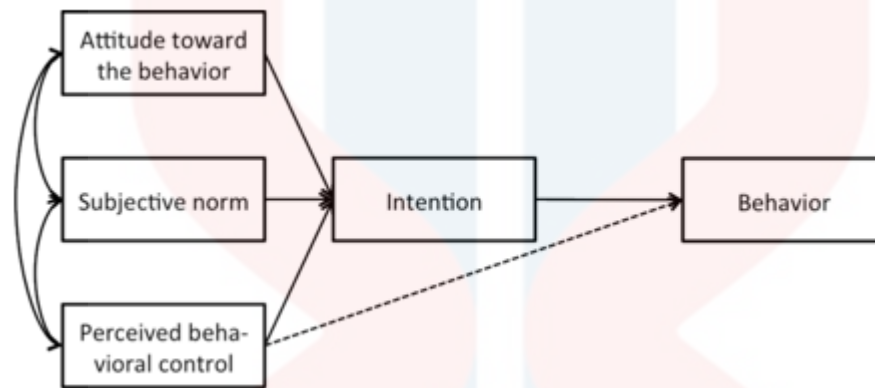
Figure 2.1

To build a theory of planned behaviour for green logistics awareness among SMEs studies, some external factors have been added which are independent variables (Knowledge, environment, government, and advertising). More specifically for the purpose of this study, the analysis of external factors will be studied for their effect on the awareness that affects green logistics activities among Small and Medium Enterprises.

2.3 PREVIOUS STUDY

2.3.1 GREEN LOGISTICS

Green logistics refers to supply chain management practices and strategies that reduce freight distribution's environmental and energy footprint. It focuses on material handling, waste management, packaging, and transport (Rodrigue, 2020). Simply put, green logistics refers to any business practice that aims to make operations more sustainable. It is also known as eco-logistics, and it builds on the foundation established by traditional logistics. The emphasis in

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traditional logistics is on operations, with no regard for the environment. The goal of green logistics is to improve both business operations and organizational sustainability.

Green Supply Chain Management is the implementation of green properties into existing Supply Chain Management, which fully integrates environmental considerations into a traditional way of Supply Chain Management. Another point of view in Green Supply Chain Management is that the industry has been gradually shifting towards eco-friendly supply chains by incorporating green technologies into their manufacturing, product design, and distribution processes (Choong, 2015).

There was no specific or clear definition to describe Green Supply Chain Management because each researcher defined the concept in a different way, making it difficult to explain with a single definition (Islam, 2017).

Awareness of green logistics is derived from awareness and green logistics. The term of awareness is the state or capacity to observe, feel, or be cognizant of events, objects, or sensory patterns. In this term, awareness of green logistics is the knowledge, perception or concern about supply chain management practices and strategies that reduce the environmental and energy footprint of freight distribution.

2.3.2 KNOWLEDGE

Knowledge is a valuable strategic asset. It is a collection of skills, experiences, capabilities, and insight that an organization creates and relies on collectively. It has an impact on all activities within and outside of the organization. Knowledge is also a systematic approach to capturing and utilizing an organization's collective expertise in order to create value. Effective knowledge enables the creation, transfer, and application of knowledge at various levels in a coherent and productive manner. The knowledge base can be defined as the organization's understanding of what customers want to be combined with the employee's skills. Using this

knowledge correctly can help organizations run more efficiently, reduce organizational risks, and maximize opportunities. This is referred to as the knowledge advantage.

Knowledge consists of consideration of aspects in selection, organization, and comparison of the idea's value (Rajendran, 2019). Knowledge can also be defined as the stage of an idea's evaluation from several levels by an organization's judgment; in short, knowledge can be used as a tool to make a positive or negative judgment about any idea. Organizational perception is an example of knowledge, and it is an important tool for assisting organizations in determining or deciding on implementation activities (Rajendran, 2019).

2.3.3 ADVERTISING

According to the Advertising Association of the UK, advertising is a strategy for reaching out to customers of a good or service. Paid communications with the aim of informing or influencing their recipients are known as advertisements. Some people are unaware of advertising even though it is continuously around. Advertising today spreads its message through every channel that is available. Television, print (newspapers, magazines, journals, etc.), radio, press, internet, posters, clothes, events, colours, sounds, visuals, and even people are examples of such media (endorsements). There is also green advertising, which many businesses have used. Green advertising is an advertisement that promotes a company's products or services, ideas, or capabilities in reducing environmental damage and pollution (Santoso, 2016).

2.3.4 GOVERNMENT REGULATION

Regulation is broadly defined as the imposition of rules by the government, backed up by the use of penalties, with the goal of changing the economic behaviour of individuals and firms in the private sector. There are various regulatory instruments or targets available. Prices, output, rate of return (in the form of profits, margins, or commissions), information disclosure,

standards, and ownership ceilings are just a few examples. Regulations may also be enacted to protect suppliers from the unstable output and low-price conditions, as well as to promote employment and a more equitable distribution of income.

Malaysia's government has recognized climate change and international green efforts. In April 2009, the Malaysian government established a new ministry, the Ministry of Energy, Green Technology, and Water (KeTTHA). KeTTHA's primary goal is to promote high-impact research and development (R&D) of green technologies in Malaysia (Choong M. C., 2009).

2.3.5 ENVIRONMENT

The environment is the sum of all the external conditions that affect an organism's life, development, and survival. The naturally occurring physical environment on which humanity is completely dependent in all of its activities. Environmental functions refer to the various uses to which these surroundings are put for economic purposes. Because of the increased environmental activities of humans and industrial companies, Malaysia's environmental problem has become more severe.

Individuals around the world are improving their quality of life because of the economics, globalisation, and technological advancement are all advancing quickly. Despite the profound consequences of such changes, the environmental damage is devastating, necessitating industrial action to save the planet. Factories generate massive amounts of waste, recyclable materials pollute land and water, and greenhouse gas emissions have a significant impact on climate change. As a result, freight transportation is one of the largest contributors to carbon dioxide (CO2) (Chen, 2020).

2.4 HYPOTHESES STATEMENT

The hypothesized relationships between the research constructs are discussed further below.

2.4.1 KNOWLEDGE

Knowledge is a valuable asset in any organization. The organization's community must be aware of the current trend, surroundings, and environment. Top management must have extensive knowledge in order to provide resources and encourage employees to learn new innovations and technology. Another barrier was a lack of knowledge in green logistics; top management has a strong relationship with the adoption because certain companies, particularly SMEs, always lack internal expertise. Top management with green knowledge was able to evaluate the benefits of new innovative technologies (Chen, 2020).

There are organizations that has been neglected the eco-friendly option in comparison with economic and environmental dimensions (Vallance, 2011). However, many consumers are aware of climate change and industry operations that harm the environment, putting pressure on the government and industry. Pressures are increasing from a variety of sources, pushing all actors and sectors of the economy to prioritize environmental concerns.

H1: There is a relationship between knowledge and the awareness of green logistics among SMEs.

2.4.2 ADVERTISING

Advertising is a form of communication that aims to inform or influence people. People are promoting green logistics or eco-friendly products and services through social media, newspapers, magazines, radio, and even people. This can make organizations aware that they need to pay more attention to the environment. This can also raise consumer awareness and demand for environmentally friendly products and services.

H2: There is a relationship between advertising and the awareness of green logistics among SMEs.

2.4.3 GOVERNMENT REGULATION

The government is one of the communities that has become aware of the recent climate change. Even though government intervention is difficult due to the unpredictable outcome, government intervention and regulation are reaching out to environmental issues more directly. Government can exert influence, even to the point of pressuring an organization to care more about the environment. As the EU moves toward a 'fair and efficient pricing policy, there is growing interest in charging for external costs (Rodrigue, 2020).

Malaysia's Ministry of Energy and Natural Resources is collaborating with the Ministries of Transport and International Trade and Industry to research and develop the use of electric vehicles on Malaysian roads (Choong M. C., 2009).

H3: There is a relationship between government regulation and the awareness of green logistics among SMEs.

2.4.4 ENVIRONMENT

Individuals all over the world are improving their quality of life as a result of rapid economic development, globalization, and technological progress. Regardless of the profound consequences of such changes, the environmental damage is catastrophic, necessitating industry initiatives to save the planet. Growing public awareness of environmental issues and their negative economic consequences, which began in the 1950s with the impact of trucking on urban communities. Truck size, emissions, and noise became public concerns, resulting in the first legislation addressing pollutant and noise emissions, as well as road access conditions. In a more recent context, well-publicized issues such as sustainability, energy, waste disposal, and climate change have aided in the establishment of green logistics as a formal field of

investigation and mitigation (Rodrigue, 2020). Businesses began to consider the environment when optimizing supply chain delivery times, costs, and greenhouse gas emissions.

H4: There is a relationship between environment and the awareness of green logistics among SMEs.

