IMPLEMENTATION AND MANAGEMENT PRACTICES OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) IN THE MANUFACTURING INDUSTRIES

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"I hereby declared that I/We had read this
report and this report are adequate in terms of
scope and quality which fulfil the requirement for the award of
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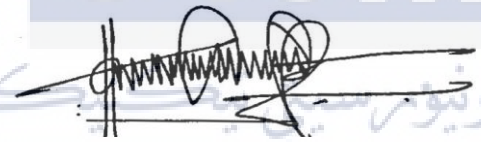
Signature : 

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The repois submitted in partial fulfilment of the requirement for the award of Bachelor of Technology Management (Innovation) with Honours.

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JANUARY 2023

DECLARATION

"I hereby admit that this is my own work except for summary of except of which I had mentioned the source."

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DEDICATION

Every difficult task necessitates making efforts on one's own, seeking advice and direction from others, and drawing strength both from God and one's parents. My humble efforts. I thus dedicate this to Almighty God, esteemed Professors, parents, my supportive siblings, friends, and seniors who acted as a source of direction, support, and expertise for the researcher during the process of finishing this report. Thank you.

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I would also like to extend a heartfelt gratitude to my family, and to my parents, Mohd Radzuwan bin Saleh and Rosnita binti Mohd Mokhyi for their unwavering support and for serving as a source of inspiration for me during making this report. Your prayers for me have been the only thing that have kept me going up to this point.

In conclusion, I would want to express my gratitude to the close friends who have consistently rooted for me, cheered me on, and prayed for me, saying that you have been by my side throughout the process of finishing this capstone project for the senior year.

ABSTRACT

In recent years, there has been an increase in workplace incidents, which obviously has a negative impact on management as well as workers in manufacturing industries. This quantitative study identified the factors that influence worker workplace safety. The population for this study was chosen by the researcher from the production department. To finish this study, the researcher created a set of questionnaires as the research instrument for data collection. The questionnaire was divided into two parts: Part A and Part B. Part A contains the demographic factors, while Part B contains the variables used in this study. OSHA Implementation, Safety Training, Workplace Environment, and Factor Influences Accident were the variables. The sample method used was stratified random sampling based on Krejcie and Morgan's table. The Statistical Package for the Social Sciences (SPSS) version 23 was used to analyse the findings. The instrument was then examined using SPSS for reliability and correlation analyses. According to the findings of the study, three independent variables influenced workplace safety among Malaysian industrial workers. Furthermore, this study presents management and workers with a few suggestions and perspectives on how to reduce or eliminate workplace occurrences.

ABSTRAK

Dalam beberapa tahun kebelakangan ini, terdapat peningkatan dalam insiden di tempat kerja, yang jelas memberi kesan negatif kepada pengurusan serta pekerja dalam industri pembuatan. Kajian kuantitatif ini mengenal pasti faktor-faktor yang mempengaruhi keselamatan tempat kerja pekerja. Populasi untuk kajian ini dipilih oleh penyelidik dari bahagian pengeluaran. Bagi menyelesaikan kajian ini, pengkaji telah mencipta satu set soal selidik sebagai instrumen kajian untuk pengumpulan data. Soal selidik dibahagikan kepada dua bahagian: Bahagian A dan Bahagian B. Bahagian A mengandungi faktor demografi, manakala Bahagian B mengandungi pembolehubah yang digunakan dalam kajian ini. Pelaksanaan OSHA, Latihan Keselamatan, Persekitaran Tempat Kerja dan Faktor-faktor yang Mempengaruhi Kemalangan adalah pembolehubah. Kaedah persampelan yang digunakan ialah persampelan rawak berstrata berdasarkan jadual Krejcie dan Morgan. Pakej Statistik untuk Sains Sosial (SPSS) versi 23 digunakan untuk menganalisis dapatan. Instrumen tersebut kemudiannya diperiksa menggunakan SPSS untuk analisis kebolehpercayaan dan korelasi. Menurut dapatan kajian, tiga pembolehubah tidak bersandar mempengaruhi keselamatan tempat kerja dalam kalangan pekerja industri Malaysia. Tambahan pula, kajian ini membentangkan pihak pengurusan dan pekerja dengan beberapa cadangan dan perspektif tentang cara mengurangkan atau menghapuskan kejadian di tempat kerja.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Research background, relevant description of the problem currently faced, the objective is discussed in this chapter along with the research question for this report.