2.5 CONCEPTUAL FRAMEWORK

A research approach has been presented to examine SMEs' awareness of green logistics considering the literature review. In the figure below, the suggested conceptual framework is displayed. Three factors, namely knowledge, advertising, governmental regulations, the environment, and awareness of green logistics, make up the independent variable that has been proposed.
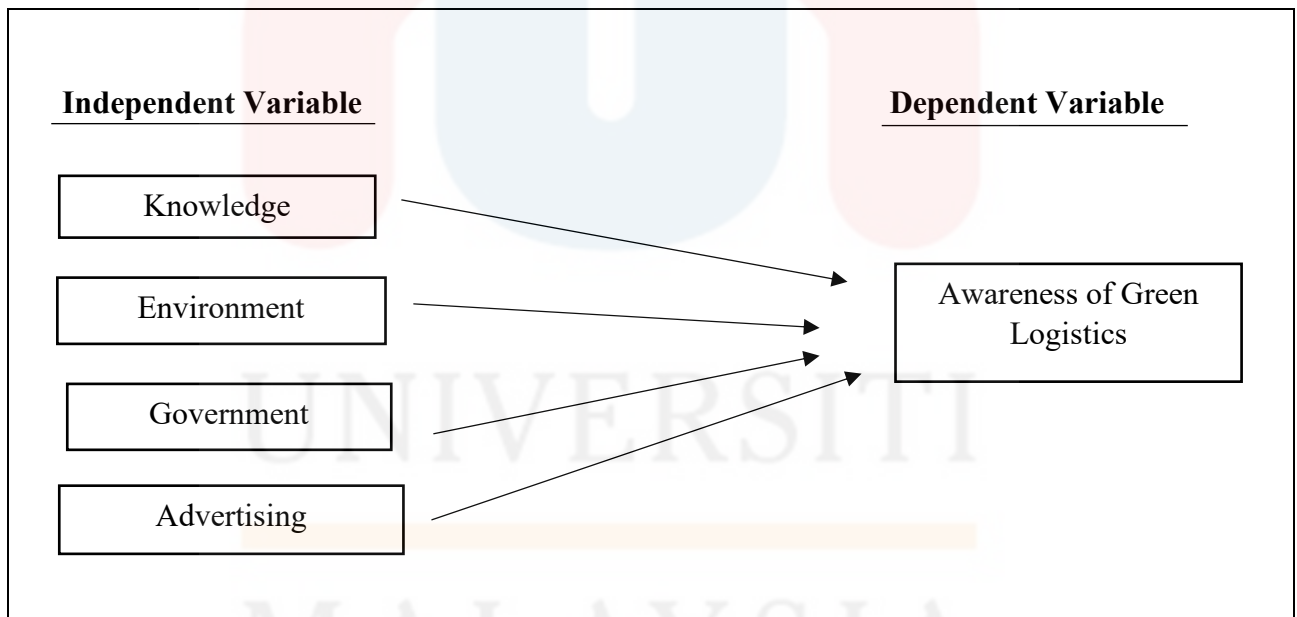
Figure 2.2

2.6 SUMMARY

This chapter describes the dependent and independent variables of this study. The independent variables are knowledge, advertising, government regulation, and finance, while the dependent

variable is green logistics with small and medium enterprises. The analysis used to conduct this research will be explained in the following chapters.
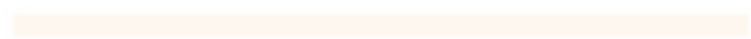
CHAPTER 3: RESEARCH METHOD

3.1 INTRODUCTION

The aim of this research is to explore the perception of key respondents toward green logistics awareness among SMEs in Kota Bharu, Kelantan. This chapter will discuss in detail the methods and methodology used in this research.

3.2 RESEARCH DESIGN

The researchers have used descriptive and correlation methods that are under non-experimental research. A correlation study tries to examine connections or associations between variables without introducing an intervention, while descriptive research would give an account of the features of people, groups, or situations that may form the first stage of a more complicated design. Because quantitative research is a strategy for testing objective theories by examining the relationship between variables, the researchers would employ it. The instrument that would use in these researchers was a questionnaire.

3.3 DATA COLLECTION METHODS

The quantitative data techniques were employed as the main data collection technique. These procedures made use of closed-ended surveys, correlation, and regression strategies, mean, mode, and median, as well as other statistical analysis techniques. The management and use of quantitative methodologies took less time. For this research, the research data was obtained and collected through a questionnaire and primary data were gathered via a questionnaire. The questionnaire will be delivered among group members, with a verified cover letter signed by the researchers' supervisor. Our online survey was related to the study's goals and questions for further investigation. We made the online survey form available to UMK Knowledge Environment Government regulation logistics students via social media. The online survey system automatically gathers each respondent's response and emails it to us.

Primary data

Primary data was the data that we collected through a survey which will be done in Kota Bharu by Small and Medium Enterprise (SMEs) as respondents. The main instrument to collect primary data is a questionnaire.

Secondary data

Relates to data that has already been gathered by someone (an individual or an organization) and is easily accessible to the researcher. (Business Research Methods All Rights Reserved © Oxford Fajar Sdn. Bhd. (008974-T), 2012 6– 40). Secondary data means the data that we collected from other parties including past researchers' studies. In this study, the secondary data is collected by the researchers through analysis of journals, online articles, and websites instead, the researchers put in the time and effort to compile and analyze the data from credible sources. For this research, the research data was obtained and collected through a questionnaire. The questionnaire will be delivered among group members, with a verified cover letter signed by the researchers' supervisor. Researchers collect data by questionnaire, and it will be their primary data.

3.4 STUDY POPULATION

 A population is related to any specific class of people or group of people or non-human beings such as objects, educational institutions, time units, and geographical regions. A quantitative survey method will be used, with questionnaires targeting around 384 respondents as the study's target population. The population of small and medium enterprises (SMEs) is 46,618 in Kelantan. It can be collected in the Economic Census 2016: Profile of Small and Medium Enterprises (reference year 2015), Department of Statistics, Malaysia.

3.5 SAMPLE SIZE

A sample size is a subset of the population. By studying the samples, the researcher was able to show a general conclusion to the population of interest. A sample is a subset of a larger population of people, objects, or items selected for measurement (De Winter, Gosling, & Potter, 2016). To get the correct sample size, we utilize the table from Krejcie and Morgan (1970).

According to (Krejcie & Morgan, 1970), 384 respondents would be chosen as respondents based on a known population's sample size. There's also the final sample size, which is the number of gatherings and units for which data is being prepared (Lavrakas, 2008). samples can provide inaccurate results, while large samples require a significant investment of time and energy (Lin, 2018). As the need for testing grows, an effective method is needed. The sample size needed to represent a particular population. For this study, researchers focused on the small and medium enterprises (SMEs) of Kota Bahru, Kelantan.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size   Source: Krejcie & Morgan, 1970

Table 3.1: Table for Determining Sample

Note:

N is population size.

S is a sample size.

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$$n = \frac{X^2 \, NP \, (1-P)}{(ME^2 \, (N-1)) + (X^2 \, P \, (1-P))}$$

n = sample size

X^2 = Chi square for the specified confidence level at 1 degree of freedom

N = Population Size

P = Population proportion (50 in this table)

ME = desired Margin of Error (expressed as a proportion

Figure 3.1: Formula for Determining Sample Size

3.6 SAMPLING TECHNIQUE

In this study, a non-probability sampling technique was used. This Sampling technique employs randomization to ensure that every member of the population has an equal chance of being included in the selected sample. It is also known as random sampling. One of the non-probability techniques used to conduct the survey is simple random sampling. Every element has an equal chance of being chosen as the part sample in this technique. It is used when no prior information about the target population is available. This method enables the researcher to choose respondents based on their convenience and accessibility without any complications. The quantitative method was used in this study to determine the level of awareness of green logistics among SMEs in Kota Bahru, Kelantan. The survey was carried out using a structured questionnaire.

3.7 RESEARCH INSTRUMENT DEVELOPMENT

The most efficient method for gathering data during a research project is the questionnaire instrument. A questionnaire is used by the researcher to get data from the respondents. In order for respondents to physically complete the questionnaire, the researcher distributes it to them throughout SMEs in Kota Bharu. In addition to physically handing out the questionnaire, the researcher will also submit it to the respondent via Google Form, an online platform. Because they are the most economical and effective method of gathering data, questionnaires are the

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tool of choice for researchers. Due to the spontaneous nature of the process of gathering data, questionnaires that are pertinent to the study were created, and by employing them, immediate responses may be obtained. A 5-point Likert scale is a tool used by researchers to obtain relevant results. In Section A of the survey, the demographic profiles of the respondents who work as SMEs in Kota Bharu, Kelantan are included. Section B describes the independent factors and the study's dependent variable.

Gender, race, marital status, and age are all factors to be considered in this section of the questionnaire. By handing out the questionnaire to all the SMEs in Kota Bharu, Kelantan, as well as via Google Form, data about green logistics awareness among SMEs in Kota Bharu, Kelantan, will be analysed. There are a few respondents, and the data will be gathered and analysed.

3.8 MEASUREMENT OF THE VARIABLES

For the purpose of completing this research, samples or data were collected. A structured questionnaire was used to collect primary data. Meanwhile, secondary data were gathered from website articles and relevant journals. The primary data source is obtained from questionnaires distributed at random to selected respondents. The survey will be closed-ended. This type of questionnaire will have multiple answer options and will allow respondents to choose a single answer from the options provided. When conducting preliminary analysis, this type of questionnaire is especially useful. Because a fixed answer set is provided, these are ideal for calculating statistical data and various percentages. This questionnaire will use the Likert question format. The Likert question format is used to determine the degree to which respondents agree with a specific statement.

The questionnaire is divided into five sections, numbered A through E. In addition, the questionnaire will include a nominal and ordinal measurement scale. In section A, the nominal

scale is used to determine each respondent's demographic profile, whereas the ordinal scale is used to evaluate each item in sections B to E. Section A contains demographic questions about respondents' personal information. Section B seeks related information about knowledge that can influence green logistics awareness. Section C discusses advertising that can influence public perception of green logistics. Section D is for obtaining reliable information about government regulations that can influence green logistics awareness, and Section E is for obtaining reliable information about environmental regulations that can influence green logistics awareness. The collected data will be analysed using descriptive statistics. Researchers used the SPSS software package to analyse data from questionnaires. This study was conducted to determine the level of awareness of green logistics among SMEs in Kota Bahru, Kelantan.

3.9 PROCEDURE FOR DATA ANALYSIS

3.9.1 Pilot test

The final phase of project planning is pilot testing. the pilot study makes the work a useful reference, which may help persuade individuals to put their money into it. The test's results can also assist important stakeholders in precisely estimating the project's resources.

The most important aspect of doing pilot tests is gathering participant input. There are several methods to do this, but an online survey is often more productive, or we can call that as a questionnaire. The questionnaire, there will contain independent variables (IV) and dependent variables (DV). Our team manipulates an independent variable (IV) to see if it affects another variable in a positive or negative way. The dependent variable is the other variable that is measured and expected to be influenced by the dependent variable (DV). 30 surveys will be given out as part of the study, and feedback will be gathered to help the questions be of higher quality.

3.9.2 DESCRIPTIVE ANALYSIS

The process of utilizing statistical methods to summarize or describe a set of data is known as descriptive analysis. Descriptive analysis, one of the main types of data analysis, is well-liked for its capacity to produce understandable insights from uninterpreted data. This study found that respondents were asked to provide information on their gender, age group, religion, race, and marital status. This is for the purpose of enhancing knowledge about the history of SMEs in Kota Bharu, Kelantan. As a result, descriptive analysis is employed to evaluate the results of the demographic section and ascertain how each questionnaire question is responded to by the respondent. The respondent must then accurately represent all demographic traits.

3.9.3 RELIABILITY ANALYSIS

Validity is the degree to which a test or scale assesses the construct it is intended to measure, whereas reliability refers to the consistency of a measure. A good test or scale has high validity as well as high reliability. However, a test or scale can have validity without also being reliable.

3.9.4 HYPOTHESIS TESTING ANALYSIS

Drawing conclusions about a population based on data collected from a sample of that population is the goal of statistical inference. A method for understanding how reliably one can extrapolate observed findings in a study sample to the larger population from which the sample was drawn, hypothesis testing is the process used to assess the strength of the evidence from the sample and provides a framework for making decisions related to the population. The researcher develops a specific hypothesis, assesses data from the sample, and determines if the specific hypothesis is supported by the data.

3.10 SUMMARY

In conclusion, this chapter highlighted the quantitative analytical approach that will be employed in this study, as well as the objective of analysing the impact of autonomous vehicles in parcel sectors. The quantitative data-gathering technique, which includes the use of questionnaires, is thoroughly addressed. This chapter also described in depth the research framework, hypothesis, population, sample design, research design, research instrument development, data collection instruments, and data analysis.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The outcomes of the research analysis were discussed and reported in this chapter. In this study, it was important to examine how the dependent variable and the independent factors related to one another. This chapter also served to test the hypothesis and respond to the study objectives. The findings of the data gathering, and a demographic profile then marked the beginning of this chapter. The reliability study was carried out to make sure the samples were reliable for the scale measurement analysis section, and descriptive analyses for the items and variables were carried out. The research analysis's findings were covered in detail in this chapter. The objective was to study how dependent and independent variables related.

In addition, this chapter was intended to test the hypothesis and respond to the research objectives. The results of the data gathering, and the demographic profile were then presented in this chapter. The descriptive analysis of the items and variables was carried out for the scale measurement analysis section, and the reliability analysis was carried out to make sure the samples were accurate. The analysis and findings that we have been used in this study are preliminary analysis, demographic profile of respondents, descriptive analysis, validity and reliability test, normality test and hypotheses testing.

4.2 PRELIMINARY ANALYSIS

In this study, there are two major stages of data analysis. Stage one aims to conduct preliminary statistical analyses such as data screening and cleaning, assessing normality, and establishing preliminary reliability, whereas Stage two aims to conduct more advanced statistics such as Factor Analysis and Multiple Regression to derive innovation factors and build the Best Innovation Model (BIM). Raw data must be prepared for analysis by checking for errors, organising it, and entering it into a spreadsheet programme. Checking the reliability of

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measures, evaluating the effectiveness of any manipulations, examining the distributions of individual variables, and identifying outliers are all examples of preliminary analyses on any data set.

The survey measurement was pilot tested on the same type of people who would be used as respondents in the main study to ensure that the instructions, questions, and scale items were clear. Even though the measurement instrument was adapted from a previous study, it was necessary to ensure that the respondents in this study could understand the questionnaire items and respond appropriately. As a result, a pilot test was conducted to identify any questions or items that might offend potential respondents and to identify anything that might go wrong throughout the data collection process. The researchers chose 30 people to participate in the pilot test study. The following is the outcome of the pilot test:

Variables	Number of Items	Cronbach's Alpha Coefficient	Strength of Association
Dependant Variables Green Logistics Awareness	5	0.904	Good
Independent Variables Environment	5	0.870	Good
Independent Variables Government Regulation	5	0.870	Good
Independent Variables Knowledge	5	0.885	Good
Independent Variables Advertising	5	0.885	Good

Table 4.1: The Result of reliability Cronbach's Alpha Coefficient for the Independent Variables and Dependent Variables

Table above showed the result of Cronbach's Alpha Coefficient for the Independent Variables and Dependent Variables in this study. Based on the table shows, all the variables were above the value 0.6. Therefore, the questionnaire was valid and accepted.

There are five questions that have been measured, the first variables are dependent variables used in measuring the awareness of green logistics among SMEs in Kota Bharu. The result of Cronbach's Alpha Coefficient in this section's question was 0.904 which is good in terms of strength of association. Therefore, the coefficients obtained for the questions in information were reliable.

The second variables are independent variables which is the relationship between environment and the awareness of green logistics among SMEs in Kota Bharu. There were five questions. The result of Cronbach's Alpha Coefficient in this section's question was 0.870 which is good in terms of strength of association. So, the coefficients obtained for the questions in information were reliable.

Another independent variable used in measuring the relationship between government regulation and the awareness of green logistics among SMEs in Kota Bharu. There were five questions in this section. The result of Cronbach's Alpha Coefficient in this section's question was 0.870 which is good in terms of strength of association. Thus, the coefficients obtained for the questions in information were reliable.

Next, the independent variables used in measuring the relationship between knowledge and the awareness of green logistics among SMEs in Kota Bharu. In this section also were included five questions and the result of reliability Cronbach's Alpha Coefficient is 0.885. Thus, the coefficients obtained for the questions in convenience were reliable and were suitable for further analysis.

The last independent variables used in measuring the relationship between advertising and the awareness of green logistics among SMEs in Kota Bharu. In this section were also included five questions and the result of reliability Cronbach's Alpha Coefficient is 0.885. Thus, the internal consistency of this section's questions is good and reliable.

4.3 DEMOGRAPHIC PROFILE of RESPONDENT

Respondents Profile	Classification	Frequency N = 384	PERCENTAGE (%)
Gender	Male	164	42.7
	Female	220	57.3
Race	Malay	91	23.7
	Chinese	104	27.1
	Indian	158	41.1
	Other	31	8.1
Marital status	Single	219	57.0
	Married	113	29.4
	Divorced	37	9.6
	Widowed	15	4.0
Age	20-30	193	50.3
	31-40	103	26.8
	41-50	67	17.4
	50 and above	21	5.5
SMEs Sectors	Manufacturing	55	14.3
	Construction	61	15.9
	Food and beverage sector	161	42
	Agriculture	67	17.4
	Mining and quarrying	40	10.4

Table 4.2: Demographic Profile of Respondent

The contextual profile of 384 respondents has been collected in this research. Table (4taktaw) consists of gender, race, marital status, age, and SMEs sector. The majority percentage of gender respondents was female with 57.3% (N=220), where 42.7% (N=164) respondents were from male. There were more females according to gender than males because females were more interested in becoming an entrepreneur. There were 4 races that be our target in this study against all respondents. The highest race was Indian with 41.1% (N=158) and the lowest was other races. The other races in question were races other than Malays and Chinese representing 8.1% (N=31) and were the lowest in percentage.

From the 384 respondents collected, 57% (N=219) stated they were single person in marital status. Only 4% (N=15) respondents were widowed as their marital status. This was because most of the respondents are teenagers between the ages of 20 and 30. The respondents aged 20 to 30 represent 50.3% (N=193) in the age distribution and it was also the highest percentage compared to respondents aged 50 and above. Respondents aged 50 and above represent only 5.5% (N=1) which was the lowest percentage. This was because the target researchers are among SMEs, and they are often young entrepreneurs.

Lastly, SMEs sector has the highest percentage in food and beverage with 42% (N=161) and the lowest was in mining and quarrying with 10.4% (N=40). Most entrepreneurs in Kelantan manage food companies. This state was known as the east coast state that rich in food that was less spicy and tastes sweet. It also has wet food such as lekor crackers and dry chip crackers. It will always be an attraction for tourists to buy dry foods at Pasar Siti Khadijah which has a wide selection of items as well as different price offers.

4.4 DESCRIPTIVE ANALYSIS

In this research, there were four variables consisting of one dependent variable (Green logistics awareness) and four independent variables (Knowledge, Advertising, Government Regulation and Environment). The researcher analyzed the mean for each variable.

4.4.1 DESCRIPTIVE ANALYSIS FOR DEPENDENT VARIABLE

No	Green Logistics Awareness	Mean	SD	N
B1	Green logistics is very important in all SMEs companies in Kota Bharu, Kelantan/ Logistik hijau sangat penting dalam semua syarikat PKS di Kota Bharu, Kelantan	4.23	.850	384
B2	Green logistics Kota Bharu, Kelantan gives a positive impact towards the environment/Logistik hijau Kota Bharu, Kelantan memberi impak positif terhadap alam sekitar.	4.17	.934	384
B3	SMEs in Kota Bharu, Kelantan having a high knowledge about the green logistics/ PKS di Kota Bharu, Kelantan mempunyai pengetahuan yang tinggi tentang logistik hijau.	3.96	1.081	384
B4	All SMEs are advertised about green logistics in Kota Bharu, Kelantan/ Semua PKS diiklankan tentang logistik hijau di Kota Bharu, Kelantan.	4.17	.893	384
B5	One of the government regulations in Kota Bharu, Kelantan is maintaining green logistics/ Salah satu peraturan kerajaan di Kota Bharu, Kelantan ialah mengekalkan logistik hijau.	4.43	.796	384

Table 4.3: Descriptive Analysis of Green Logistics Awareness

On the table above shows the value for each question contained in the questionnaires for dependent variables, green logistics awareness. There are five questions for this green logistics awareness and each question shows a different amount of Likert scale. The column means the highest value is on the last question of the government regulations in Kota Bharu, Kelantan is maintaining green logistics which 4.43. This demonstrates that most Small and Medium

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Enterprise (SMEs) are understand that government regulation has a significant impact on awareness of green logistics. The lowest value for mean is on the third question as SMEs in Kota Bharu, Kelantan having a high knowledge about the green logistics, 3.96. This is because SMEs more listen to government instruction compared to their knowledge about green logistics.