1.1 Background of Study

To comprehend the safety culture in Malaysia's industrial sectors, it is necessary to first define the term "manufacturing sector." Manufacturing activity is defined as "the melding, changing, attempting to make, completing, adorning, or otherwise treating or adapting any article or substances with a perspective to its use, sale, transfer, delivery, or disposal" by the Industrial Co-ordination Act 1975 (ICA), and includes part assembly and hip repairing but excludes any activity normally associated with retail or wholesale commerce. Manufacturing companies with RM2.5

million in shareholder capital or 75 or more filled paid employees must apply for a production licence, that has to be granted by the Ministry of International Trade and Industry (MITI). MIDA is the primary government organisation in charge of promoting Malaysia's service and manufacturing sectors. MIDA aids enterprises that want to invest in the industrial and service sectors, as well as making their ambitions a reality. MIDA offers a wide range of services, including offering information on investment opportunities and assisting industries looking for joint venture partners. Basic metal products, electronics manufacturing services, electrical and electronic, food processing, engineering supporting, medical devices, petrochemical and polymer, machinery and equipment, pharmaceuticals, rubber products, textiles and apparel, and wood-based industries are the twelve industries classified by MIDA.

In terms of safety and health, industrialised and underdeveloped nations have different goals, according to Rantanen, Lehtinen, and Savolainen (2004). Stress, ageing employees, the right of workers to know, chemicals, ergonomic, workplace safety and wellness monitoring solutions, and health services are all high considerations in developed countries. Priorities in industrially developing countries include agriculture, hazardous occupations such as construction and mining, substantial hazard control, small businesses, the informal sector, workplace illness reporting and safety, health, and child labour. As a result, a good safety management system combined with the execution of workplace safety and health regulations will assist companies in promoting workplace safety and health. Awareness of the significance of major role safety and health rules in all types of occupations has begun to grow in most Asian countries. According to Soehod & Laxman (2007), Malaysia is the first Asian country to pass comprehensive occupational safety and health legislation. Occupational safety and health are covered under the Occupational Safety and Health Act of 1994 (OSHA) in both the private and public sectors.

The fundamental purpose of this Act is to ensure that employers provide employees with safe working conditions. It advocates for a workplace free of hazards such as harmful chemicals exposure, excessive noise levels, mechanical hazards, heat or cold stress, or unhygienic conditions. Apart from OSH,'safety culture' is also an

essential factor in decreasing workplace risks and accidents. The Chernobyl disaster in 1986 gave rise to the term "safety culture" (Ostrom, Wilhemsen & Kaplan, 1993). The International Atomic Energy Agency (IAEA) coined this word (Gad & Collins, 2002). 'Safety culture,' according to Guldenmund (2000), is defined as those components of an organization's culture that influence attitudes and behaviour related to raising or lowering risk.

Because of its nature, Malaysia's manufacturing sector is one of the most dangerous. Factory workers, according to Hong, Ramayah, and Subramaniam (2018), require a basic grasp of workplace safety to be aware of potential hazards. Furthermore, Hong et al. (2018) discovered that workers' awareness is passed down from generation to generation. As a result, it also transmits risky behaviours and harmful situations that become customary and eventually become part of the company culture. Manufacturers must take advantage of their employees' knowledge and experience to compete in the current business climate, given the tendency toward worldwide legal standards. As a result, issues such as human resources, workplace safety, and occupational safety and health cannot be avoided (Phusavat et al., 2017).

In the manufacturing industries, workplace accidents are unavoidable, and they can cost a significant amount of money each year (Noor Aina Amirah, 2013). To avoid workplace accidents, all Malaysian enterprises should now be subjected to Occupational Safety and Health Practices (OSHP), as workplace accidents can impair corporate operations all over the world (Hamid, 2015). Occupational Health and Safety Practices (OSHP) are strategies, policies, actions, and procedures that a company can use to keep its employees safe (Vinodkumar, 2010). Manufacturing safety and health practises may reduce the likelihood of an accident occurring (Hamid, 2015). Accidents can be avoided by raising information with employees, industry, and the rest of the public. Employees may be influenced to improve workplace safety performance by a company's OSHA. Furthermore, installing a strong OSHP in the workplace would reduce the number of accidents while also delivering other advantages to the organisation (Yueng-Hsiang Huang, 2006).

1.2 Problem Statement

Occupational Safety and Health Act (OSHA) aims to safeguard employees in the workplace against accidents, injuries, and hazardous material exposure, particularly in the manufacturing sector. Because incidents or accidents at work can happen at any moment, employers must take responsibility and ensure that they take the appropriate precautions to limit the risk of incidents or accidents while also providing a safe work environment. According to National Occupational Accident Statistics 2020, occupational accident rates in 2020, including the categories of fatalities and events, the reasons of the accident, the industry, and the states, will be available. These assertions are based on data from the Department of Occupational Safety and Health (DOSH) of the Ministry of Human Resources and the Social Security Organization (SOCSO). Manufacturing had the most occupational accidents in 2020, with 10,303 incidents, followed by service with 8,008, construction with 3,958 incidents, and wholesale and retail trade with 3,429.