4.4.2 DESCRIPTIVE ANALYSIS FOR INDEPENDENT VARIABLE

Name	Independent Variable	Mean	SD	N
C1	Our enterprise reduces and recycle the waste/ Perniagaan kami mengurangkan dan mengitar semula bahan buangan	4.41	.809	384
C2	We attempted to minimize pollution of the air, soil, water, and sound. / Kami berusaha untuk mengurangkan pencemaran udara, tanah, air dan bunyi.	4.48	.778	384
C3	Our employees will share ideas and give suggestions to make something for successful implementation of environmental practices/ Kakitangan kami akan saling berkongsi idea dan memberi cadangan untuk membuat sesuatu bagi kejayaan pelaksanaan alam sekitar	4.49	.751	384
C4	"Green logistics" is the environmentally friendly method of moving resources and goods/ Logistik hijau ialah kaedah mesra alam untuk memindahkan sumber dan barangan.	4.54	.725	384
C5	We are returning the packaging from end user back to the supplier/ Kami memulangkan bungkusan daripada pengguna akhir kembali kepada pembekal	4.46	.754	384
C6	The recycled plastic bag easier to use for Small Medium Enterprise (SMEs) to give to customers/ Beg plastik kitar semula itu lebih mudah digunakan untuk peniaga-peniaga kecil berikan kepada para pelanggan	4.44	.756	384
C7	The regular use of recycled plastic bags is one of the ways to reduce environmental pollution/ Penggunaan beg plastik kitar semula secara	4.49	.733	384

	berkala itu antara salah satu cara pengurangan pencemaran alam sekitar			
C8	Eliminating the use of plastic will save the SMEs more/ Hapus terus penggunaan plastic akan lebih menjimatkan para peniaga.	4.52	.700	384
C9	It is easier for SMEs to comply with the government's instructions by practicing the concept of green logistics that prioritizes environmental cleanliness/ Para peniaga lebih mudah mematuhi arahan kerajaan dengan mengamalkan konsep logistic hijau yang mengutamakan kebersihan alam sekitar	4.45	.739	384
C10	Penalty will be imposed on traders who do not prioritize the concept of green logistics/ Denda akan dikenakan kepada peniaga-peniaga yang tidak mengutamakan konsep logistic hijau.	4.47	.750	384
C11	I understand the knowledge and information about green logistics/ Saya memahami pengetahuan dan maklumat tentang logistik hijau.	4.45	.749	384
C12	I know that green logistic practices can increase company sales/ Saya tahu bahawa amalan logistik hijau boleh meningkatkan jualan syarikat	4.50	.733	384
C13	I believe that green logistics can reduce product life cycle cost. /Saya percaya bahawa logistik hijau boleh mengurangkan kos kitaran hayat produk.	4.46	.767	384
C14	Our Company is aware of the benefits of the implementation of green logistic practices/ Syarikat kami menyedari faedah pelaksanaan amalan logistik hijau	4.50	.737	384
C15	Company provides resources for employees to learn green logistics practices/ Syarikat menyediakan sumber untuk pekerja mempelajari amalan logistik hijau.	4.50	.730	384
C16	I have seen an advertisement regarding green logistics in any social media platform/ Saya telah melihat iklan mengenai "green logistics" di mana-mana platform media sosial.	4.39	.794	384
C17	I aware that many companies have advertised their eco-friendly products/ Saya sedar bahawa banyak syarikat telah mengiklankan produk mesra alam mereka.	4.45	.745	384

C18	I have seen any celebrities or public figure that promote and support green logistics or go green campaign/ Saya pernah melihat mana-mana selebriti atau tokoh masyarakat yang mempromosikan dan menyokong "green logistics" atau kempen "go green".	4.42	.760	384
C19	I aware or seen the eco labels and green stickers in any products or services that you purchase/ Saya menyedari atau melihat "eco labels" dan "green stickers" dalam mana-mana produk atau perkhidmatan yang anda beli.	4.42	.767	384
C20	I have think there is enough information regarding green logistics in marketing or information platform/ Saya rasa saya ada maklumat yang cukup berkenaan "green logistics" dalam pemasaran atau mana-mana platform maklumat.	4.48	.685	384

Table 4.4: Descriptive Analysis for Independent Variable

On the table above shows the value for each question contained in the questionnaires for independent variables. There are five questions for each independent variable and everyone of question shows a different amount of Likert scale. Column means the highest values are on environmental factors; "Green logistics" is an environmentally friendly method of moving resources and goods, which is 4.54. This demonstrates that most Small and Medium Enterprise (SMEs) are understand that environment has a significant impact on awareness of green logistics. The lowest value for mean is on the advertising factor: SMEs have seen an advertisement regarding green logistics in any social media platform ,4.39. This is because SMEs are not too sensitive to advertisements displayed on social media even though most SMEs are among teenagers who often use social media.

4.5 VALIDITY AND RELIABILITY TEST

There are various reliability coefficients. Cronbach's alpha is one of the most used, and it is based on the average correlation of items within the test if the items are standardised. If the items are not standardised, the average covariance coefficient is used, which ranges from 0 to

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1. As a result, in order to ensure that this reliability figure is strong and healthy. The items under each construct were subjected to a reliability test. This allows the researcher to examine the reliability of each item and decide which items to remove in order to improve the overall reliability of the construct. Table 4.3 below demonstrates the results of overall reliability on each construct.

Variables	Number of Items	Cronbach's Alpha Coefficient	Strength of Association
Dependant Variables Green Logistics Awareness	5	0.856	Good
Independent Variables Environment	5	0.885	Good
Independent Variables Government Regulation	5	0.904	Excellent
Independent Variables Knowledge	5	0.903	Excellent
Independent Variables Advertising	5	0.901	Excellent

Table 4.5: Reliability Analysis

The Cronbach's alpha coefficient of a scale should be above 0.7. As table 4.5 demonstrates, the construct "Government Regulation" has the highest Cronbach's alpha measurement, which is 0.904. The lowest Cronbach's alpha is the "Green Logistics Awareness" construct, which is 0.856. As a result, because the minimum reliability of the constructs is greater than 0.7, it can be assumed that all of the instrument's constructs produced an acceptable reliability level.

4.6 NORMALITY TEST

Using SPSS software, the researcher performed a normality test analysis. The researcher used the Kolmogorov-Smirnova and the Shapiro-Wilk data normality test. Although it more suitable for small sample size (50 samples), The Shapiro-Wilk test can handle sample sizes as large as

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2000. For this reason, the Shapiro-Wilk test will be used as our numerical method of determining normalcy. The data is normal if the Shapiro-Wilk test sig. value is greater than 0.05. The data considerably depart from a normal distribution if it is less than 0.05.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean1	.134	384	.000	.875	384	.000
Mean2	.203	384	.000	.745	384	.000
Mean3	.203	384	.000	.747	384	.000
Mean4	.205	384	.000	.752	384	.000
Mean5	.185	384	.000	.792	384	.000

a. Lilliefors Significance Correction

Table 4.6: The Results of Normality Test

The analysis results show that the normality table test has a significance value of 0.000 for all dependent and independent variables. As a result, the researcher used a non-parametric version of the kurtosis skewness and normality test. All dependent and independent variables were subjected to this normality test. As a result, the researcher performs this test to ensure that the data is normally distributed by calculating the skewness and kurtosis values for each item.

Variable	Skewness	Kurtosis	Result
Dependant Variables Green Logistics Awareness	-1.195	2.655	Normal Distributed
Independent Variables Environment	-2.492	9.138	Normal Distributed
Independent Variables Government Regulation	-2.438	8.813	Normal Distributed
Independent Variables Knowledge	-2.398	8.408	Normal Distributed
Independent Variables Advertising	-1.985	5.536	Normal Distributed

Table 4.7: The Normality Test

When using SEM, acceptable skewness values are between - 3 and + 3, and acceptable kurtosis values are between - 10 and + 10. While skewness and kurtosis values for all variables within the range of a variable are normally distributed when they are between 2 and 7, respectively. The results of the analysis using the skewness and kurtosis normality tests are shown in the table above for all variables involved. Skewness values range from -1.195 to -2.492, while kurtosis values range from 2.655 to 9.138.

4.7 HYPHOTESIS

Number of Hypothesis	Pearson correlation	Significant Value	Conclusion
H1	0.707	0.000	Accepted
H2	0.774	0.000	Accepted
H3	0.810	0.000	Accepted
H4	0.813	0.000	Accepted

Table 4.8: Pearson's Correlation Coefficient Analysis

Table 4.8 shows results demonstrate that there is a relationship between knowledge and awareness of green logistics among SMEs, with a p-value of 0.000 indicating that this association exists. The correlation coefficient's positive value of 0.707 indicates that the association is tenuous. It proves that the knowledge of SMEs about the awareness of logistics can give the benefit to company. As a result, H1 is accepted.

Based on the table 4.8, it shows that the p-value as 0.000 which is less than 0.01, this indicates that there is a significant relationship between advertising and the awareness of green logistics among SMEs. It shows that the result of Pearson Correlation is 0.774 and this result expose that there is a relationship between advertising and the awareness of green logistics among SMEs. Hence, the H2 is accepted.