Workplace accidents, injuries, diseases, and infections remain a serious concern in the industrial sector (Paivi Hamalainen, 2006). People in Malaysia continue to underestimate the significance of worker safety and well-being in the manufacturing industry. They are not unaware of the need of safety awareness. Several studies have found that businesses pay minimal or no attention towards their employees' safety and health. (Adebiyi, 2009). Nowadays, safety culture is a critical aspect in evaluating an organization's overall execution safety performance. The success or failure of a company is largely determined by its safety culture. Among the other factors that contribute to great safety performance is the function of safety culture. There are various types of manufacturing industries in Malaysia. Textiles, petrochemicals, automobiles, plastics, wood-based products, electronics, and many other industries exist. Because most workplace accidents are caused by unsafe actions, it is critical that individuals have a positive attitude when exhibiting safety behaviours. In this context, safety culture directs workers toward an appreciation of the importance of a safe working environment.

Nowadays, we frequently hear about accidents occurring in manufacturing companies (Gillespie, 2016). Accidents at work have a detrimental impact on countries and businesses in terms of loss of life, property, and damages (Yom, 2011). Poor or unwillingness to act on Occupational Safety and Health Practices (OSHP) in various companies will always result in an accident (Yusof, 2008). As a result, we may conclude that OSHA in the manufacturing industries is critical in preventing and eliminating workplace accidents and injuries (Said, 2015). Through their coherence and participation, safety culture organisations foster worker connection, trust, and involvement. They emphasise the importance of safety to one another and foster communication through teamwork. Furthermore, safety culture offers them with information on safety procedures in the organisation as well as the opportunity to share ideas and beliefs that help workers achieve organizational safety. Furthermore, it encourages employee participation in spreading safety information and developing communication networks and safety initiatives. It maintains a primary focus on the interior authoritative safety standard. Working in conjunction with health and safety trends.

Workplace accidents can be prevented if employees and employers are more aware of their surroundings and practise safe behaviour (Christian, Wallace, Bradley, & Burke, 2009). Furthermore, good OSH implementation will contribute to the development of a healthy safety culture because OSHA implementation encourages businesses to adapt to workers' safety and workers to accept some duty for their own safety. The importance of a health and safety policy cannot be overstated in an economy marked by underdevelopment, poverty, violence, threats, sickness, corruption, and so on. As a result of the numerous jobs individuals participate in, mortality and fatality rates will be lowered, and life expectancy will rise. Reducing unfavorable trends, such as occupational illnesses and injuries, has a negative impact on employees, their families, and the country. Consider the negative ripple effect that will follow if a family's breadwinner is killed or injured on the job. These unfavorable consequences will have an impact on the country. Overall health index has improved. OHSA is another method of protecting the public's health.

The most critical factor of guaranteeing continuous enhanced job productivity is workplace safety. Management commitment is defined as management's interest and participation in actions aimed at accomplishing goals (Cooper, 2006). According to figures from the Department of Industrial Safety and Health, there were 1251 occupational accidents recorded in April 2018, with 71 persons killed and 58 people permanently injured. Employers who are less concerned about employee safety and health should take this seriously.

Management commitment, according to Ashill, Peel, and Krisjanous (2006), is displayed by a variety of approaches, including workplace safety training and education, rewarding, and staff decision-making empowerment. Employees will be able to obtain the necessary safety information and expertise safely if they invest in safety education and training.

1.3 Research Question

1. What is the necessity of the Manufacturing industry's health and safety policy?
2. What are the methods that can be used to implement the health and safety policy in the organization?
3. What is the organization's level of preparation for any crisis concerning employee health and safety in the workplace?

1.4 Research Objective

i. To determine the necessity of health and safety policy in the Manufacturing industries.
ii. To identify the methods are used in the organization to implement the health and safety policy
iii. To investigate the organization's preparedness for any occurrence involving the health and safety of employees in the workplace.

1.5 Significant of The Study

This research will provide a study of the structure of the necessity of health and safety policy in manufacturing industries. Research design can capture the method that are used in the organization to implement the health and safety policy, the organization's preparedness for any accurrence involving the health and safety of employees in the workplace.

As an outcome of this research, employees and managers in the Manufacturing industries will be more aware of the significance of workplace health and safety. They will begin to implement the Occupational Safety and Health Act of 1994, which is based on the concept that employees and management must collaborate to ensure the workplace is accident-free, that excellent participation is a primary concern in leading the implementation of workplace safety, and that occupational health and safety policies should be developed and communicated to all employees. Furthermore, it is the employer's responsibility to ensure the safety, health, and welfare of workers while they are working by making measures to ensure, as far as feasible, safety and absence risk.

1.6 Summary

The formation and implementation of health and safety policy is one of the main steps that need to be created in every organization. Security campaign practices must be implemented to further improve security efforts and increase awareness that the company takes the issue seriously. Furthermore, it just depicts a perspective of what research entails. However, fundamental information is insufficient to prove the problem, the next chapter will go into further detail.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Chapter 2 will illustrate the literature review of necessity and method that can be used in the organization to implement the OSHA. It also will explain about independent variable and a dependent variable that consider the advantage and implementation of OSHA in manufacturing industries that related to previous research. Besides that, it also will discuss implementation and management practices of Occupational Safety and Health Act (OSHA) in the manufacturing industries in Malaysia. Review on related journal and article that related to the research and same area also been a highlight in this chapter.

2.1 Factor Influences Accident

Integrating occupational safety and health into an organization's operations is extremely practical because it not only reduces the number of incidents but may also boost productivity and economic and financial benefits. Occupational safety and health in Malaysia have improved significantly in the last ten years, despite legal amendments that resulted in the passage of the Occupational Safety and Health Act (OSHA) in 1994. Being caught in or crushed by equipment or machinery is one of the most common and fatal accidents that can occur in the industrial business, which is filled with massive things and heavy machinery. Crushed limbs, shattered bones, amputation, burns, a catastrophic head or brain injury, a death, or even spinal cord injury are common outcomes of such accidents. Accidents of this nature are usually caused by defective machinery or equipment and are rarely the responsibility of the employee. However, such incidents could also be caused by an employee's lack of awareness of safe equipment handling and machinery operation. The condition of equipment and machinery used in global manufacturing is the responsibility of both employers and employees. Moreover, it should be the employer's first concern to train personnel in correct equipment control and machine operation to prevent employees from getting into mischief and damaging themselves and others. Workplace accidents in the manufacturing business can be caused by worker tiredness, repetitive motion, overexertion, long exposure to dangerous chemicals, excessive noise, and a variety of other factors. That stated, it would be preferable for global manufacturing organisations to work on improving their employees' working environments, and for workers in all industrial occupations to be always vigilant.

Unsafe working environments and ways of working in the workplace can be detected, and safe ways of working must be learnt. Safety measures must be implemented for each part of the job, and employees must have a caring attitude toward health and safety in the workplace. happens in the workplace (National Safety Council, USA Company, 1991) The risk variables that contribute to workplace accidents should be regarded seriously by facility management in the context of this study because every accident involves risks and effects that are unique to the workers involved. The

appropriateness of materials and equipment has been implicated for more than a quarter (27%) of occupational accidents, according to (Haslam et al, 2005). According to Haupt (2001), the availability of materials and equipment in the workplace may necessitate various replacement materials and tools, which require the employee's competence and may also be new to the employee. Lack of equipment, machinery, or appliances, material usability, physical suitability of materials such as large and overweight sizes, and installation design of equipment such as scaffolding that does not follow procedures are all examples of accidents related to the suitability of materials and equipment. (Ismail et al, 2012; Fung et al, 2012; Haslam et al, 2005).

Neglect of safety measures, procedures and less responsible can have a negative impact on the management of the organization. A person's attitudes and behaviors can have an impact (Gawande, 2011). Employees' unfavourable attitudes, a lack of abilities for the job, and unsafe working environments all contribute to unsafe behaviour (Jafari, 2016) Security attitude relates to a person's dedication and sense of duty to safety regulations, procedures, and practises, as well as their ideas, perceptions, emotions, and values (Neal and Griffin, 2004). Employees are more likely to be involved in workplace accidents when they have negative attitudes. In general, the following causes lead to workplace accidents: negligence, a lack of knowledge or training, bad equipment condition, and poor safety planning management. Accidents in the workplace can be prevented if users follow all the regulations established by Noresah (1997). Workplace safety, particularly in workshops with a high potential of hazard, is critical since many instruments and machinery require human training to operate. Accidents are more likely without sufficient knowledge and SOPs, and this should be stressed by management or organisations while offering education or training.