There is a considerable correlation between government legislation and SMEs' understanding of green logistics, as shown by the significant value of 0.000 in Table

4.8. The correlation value, however, stands at 0.810, indicating a strong association between governmental regulation and SMEs' understanding of green logistics. Additionally, it demonstrates that there is a slight but significant correlation between governmental regulation and SMEs' understanding of green logistics. Consequently, H3 is acceptable.

The relationship between environmental awareness and green logistics awareness among SMEs is seen in Table 4.8. Given that the significant value in the table is 0.000, we may infer that there is a substantial correlation between environmental consciousness and green logistics among SMEs. The correlation coefficient for environment and green logistics awareness among SMEs is 0.813, indicating a strong positive relationship between the environment and green logistics awareness among SMEs. As a result, the H4 is acceptable.

4.8 SUMMARY

In conclusion, the findings of this study have helped future researchers by providing useful data regarding the level of awareness among SMEs in Kota Bahru, Kelantan. In addition, the current study helps businesses, particularly those in manufacturing, understand how to apply the 5S system. To increase their commercial effectiveness, manufacturing companies might make improvements to their policies and procedures.

Finally, this study hopes to get positive input from connected manufacturing firms to address the problems with green logistics. Even though the current study has certain limitations, it is hoped that this is just the beginning of research into what makes implementation successful.

CHAPTER 5: DISSCUSSION AND CONCLUSION

5.1 INTRODUCTION

This chapter will discuss the findings from the previous chapters. Every variable had been analyzed to come out with the findings to present the relationship between awareness of green logistics, knowledge, advertising, and government regulation. The key findings, discussion, implication of the study, limitation of the study, recommendation or suggestion for future research are also included in this chapter.

5.2 KEY FINDINGS

No	Research Objective	Research Question
1	To evaluate the relationship between knowledge and awareness of green logistics among SMEs in Kota Bharu, Kelantan.	What is the relationship between knowledge and awareness of green logistics among SMEs in Kota Bharu, Kelantan?
H1	There is a significant relationship between knowledge and awareness of green logistics among SMEs	

Table 5.1: Research Question 1 & Objective 1

H1 proposed a significant relationship between knowledge and awareness of green logistics among SMEs in Kota Bahru, Kelantan. The finding showed a very high positive relationship between knowledge and awareness of green logistics among SMEs with a correlation coefficient of 1. The correlation between knowledge and awareness of green logistics among SMEs has a positive influence as the p-value is 0.000. Thus, H1 is supported. We may conclude that there is a substantial correlation between knowledge and awareness of green logistics among SMEs in Kota Bahru, Kelantan as the research purpose and question have been satisfied.

No	Research Objective	Research Question
1	To determine the relationship between advertising and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.	What is the relationship between advertising and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?
H2	There is a significant relationship between advertising and the awareness of green logistics among SMEs.	

Table 5.2: Research Question 2 & Objective 2

The results of hypothesis H2 in Chapter 4 were studied to answer the research question. H2 proposed that there is a significant relationship between advertising and the awareness of green logistics among SMEs. The finding showed that there is a high positive relationship between advertising and the awareness of green logistics among SMEs in Kota Bahru, Kelantan with a correlation coefficient of 0.000· Thus, H2 is supported. This indicates the awareness of green logistics among SMEs has a very high influence on advertising.

No	Research Objective	Research Question
1	To study the relationship between government regulation and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.	What is the relationship between government regulation and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?
H3	There is a significant relationship between government regulation and awareness of green logistics among SMEs in Kota Bahru, Kelantan.	

Table 5.3: Research Question 3 & Objective 3

H3 proposed a significant relationship between government regulation and awareness of green logistics among SMEs in Kota Bahru, Kelantan. The finding showed a very high positive relationship between government regulation and awareness of green logistics among SMEs with a correlation coefficient of 1. The correlation between knowledge and awareness of green logistics among SMEs has a positive influence as the p-value is 0.000. Thus, H3 is supported.

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We may conclude that there is a substantial correlation between government regulation and awareness of green logistics among SMEs in Kota Bahru, Kelantan as the research purpose and question have been satisfied.

No	Research Objective	Research Question
1	To investigate the relationship between the environment and the awareness of green logistics among SMEs in Kota Bharu, Kelantan.	What is the relationship between the environment and the awareness of green logistics among SMEs in Kota Bharu, Kelantan?
H4	There is a significant relationship between the environment and awareness of green logistics among SMEs in Kota Bahru, Kelantan.	

Table 5.4: Research Question 4 & Objective 4

The results of hypothesis H4 in Chapter 4 were studied to answer the research question. H4 proposed that there is a significant relationship between the environment and the awareness of green logistics among SMEs. The finding showed that there is a high positive relationship between the environment and the awareness of green logistics among SMEs in Kota Bahru, Kelantan with a correlation coefficient of 0.000. Thus, H4 is supported. This indicates the awareness of green logistics among SMEs has a very high influence on environment.

5.3 DISCUSSION

5.3.1 Knowledge

The table 4.7 in previous chapter exposed the first hypothesis which is the knowledge. The H1 is accepted and the awareness of green logistics among SMEs in Kota Bharu, Kelantan. The results show a positive value of correlation coefficient 0.384*** and significant value as 0.01 level which indicates there is a significant relationship between the knowledge and information about green logistics among SMEs. Recommendation has been specified after all the survey done.

5.3.1.1 Training

Employees should offer their staff training and an activity in the area of green logistics. The following steps should be taken to establish green logistics initiatives. Planning the courses and educating the staff in order to increase their environmental awareness and expertise is a crucial step that is necessary for organisational support and enough human resources.

5.3.1.2 Benefits of having a knowledge of green logistics.

The company will have a chance to enhance brand recognition. In today's information-rich environment, choosing green logistics can assist build your brand's reputation. Public trust and confidence are inspired by a company's brand image that is based on environmental stewardship. 2. Next, it also can bring in new partners. By choosing a sustainable supply chain, your company can improve its environmental reputation. You are a good candidate for other companies searching for a partner with similar principles because of your environmental engagement.

5.3.2 Advertising

5.3.2.1 Social media platforms

Social media can have an impact on consumers' environmental concerns, such as the desire to purchase environmentally friendly logistics. Additionally, social media has a beneficial influence on customers' egoistic motivations, which means that it can affect consumers' health worries about green logistics and influence their decision to apply green logistic in their companies that are good for their own business. Knowledge exchange within organisations is improved by social media. Social media will make it easier to exchange information and combine knowledge within organisations, encouraging cross-functional coordination and management. Consequently, social media enables business partners to obtain useful and important information within enterprises and supply chain networks.

5.3.3 Government

According to the result Table 4.7 in previous chapter, the hypothesis of government regulation which is the H3 is accepted and contributes to awareness of green logistic among SMEs in Kota Bharu, Kelantan. The result of the independent variable shows the value of correlation coefficient 0.810*** and significant value which indicates there is a significant relationship between government regulation relationship between the government regulation and awareness of green logistic among SMEs Recommendation has been specified after all the survey done.

5.3.3.1 Green Technology ang the Tenth Malaysia Plan

Twelve National Key Economic Areas, or NKEAs, with the potential to provide high incomes will be the focus of the Tenth Malaysia Plan, which runs from 2011 to 2015. The growth of economic sectors including green technology, automotive, aerospace, and logistics that are not recognised as NKEAs will continue to be steered by the pertinent ministries, agencies, and councils. The government's strategy for building a thorough ecosystem for environmental sustainability was laid out in the AFFIRM framework, which stands for Awareness, Faculty, Finance, Infrastructure, Research, and Marketing. This framework was introduced under the 10th MP. This framework's concept highlights the requirement for all Malaysians to embrace a joint responsibility for environmental preservation and protection. This policy promotes and instructs businesses, offices, and homes to separate their garbage.

5.3.4 Environment

Based on the results in Table 4.7 in previous chapter, the hypothesis of environment which I H4 accepted, and it is one of the parts of awareness of green logistic among SMEs in Kota Bharu, Kelantan. The results show the value of correlation coefficient 0.813*** and significant value as 0.000 which determines that there is a significant relationship between environment and awareness of green logistics among SMEs.

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5.3.4.1 Green Purchasing

One of the widely recognised components of green supply chain management (GSCM) practises is the adoption of green purchasing. A buying organisation with a green supply chain initiative will pay attention to the green practises of their suppliers, especially the small and medium-sized businesses, so that suppliers can achieve their environmental goals.

5.3.4.2 Eco design practice

Nearly 80% (80%) of product-related environmental impacts can be changed during design, which highlights the significance of eco-design. There are two primary categories of eco-design practises: product-related design and packaging-related design. When it comes to product design, padvised that because cost-saving potential are typically greater at the beginning of the supply chain, buying firms should aggressively explore for ways to use recycled and reused materials

5.4 IMPLICATION OF THE STUDY

This study presents a number of academic implications. According to a review of the research findings, knowledge, advertising, governmental policy, and the environment can raise SMEs' awareness of green logistics. This finding would therefore improve the knowledge of the relationship between green logistics awareness practices SMEs for academics in the field of green logistics and small company management, making this study a significant contribution to the current literature.

The relationship between knowledge, advertising, governmental regulation, and environment in relation to SMEs' awareness of green logistics has been explained by a number of theoretical relationships that have been investigated and confirmed empirically in this study. By utilizing the theoretical framework, other investigations in this study supported each of the hypotheses that were put out. The study's conclusion is that knowledge, advertising, governmental policy,

and the environment all have a positive and significant impact on SMEs' understanding of green logistics in Kota Bharu, Kelantan. Therefore, SMEs' attempts to be more environmentally conscious in the future will increase as a result of their awareness of the worries, true intents, and wants of consumers.

The study's findings also supported the existence of a beneficial association between green logistics and corporate performance. This suggested that SMEs should spend more money on eco-friendly logistics. By doing this, SME manufacturers will gain a reputation for environmental responsibility and, as a result, boost commercial performance. The business performance of SME manufacturers, who are already known for their environmental stewardship, is negatively impacted by green logistics.