2.2 OSHA Implementation

'Implementation' is described as a sequence of activity taken to put an idea, decision, method, or strategy into action (Klein & Sorra, 1996). The immediate result of interest is the application of this new notion for the first period. The OSH adoption measured here complies with the minimum necessary of the Occupational Safety and Health Act (OSHA) of 1994. Because OSH implementation must be interconnected and coordinated across numerous functions, departments, work shifts, and locations, this activity is an organizational-level construct. It is a company-wide endeavor rather than an individual one. Furthermore, the solution should provide a collective benefit, such as improved employee health, increased productivity, and decreased health-care expenses. To avoid undesirable consequences for employees, management and employers must pay close attention and take this problem seriously. All safety and health-related measures and regulations must be disseminated and displayed to employees and the public for their knowledge and understanding. As we all know, the employer or management is required and responsible for ensuring the delivery of information related to safety, supervision, education, and training, as well as facilities for the welfare and safety and health of employees, as stated in the Occupational Safety and Health Act 1994 (OSHA). This study is expected to aid in the process of obtaining relevant information, which can then be used to improve safety practises in the workshop and in institutions. In general, to achieve the process of human capital development, particularly in the areas of safety and health. To guarantee the safety of each workshop, management and users must work together to develop a disciplined and safe work culture. (Mohd, 2002).

The study's goal, according to Subramaniam, Mohd. Shamsudin, Mohd Zin, Sri Ramalu, and Hassan (2016) is to investigate the role of safety participation as an intermediary in the relationship between six safety management factors: management commitment, safety training, safety interaction and feedback, safety rules, occupational safety promotion policies and regulations, and worker participation. According to the findings of this study, only three characteristics of safety management practises were significantly associated to workplace safety

(Subramaniam et al., 2016). As a result, there must be a link between managerial commitment and workplace safety.

According to Morillas, Rubio-Romero, and Fuertes (2013), implementing occupational health and safety (OHS) in a company can ensure that workplace accident rates decrease, as indicated with data on workplace accident rates in Sweden and Spain. An initial comparative study was done in Swedish and Spain for this topic. It was also distinguishable from others in that it just looked at the preceding case, whereas others distributed respondents with questionnaires. It is important that an organization implements the Occupational Safety and Health Act (OSHA) at workplace, particularly in the manufacturing industries, to make the workplace safe, healthy, and free of accidents and diseases. It will allow to increase the level of the work environment, which is a vital component of the organization's quality of life and productivity. These two positive impacts, in turn will contribute directly to the enhancement of people's quality of life and the country's competitiveness, in accordance with the country's policy goals and transformation plan.

2.3 Work Environment

A healthy workplace is a beneficial policy for every industrial plant or firm. Much effort has been expended to protect employees and reduce dangers. Risk assessment, management, and reduction are continuing efforts in many countries with a range of characteristics aimed at improving workers' quality of life (QOL). Workplace safety should be addressed effectively in any business, regardless of the number of employees. It is your responsibility as an employer to offer safety standards, processes, and procedures for your employees. Preventive actions against workplace accidents or deaths are critical for ensuring a healthy, safe workplace (simplifiedsafety.com, 2018).

A safety and health management system, or safety program, can contribute to improve the work environment, according to Maine.gov (2016). This will aid in the prevention of occupational injuries and diseases. To provide a safe working environment, all levels of participation are required, including employee engagement and employer involvement. Apart from that, comply with OSHA requirements, a system or process to identify and control dangers, training programs, awareness, communication, and continual development is required to assure the implementation's success. According to Pretrus and Kleiner (2013), the most crucial feature is that all employees of the organisation have the duty of addressing workplace safety collectively. on the statement, the workplace environment is linked to and influences worker safety. Unsafe or uncomfortable working circumstances, as well as a high chance of violence, are examples of poor workplace environments (Pretrus & Kleiner, 2013).

Accidents are unexpected and uncontrollable situations in which the action or reaction of an object, substance, person, or radiation causes or increases the risk of personal injury (Heinrich et al., 1980). Human factors, according to Male (2003), are likely to contribute to this problem on a few levels, including individual considerations such as drivers and pedestrians, job type like workplace and vehicle design, and organisational factors (e.g., training procedures and management systems). Although obtaining a zero-accident goal in the workplace is a Herculean undertaking, an effective causal analysis paradigm may lead to the deployment of successful intervention measures that will successfully minimise the substantial social and human costs associated with occupational fatalities (Gyekye, 2010). Facility management is the process of providing support services to expedite important company activities while also supporting in the attainment of organisational objectives and strategies to guarantee that buildings, equipment, services, systems, and manpower are all in good working order (Hamilton & Norizan Ahmad, 2001). Facilities management, often known as property management, provides services to support the operations of a company organisation, according to (Zuhairi Abd. Hamid, 2004).

2.4 Safety Training

Occupational safety coaching is a means of providing employees with the abilities and understanding they need to complete their activities and procedures safely. This also includes specific guidelines and instructions to help them discover, report, and manage workplace hazards and incidents. Staff safety training has been widely proved to be important in promoting safe behaviour (Hare, Cameron, & Duff, 2006; Vinodkumar & Bhasi, 2010). Employee safety behaviour, skills, and knowledge improve when safety training is effective. Workers are likely to be conscious of prospective risks and dangers at work, as well as the potential consequences if the hazards are ignored. While formal safety programmes often have a planned curriculum and exercises for employees to participate in, implementing them may consume the manufacturing budget. There has been claimed that companies would rather devote their resources to more profitable endeavours (Legg et al., 2015). Safety training is crucial in lowering the number of workplace incidents (Tam et al., 1998). Because it is the most direct means to develop workers' technical abilities and safety awareness, safety training that covers a higher level of employees would result in a greater reduction in accident statistics (Surienty and Lilis. 2019). Safety training, according to Vinodkumar and Bhasi (2010), is an integral part of any accident prevention programme and any OSH programme. According to Robson (2010), workplaces should continue to provide OHS training to employees because training has a favourable impact on worker behaviour. The problem is that accidents happen even when workplace training is in place. Inadequately given training is one of the primary reasons contributing to the high risk of injury and mortality in this industry, James (2011).

Improve favourable behaviours toward greater safety practise and raise the level of safety behaviour with effective OSH training. Supervisors, employers, and managers are responsible for their employees' safety, and they must provide training on safety principles and techniques. Workers may benefit from understanding respective responsibility that under OSHA and the rights protected by the Acts, as well as basic principles and procedures for identifying and controlling dangers, including

the control hierarchy. (see "Hazard Prevention and Control"). Instruct them on incident investigation techniques, such as root cause analysis. From that training it helps them to execute their work safely.

Appropriately, this has an impact on how workers conduct their jobs, as they gain information and technical abilities that can help them deal with hazards more effectively (Ricci et al, 2018). Workers' perspectives and experiences regarding OHS are rarely incorporated in work-related accident and sickness prevention initiatives, according to Garcia et al. (2004). As a result, it's critical to investigate workers' attitudes about workplace safety and health. Understanding the different types of OSHA training is necessary for determining workers' attitudes about OSHA training at work based on their safety awareness and supervisory responsibilities, as well as determining the relationship between OSHA training and worker awareness and supervisory roles. According to James (2011), evaluating workers' opinions of the training they get is critical to planning and implementing successful employee training programmes. As a result, this study aimed to establish a critical foundation for OSHA training from the standpoint of workers' perceptions.

2.5 Marketpalce Accident

Workplace accidents are becoming increasing well-known as a severe danger for the industries concerned. Employees in the manufacturing sector who are involved in the many operations of handling machines and diverse production equipment such as the usage of moulding machines are also affected by this issue, which is all intimately tied towards the problem of health and safety understanding. To foster the development of a safe and healthy marketplace since it is one of the most important functions of the company and its employees to conduct their daily operations in a safe and correct manner. Employees with a high level of health and safety consciousness can do their work effectively and professionally, potentially preventing work-related accidents. Mishaps occurring during daily operations in the workplace create a bleak condition.

The development and enforcement of OSHA, as well as the level of awareness and understanding regarding safety issues among employers and employees, have been the focus of previous studies on workplace injuries in Malaysia (Jamaluddin, 1994; Mansur et al., 2003; Ariffin et al., 2006; Rampal and Nizam, 2006; Lugah et al., 2010). According to their studies, safety and health standards in Malaysia have developed from highly prescriptive laws to intricate technical rules to more flexible laws that encourage self-regulation in accordance with OSHA 1994. On the other hand, Rahmahand Sum (2000) examines how OSHA has affected the need for employees in 50 manufacturing enterprises. According to the findings of their study's cross-sectional analysis, OSHA significantly affects the amount of labor that organizations demand.

Since marketplace accidents or injuries that have significantly contributed to the decline in death, reduced employee productivity, and, in turn, impacted the economy, safety has become the greatest priority of worldwide industries (Atombo, Wu, Tettehfio, Nyamuame, & Agbo, 2017; Cusick, Kiely, & Logan, 2010; Wachter & Yorio, 2014). Such circumstances have gotten worse in the steel industry as well as in underdeveloped countries. Steel industries have historically been notorious for their hazardous working conditions (Pedrag Milic, 2011), and as a result, work-related injuries are becoming more common among industry workers (Motbainor, Achenef & Kumie, 2007; Takele & Abera, 2007).

2.6 Theoterical Framework

Theotrical framework is importance element in this chapter. From the standpoint of the framework, a study might become more obvious regarding the relationship. Interaction variables with independent variables are shown in study frameworks. However, for this study, the independent variable will be safety and health, while the dependent variable will be enhanced accident.