5.5 LIMITATIONS OF THE STUDY

There are a few restrictions on this study. First, there are only 300 participants in the study. Future research may use a larger sample size, which would include a larger population of Malaysians. Second, the convenience sample technique was used due to time and money restrictions, which resulted in a small number of Malaysian customers in Kota Bharu agreeing to participate in this study. Future research might be done across the globe, rather than just in a few specific locations. These could be incorporated into further research models. Future research should concentrate on other pertinent topics, such as doing in-depth case studies to examine the consumers' willingness to pay for the green logistics, as this study only examines the SMEs' understanding of green logistics. The results of this study will be helpful for both businesses and marketers in determining how to enhance their green logistics in order to draw customers to purchase their goods. This study could establish the framework for researchers who are interested in doing choice-based research in depth in the future, in addition to offering

some useful basic ideas for marketers or organizations to better understand consumers' needs and concerns.

5.6 RECOMMENDATION / SUGGESTION FOR FUTURE RESEARCH

The country's economic growth has various factors that can contribute to a more vigorous and advanced direction. Furthermore, this increase in business efficiency is driven by the logistics industry which is the backbone of the global supply chain and is very important in promoting trade activities. Logistics is also important to increase the country's competitiveness and strengthen connectivity to the rest of the world. Although transportation is a core component, the logistics sector also encompasses a variety of other areas including storage, warehousing, delivery services, and equipment maintenance. In general, logistics is defined as the process of planning, implementing, and controlling the efficiency of the flow of goods and services, storage of goods and related information from the stage of delivery to consumption.

One of recommendation for future green logistics is circular economy. Circular economy is a emphasizes sharing, renting, reusing, repairing, and recycling old goods for as long as possible. The product's life cycle is extended in this way. It refers to minimizing waste. When a product is nearing the end of its useful life, its components are preserved as efficiently as possible. This can be applied effectively numerous times, adding more value. The conventional, linear take-make-consume-dispose economic model is broken down in this way. This concept depends on a lot of inexpensive, readily available materials and energy. Planned obsolescence, in which a product is made to have a short lifespan to entice customers to buy it again, is also included in this concept. The European Parliament has demanded action against this behaviour. It can reduce pressure on the environment, improve the security of raw material supply, increase competitiveness, stimulate innovation, increase economic growth. Consumers will also be supplied with more durable and innovative products that will improve their quality of life and

save them money in the long term. It is more focus on supply chain process which is one of the activity logistics.

Blockchain is another suggestion for future green logistics awareness in the community especially for SMEs. Blockchain technology is a form of distributed and parallel computer architecture. It allows parties to communicate digitally without the need for a central server or other reliable authority. In addition, SMEs are often among teenagers between the ages of 20 and 30 who are more knowledgeable about the latest technology. As a result, it is categorized as a disruptive technology that can fundamentally change most of the processes, we do every day. In essence, thousands of computers work together to store a copy of the data, known as a ledger, and all modifications to the data are provided by a consensus of partners. To ensure transparency, every time a change is made to the data, a timestamp is logged. The system does not need to have mutual trust. The ability to make changes to the stored data only according to established rules, the storage of these changes in a ledger whose content is transparently open to audit and protected by cryptographic methods, and the availability of a copy of this chain to all parties, are factors that ensure trust among parties system interest. Like tangible assets, digital data can now be transferred between owners.

Besides, developing Communication, Education and Public Awareness (CEPA) is another recommendation for SMEs. A significant part of biological diversity is communication and education, particularly for comprehending human life. It is an asset in achieving sustainable development in this way. By implementing the National Biodiversity Strategy and Action Plan, which is managed by CBD, they are more motivated and dedicated to assisting in the achievement of the Biodiversity Convention's objectives. For each focal point nation and the coordinator of the National Biodiversity Strategy and Action Plan, effective communication is still a problem. They must address every area, particularly how they disseminate messages. Through article 13 of the Convention on Biological Diversity Conference's sixth meeting,

Communication, Education and Public Awareness (CEPA) was approved for inclusion in the work schedule. The provision of pertinent CEPA inputs for convention members is one of the components of this work programme. This CEPA aims to promote and encourage understanding of the significance of and necessary steps for biological diversity conservation, as well as disseminate these ideas through the media and nurture these topics in educational programmes. It also forges partnerships with other nations or international organisations to develop programmes, educate the public, and raise awareness of the need to conserve and sustainably use biological diversity.

Lastly, the recommendation for future in green logistics awareness is accelerating the implementation of low-carbon mobility initiatives. The implementation of this low-carbon mobility initiative can help Malaysia to further commit to a 45% reduction in GHG emissions from 2005 levels by 2030 when it ratifies the Paris Agreement in 2016. In Malaysia, GHG emissions from cars must be collected and measured from the ground up. In addition, Malaysia offers a strategy and action plan for the land transport industry to reduce energy consumption and greenhouse gas (GHG) emissions by 2030. Government green procurement is the practice of purchasing goods, services, and projects on behalf of the government while keeping environmental considerations in mind. Government revenue, which currently accounts for 15% of GDP and serves as one of the main drivers of the country's socioeconomic development. To support efforts to reduce GHG emission rates, the Ministry and Department strive to increase green procurement at least at a rate of 5%. To help reduce GHG emissions, the CORSIA system must be gradually implemented by all ICAO members. Malaysia, however, voluntarily joined CORSIA in 2021 to demonstrate the country's strong commitment to addressing the challenges of climate change. Furthermore, it is also for the reduction of energy consumption and GHG emissions with electric mobility, energy consumption and GHG emissions using alternative fuels as well as energy consumption and GHG emissions through shifting transport modes.

Therefore, in the future SMEs will be more aware of the pollution that occurs, especially air pollution. In conclusion, green awareness is important for SMEs to do their business activity. SMEs play the roles and responsibilities of save the environment in future.

5.7 OVERALL CONCLUSION OF THE STUDY

The conclusion of the overall study has been discussed in this chapter. The research was conducted by researchers using questionnaire surveys to investigate the awareness of green logistics among SMEs in Kota Bahru, Kelantan. The study provided the outline of results based on survey data from respondents, enabling researchers to interpret and classify the findings as to whether the outcome meets the objectives of this analysis. Knowledge, advertising, government regulation, and environment are adopted to study the awareness of green logistics among SMEs in Kota Bahru, Kelantan. The findings of this study have can be useful to small and medium enterprises in applying green logistics to future researchers by providing useful data regarding the level of awareness among SMEs in Kota Bahru, Kelantan. According to the study, the p value for all the independent variables stated is 0.00, meaning that there is no independent variable that affects the awareness of green logistics among SMEs in Kota Bahru, Kelantan which is not acceptable for this study. Since all the hypotheses presented in Chapter 2 were accepted, this research was successful. For future research, any researcher can make better research with the suggestions given such as circular economy. The circular economy emphasizes sharing, renting, reusing, repairing, and recycling old goods if possible. The product life cycle is extended in this way. It refers to minimizing waste. As a product approaches the end of its useful life, its components are preserved as efficiently as possible. This can be effectively used multiple times, adding more value. In addition, there are some other suggestions that can be used in future research.

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THE STUDY ON GREEN LOGISTICS AWARENESS AMONG SMEs IN KOTA BHARU, KELANTAN

Dear Respondents,

We are final year students of the programme Bachelor of Entrepreneurship (Logistics and Distribution Business) with Honour (SAL), Faculty of Business and Entrepreneurship (FEB), University Malaysia Kelantan (UMK). This questionnaire was distributed as part of our final year project to conduct research on factors influencing the use of cashless transactions among University Malaysia Kelantan (UMK) City Campus students. All the information in this questionnaire will be kept confidential and used for academic purposes only. We would like to thank you for spending your time by giving kind cooperation and fair

responses.

This survey was prepared by:

VINOTHINI A/P SURESH (A19A0967)

NURUL SHAHIRA BINTI OTHMAN (A19A0769)

NURUL AIDA BINTI NORISAM (A19A0700)

NURUN NAJIHAH BINTI MAZNI (A19A0782)

SECTION A: DEMOGRAPHIC

Please answer the question correctly by selecting the BEST answer.

Sila jawab soalan dengan betul dengan memilih jawapan TERBAIK.

1. Gender / Jantina
   (   ) Male / Lelaki
   (   ) Female / Perempuan
2. Race / Bangsa
   (   ) Malay / Melayu
   (   ) Chinese / Cina
   (   ) Indian / India
   (   ) Other / Lain-lain
3. Marital status
   (   ) Single / Bujang
   (   ) Married / Berkahwin
   (   ) Divorced / Bercerai
   (   ) Widowed / Janda
4. Age / Umur
   (   ) 20 – 30
   (   ) 31 – 40
   (   ) 41 – 50
   (   ) 50 and above
5. SMEs Sectors
   (   ) Manufacturing / Pembuatan
   (   ) Construction / Pembinaan
   (   ) Food and beverages sector / Sektor makanan dan minuman
   (   ) Agriculture Pertanian
   (   ) Mining and quarrying / Perlombongan dan kuari
   (   ) Other / Lain-lain

SECTION B: GREEN LOGISTICS AWARENESS (DEPENDENT VARIABLE)

Next, please rate this section aims *to investigate the awareness of green logistics among SMEs in Kota Bharu.* You can circle your honest response from 1 to 5. Please keep in mind that there are no right or incorrect answers.

Seterusnya, sila nilai bahagian ini bertujuan untuk menyiasat kesedaran logistik hijau dalam kalangan PKS di Kota Bharu. Anda boleh bulatkan jawapan jujur anda dari 1 hingga 5. Sila ingat bahawa tiada jawapan yang betul atau salah.