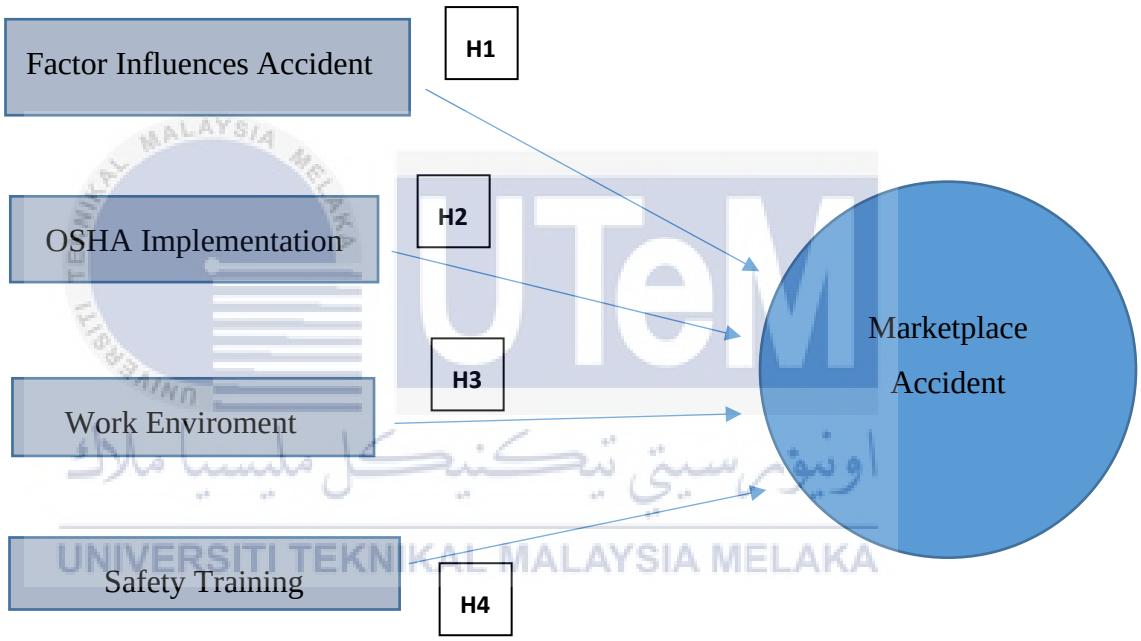

Figure 2.1: Theorical Framework

2.7 Hypotheses of the study

Variable 1: Factor Influences Accident

H0: Factor Influences Accident is not significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

H4: Factor Influences Accident has a significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

Variable 2: OSHA implementation

H0: OSHA Implementation is not significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

H1: OSHA Implementation has a significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

Variable 3: Work Environment

H0: Work Environment is not not significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

H3: Work Environment osha implementation has a significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

Variable 4: Safety Training

H0: Safety Training is not significant and positive impact on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

H2: Safety Training OSHA implementation has a significant and positive impact on the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries

2.8 Summary

Based on the overall literature review for this study, researchers can conclude that all past studies that have been done are in success rating. Through previous study, researchers can know what is most important in OSHA. By diong the past studies, researchers may have more exposure and knowledge on OSHA thus create a better understanding towards health and safety. For the next chapter, researcher may discuss about methodology choices that will be used to achieve success.

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter describes the overall methodology that will be used in this research. This chapter will determine the research methodologies and study design so that a more in-depth understanding of the procedures to conduct the complete task is provided. This chapter also explains the study framework, instrument, and sample approach. Lastly, the method to collect data and the techniques to analyze data are discussed accordingly.

3.1 Research Design

A research design is a detailed description of data and information collection and interpretation that is based on study challenges and objectives. The research design may result in the mission being executed easily and functionally. The research's brief character was chosen for this study. Descriptive analysis (Hossein, 2016) studies the phenomena and its features, focusing on determining what is happening, and the data is quantitatively analysed by utilising average percentages, frequencies, and other statistical measures in relation to determination. A study design is a detailed action plan that outlines how research will be carried out. According to Ita Warliani (2017), the design of this study serves as a guide for the researcher in the process of collecting data, analyzing it, and then summarizing the findings of the research.

This is quantitative research that was carried out utilizing a survey approach using a questionnaire as a data-gathering tool. A questionnaire is a series of questions or statements used to gather information for the purpose of doing research. This section will be involving around 103 respondents from manufacturing industries. Questionnaires are a simple way to obtain information (Noor Amy Afiza, 2018). Using the research approach allows the current study's researchers to collect in-depth data on the use of implementation and management practices of Occupational Safety and Health Act (OSHA) in the manufacturing industries. The research design can capture the sorts of OSHA implimentation and management practice, necessity health and safety policy and organization’s preparedness for any accurrence involving safety and health in workplace.