1=Strongly Disagree / Sangat Tidak Setuju

2=Disagree / Tidak Setuju

3=Slightly Agree / Agak Setuju

4=Agree / Setuju

5=Strongly Agree / Sangat Setuju

No.	Questions / Statement	Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1.	Green logistics is very important in all SMEs companies in Kota Bharu, Kelantan/ Logistik hijau sangat penting dalam semua syarikat PKS di Kota Bharu, Kelantan					
2.	Green logistics Kota Bharu, Kelantan gives a positive impact towards the environment/Logistik hijau Kota Bharu, Kelantan memberi impak positif terhadap alam sekitar.					
3.	SMEs in Kota Bharu, Kelantan having a high knowledge about the green logistics/ PKS di Kota Bharu, Kelantan mempunyai pengetahuan yang tinggi tentang logistik hijau.					
4.	All SMEs are advertised about green logistics in Kota Bharu, Kelantan/ Semua PKS diiklankan tentang logistik hijau di Kota Bharu, Kelantan.					
5.	One of the government regulations in Kota Bharu, Kelantan is maintaining green logistics/ Salah satu peraturan					

	kerajaan di Kota Bharu, Kelantan ialah mengekalkan logistik hijau.					

SECTION C: ENVIRONMENT/ PERSEKITARAN (INDEPENDENT VARIABLE)

This section aims to study the environment that influence the awareness of green logistics among SMEs in Kota Bharu.

Bahagian ini bertujuan untuk mengkaji persekitaran yang mempengaruhi kesedaran logistik hijau dalam kalangan PKS di Kota Bharu.

No.	Questions / Statement	Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1.	Our enterprise reduces and recycle the waste/ Perniagaan kami mengurangkan dan mengitar semula bahan buangan.					
2.	We attempted to minimize pollution of the air, soil, water, and sound. / Kami berusaha untuk mengurangkan pencemaran udara, tanah, air dan bunyi.					
3.	Our employees will share ideas and give suggestions to make something for successful implementation of environmental practices/ Kakitangan kami akan saling berkongsi idea dan memberi cadangan untuk membuat sesuatu bagi kejayaan pelaksanaan alam sekitar.					
4.	"Green logistics is the environmentally friendly method of moving resources and goods/ Logistik hijau ialah kaedah mesra alam untuk memindahkan sumber dan barangan.					
5.	We are returning the packaging from end user back to the supplier/ Kami memulangkan bungkusan daripada pengguna akhir kembali kepada pembekal					

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SECTION D: GOVERNMENT/KERAJAAN (INDEPENDENT VARIABLE)

This section aims to study the government regulation that influence the awareness of green logistics among SMEs in Kota Bharu.

Bahagian ini bertujuan untuk mengkaji kerajaan yang mempengaruhi kesedaran logistik hijau dalam kalangan PKS di Kota Bharu.

No.	Questions / Statement	Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1.	The recycled plastic bag easier to use for Small Medium Enterprise (SMEs) to give to customers/ Beg plastik kitar semula itu lebih mudah digunakan untuk peniaga-peniaga kecil berikan kepada para pelanggan.					
2.	The regular use of recycled plastic bags is one of the ways to reduce environmental pollution/ Penggunaan beg plastik kitar semula secara berkala itu antara salah satu cara pengurangan pencemaran alam sekitar.					
3.	Eliminating the use of plastic will save the SMEs more/ Hapus terus penggunaan plastic akan lebih menjimatkan para peniaga.					
4.	It is easier for SMEs to comply with the government's instructions by practicing the concept of green logistics that prioritizes environmental cleanliness/ Para peniaga lebih mudah mematuhi arahan kerajaan dengan mengamalkan konsep logistic hijau yang mengutamakan kebersihan alam sekitar.					
5.	Penalty will be imposed on traders who do not prioritize the concept of green logistics/ Denda akan dikenakan kepada peniaga-peniaga yang tidak mengutamakan konsep logistic hijau.					

SECTION E: KNOWLEDGE/PENGETAHUAN (INDEPENDENT VARIABLE)

This section aims to study the knowledge that influence the awareness of green logistics among SMEs in Kota Bharu.

Bahagian ini bertujuan untuk mengkaji pengetahuan yang mempengaruhi kesedaran logistik hijau dalam kalangan PKS di Kota Bharu.

No.	Questions / Statement	Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1.	I understand the knowledge and information about green logistics/ Saya memahami pengetahuan dan maklumat tentang logistik hijau.					
2.	I know that green logistic practices can increase company sales/ Saya tahu bahawa amalan logistik hijau boleh meningkatkan jualan syarikat.					
3.	I believe that green logistics can reduce product life cycle cost. /Saya percaya bahawa logistik hijau boleh mengurangkan kos kitaran hayat produk.					
4.	Our Company is aware of the benefits of the implementation of green logistic practices/ Syarikat kami menyedari faedah pelaksanaan amalan logistik hijau					
5.	Company provides resources for employees to learn green logistics practices/ Syarikat menyediakan sumber untuk pekerja mempelajari amalan logistik hijau.					

SECTION F: ADVERTISING/PENGIKLANAN (INDEPENDENT VARIABLE)

This section aims to study the advertising that influence the awareness of green logistics among SMEs in Kota Bharu.

Bahagian ini bertujuan untuk mengkaji pengiklanan yang mempengaruhi kesedaran logistik hijau dalam kalangan PKS di Kota Bharu.

No.	Questions / Statement	Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1.	I have seen an advertisement regarding green logistics in any social media platform/ Saya telah melihat iklan mengenai "green logistics" di mana-mana platform media sosial.					
2.	I aware that many companies has advertised their eco-friendly products/ Saya sedar bahawa banyak syarikat telah mengiklankan produk mesra alam mereka.					
3.	I have seen any celebrities or public figure that promote and support green logistics or go green campaign/ Saya pernah melihat mana-mana selebriti atau tokoh masyarakat yang mempromosikan dan menyokong "green logistics" atau kempen "go green".					
4.	I aware or seen the eco labels and green stickers in any products or services that you purchase/ Saya menyedari atau melihat "eco labels" dan "green stickers" dalam mana-mana produk atau perkhidmatan yang anda beli.					
5.	I have think there is enough information regarding green logistics in marketing or information platform/ Saya rasa saya ada maklumat yang cukup berkenaan "green logistics" dalam pemasaran atau mana-mana platform maklumat.					

APPENDIX B – GANTT CHART

Months / Research activity	Week 1	Week 2	Vvvvv 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Briefing and group distribution	■													
Find the research article titles and findings.		■												
Meeting on a study project with our SV		■												
Title approval and start writing chapter 1			■											
Submission for chapter 1			■											
Discuss about chapter 1 correction with SV				■										
Start writing for Chapter 2					■									
Chapter 2 submission						■								
Discuss about chapter 2 correction with SV							■							
Start writing Chapter 3 and correction								■						

Task														
for Chapter 3								■						
Complete submission and Turnitin check for PPTA 1									■					
Presentation final year project 1										■				
Data collection										■				
Meeting with SV for Chapter 4											■			
Start writing for chapter 4											■			
Correction for Chapter 4												■		
Start writing Chapter 5												■		
Correction Chapter 5													■	
Turnitin check and full submission for final year project													■	
Presentation final year project														■

APPENDIX C – Result of Turnitin

Universiti Malaysia KELANTAN	**REKOD PENGESAHAN PENYARINGAN *TURNITIN*** ***VERIFICATION RECORD OF TURNITIN SCREENING***

Kod/Nama Kursus*:* ALS4113
Code/ Course Name: SAL
Sesi/*Session:* 2022/2023
Semester*:* 7
Nama Program/*Name of Programme:* SAK, SAB, SAL, SAR, SAP, SAH, SAW
Fakulti/Pusat/*Faculty/Centre:* Fakulti Keusahawanan Dan Perniagaan/
　　　　　　　　　　　　　　　Faculty of Entrepreneurship and Business

Pengesahan Penyaringan Plagiat/ *Verification of Plagiarism Screening*

Saya, <u>VINOTHINI A/P SURESH</u> (A19A0967), <u>NURUL SHAHIRA BINTI OTHMAN</u>(A19A0769), <u>NURUL AIDA BINTI NORISAM</u>(A19A0700), <u>NURUN NAJIHAH BINTI MAZNI</u> (A19A0782) dengan ini mengesahkan Kertas Projek Penyelidikan ini telah melalui saringan aplikasi turnitin. Bersama ini dilampirkan sesalinan laporan saringan Turnitin dengan skor persamaan sebanyak 20%.

I, <u>VINOTHINI A/P SURESH</u> (A19A0967), <u>NURUL SHAHIRA BINTI OTHMAN</u>(A19A0769), <u>NURUL AIDA BINTI NORISAM</u>(A19A0700), <u>NURUN NAJIHAH BINTI MAZNI</u> (A19A0782) hereby declare that I have screen my thesis using Turnitin Software. Enclosed here with a copy of verification of Turnitin screening with similarity score of 20%.

Tajuk Kertas Kerja Penyelidikan/ *The Tittle of Research Project Paper*: -
<u>The Study on Green Logistic Awareness Among SMEs in Kota Bahru, Kelantan</u>

Tandatangan/*Signature*

…….…………*VINOTHINI*……………………………
Nama Pelajar/*Student Name*: VINOTHINI A/P SURESH
No.Matrik/*Matrix No*: A19A0967
Tarikh/*Date*: **26 JANUARY 2023**

Tandatangan/*Signature*

…….…………*SHAHIRA*…….……………………….
Nama Pelajar/*Student Name*: NURUL SHAHIRA BINTI OTHMAN
No.Matrik/*Matrix No*: A19A0769
Tarikh/*Date*: 26 JANUARY 2023

Tandatangan/*Signature*

…….…………*AIDA*…….…………………….
Nama Pelajar/*Student Name*: NURUL AIDA BINTI NORISAM
No.Matrik/*Matrix No*: A19A0700
Tarikh/*Date*: **26 JANUARY 2023**

Tandatangan/*Signature*

…….…………*NAJIHAH*…….…………………….
Nama Pelajar/*Student Name*: NURUN NAJIHAH BINTI MAZNI
No.Matrik/*Matrix No*: A19A0782
Tarikh/*Date*: **26 JANUARY 2023**

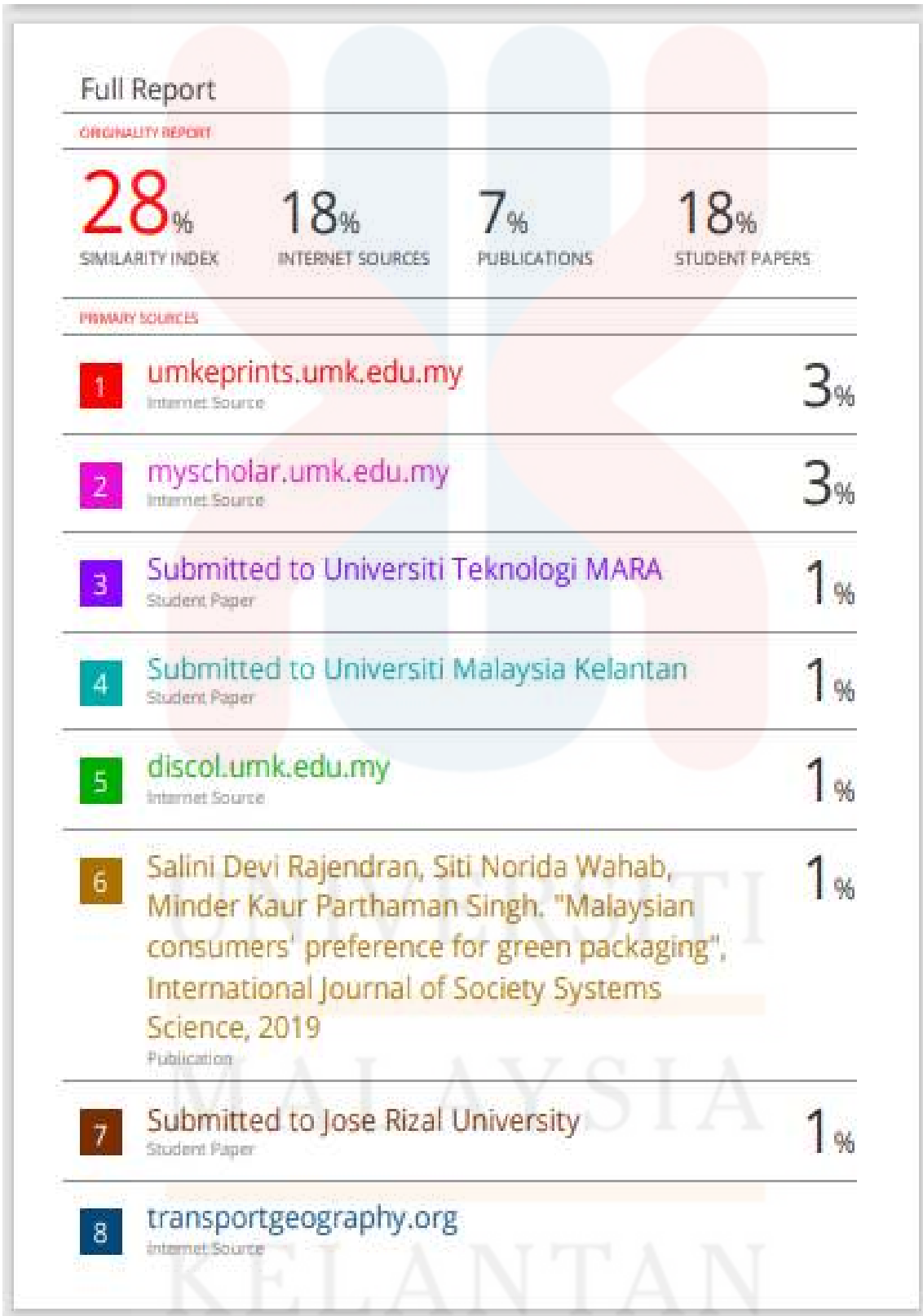| |
|---|
| Pengesahan Penyelia/*Supervisor*:

Tandatangan/*Signature:*

Tarikh/*Date:* |

Full Report

28%
SIMILARITY INDEX

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8	transportgeography.org Internet Source	

ASSESSMENT FORM FOR FINAL YEAR RESEARCH PROJECT: RESEARCH REPORT (Weight 50%)
(COMPLETED BY SUPERVISOR AND EXAMINER)

APPENDIX D - Rubric

Student's Name: VINOTHINI A/P SURESH   Matric No. A19A0967
Student's Name: NURUL SHAHIRA BINTI OTHMAN   Matric No. A19A0769
Student's Name: NURUL AIDA BINTI NORISAM   Matric No. A19A0700
Student's Name: NURUN NAJIHAH BINTI MAZNI   Matric No. A19A0782
Name of Supervisor: MOHAMMAD NIZAMUDDIN BIN ABDUL RAHIM   Name of Programme: SAL

Research Topic   THE STUDY ON GREEN LOGISTICS AWARENESS AMONG SMEs IN KOTA BHARU, KELANTAN

NO.	CRITERIA	PERFORMANCE LEVEL				WEIGHT	TOTAL
		POOR (1 MARK)	FAIR (2 MARKS)	GOOD (3 MARKS)	EXCELLENT (4 MARKS)		
1.	**Content (10 MARKS)** (Research objective and Research Methodology in accordance to comprehensive literature review) Content of report is systematic and scientific (Systematic includes Background of study, Problem Statement, Research Objective, Research Question) (Scientific refers to researchable topic)	Poorly clarified and not focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Fairly defined and fairly focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Good and clear of Research objective and Research Methodology in accordance to comprehensive literature review with good facts.	Strong and very clear of Research objective and Research Methodology in accordance to comprehensive literature review with very good facts.	x 1.25 (Max: 5)	3
		Content of report is written unsystematic that not include Background of study, Problem Statement, Research Objective, Research Question and unscientific with unsearchable topic.	Content of report is written less systematic with include fairly Background of study, Problem Statement, Research Objective, Research Question and less scientific	Content of report is written systematic with include good Background of study, Problem Statement, Research Objective, Research Question and scientific with	Content of report is written very systematic with excellent Background of study, Problem Statement, Research Objective, Research Question and scientific with	x 1.25 (Max: 5)	

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				with fairly researchable topic.	good researchable topic.	very good researchable topic.		
2.	**Overall report format (5 MARKS)**	*Submit according to acquired format*	The report is not produced according to the specified time and/ or according to the format	The report is produced according to the specified time but fails to adhere to the format.	The report is produced on time, adheres to the format but with few weaknesses.	The report is produced on time, adheres to the format without any weaknesses.	x 0.25 (Max: 1)	
		Writing styles (clarity, expression of ideas and coherence)	The report is poorly written and difficult to read. Many points are not explained well. Flow of ideas is incoherent.	The report is adequately written; Some points lack clarity. Flow of ideas is less coherent.	The report is well written and easy to read; Majority of the points is well explained, and flow of ideas is coherent.	The report is written in an excellent manner and easy to read. All of the points made are crystal clear with coherent argument.	x 0.25 (Max: 1)	
		Technicality (Grammar, theory, logic and reasoning)	The report is grammatically, theoretically, technically and logically incorrect.	There are many errors in the report, grammatically, theoretically, technically and logically.	The report is grammatically, theoretically, technically and logically correct in most of the chapters with few weaknesses.	The report is grammatically, theoretically, technically, and logically perfect in all chapters without any weaknesses.	x 0.25 (Max: 1)	
		Reference list (APA Format)	No or incomplete reference list.	Incomplete reference list and/ or is not according to the format.	Complete reference list with few mistakes in format adherence.	Complete reference list according to format.	x 0.25 (Max: 1)	
		Format organizing	Writing is disorganized and underdeveloped	Writing is confused and loosely organized.	Uses correct writing format. Incorporates a coherent closure.	Writing includes a strong beginning, middle, and end with	x 0.25	

		(cover page, spacing, alignment, format structure, etc.)	with no transitions or closure.	Transitions are weak and closure is ineffective.		clear transitions and a focused closure.	(Max: 1)	
3.	**Research Findings and Discussion (20 MARKS)**		Data is not adequate and irrelevant.	Data is fairly adequate and irrelevant.	Data is adequate and relevant.	Data is adequate and very relevant.	x 1 (Max: 4)	
			Measurement is wrong and irrelevant	Measurement is suitable and relevant but need major adjustment.	Measurement is suitable and relevant but need minor adjustment.	Measurement is excellent and very relevant.	x 1 (Max: 4)	
			Data analysis is inaccurate	Data analysis is fairly done but needs major modification.	Data analysis is satisfactory but needs minor modification.	Data analysis is correct and accurate.	x 1 (Max: 4)	
			Data analysis is not supported with relevant output/figures/tables and etc.	Data analysis is fairly supported with relevant output/figures/tables and etc.	Data analysis is adequately supported with relevant output/figures/table and etc.	Data analysis is strongly supported with relevant output/figures/table and etc.	x 1 (Max: 4)	
			Interpretation on analyzed data is wrong.	Interpretation on analyzed data is weak.	Interpretation on analyzed data is satisfactory.	Interpretation on analyzed data is excellent	x 1 (Max: 4)	
4.	**Conclusion and Recommendations (15 MARKS)**		Implication of study is not stated.	Implication of study is weak.	Implication of study is good.	Implication of study is excellent	x 1.25 (Max: 5)	
			Conclusion is not stated	Conclusion is weakly explained.	Conclusion is satisfactorily explained.	Conclusion is well explained.	x 1.25 (Max:5)	

		Recommendation is not adequate and irrelevant.	Recommendation is fairly adequate and irrelevant.	Recommendation is adequate and relevant.	Recommendation is adequate and very relevant.	x 1.25 (Max:5)	
						TOTAL (50 MARKS)	