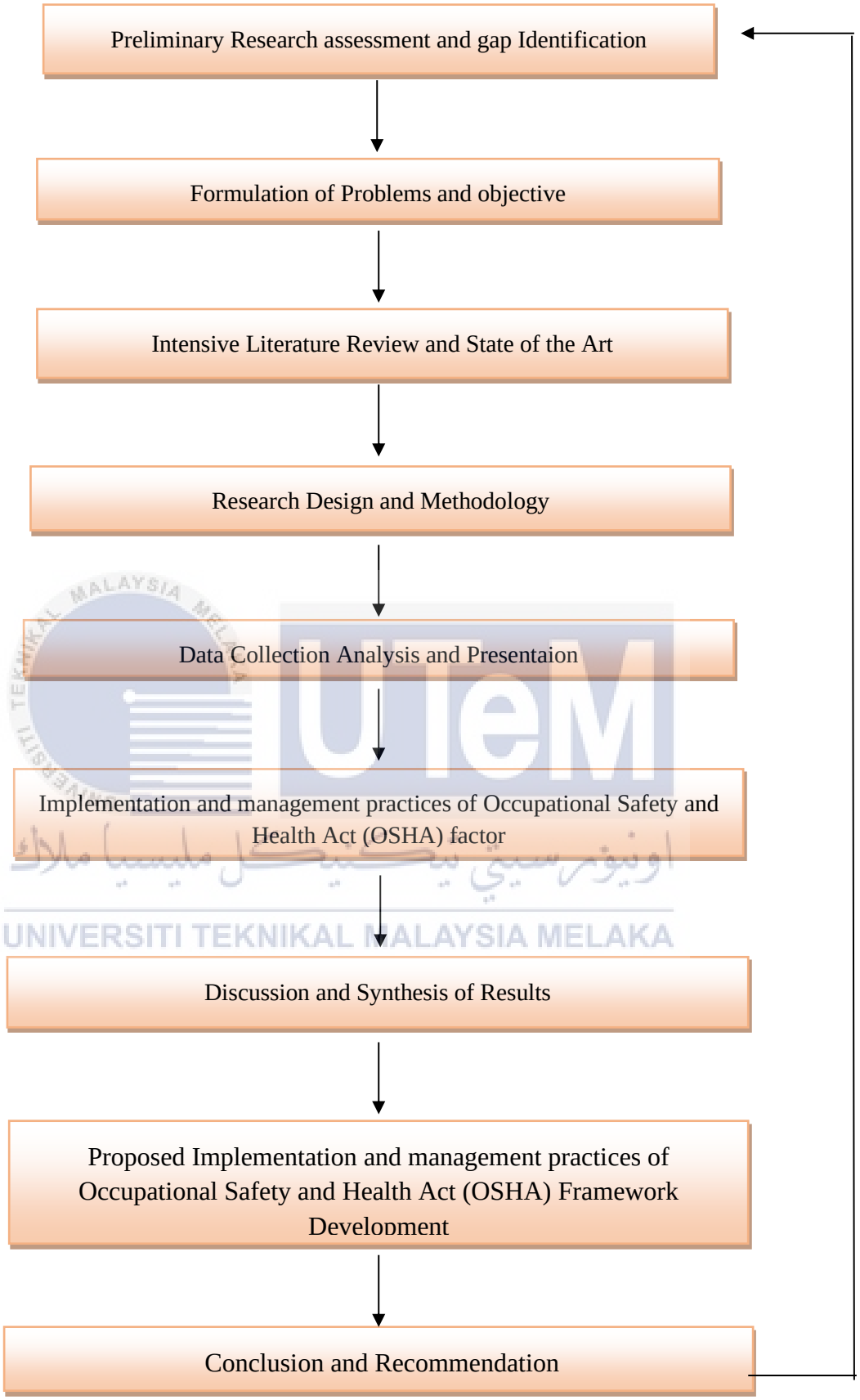

Figure 3.1: Research Design Flowchart

3.1.1 Research Approach

The method of deductive research was chosen for this study since it meets the goal of learning the relationship between the variables specified in the conceptual framework offered for careful examination and comprehension of OSHA management and implementation practises in the manufacturing industries. The deductive approach, as according to Nathan et al. (2015), is rooted in current literature and theory.

3.2 Methodological Choices

The most important methodological choices made by researchers are based on qualitative and quantitative data. Furthermore, qualitative data is presented in the form of words and images, while quantitative data is presented as a list of items. In this study, researchers choose quantitative method. Quantitative method is involving the gathering of numerical data from primary or secondary sources. Quantitative data, on the other hand, is based on a large sample of individuals and may be easier to acquire and analyse. Researchers can use quantitative research methods for descriptive purposes. This is because, in descriptive research, researchers can simply seek an overall summary of study variables (Pritha Bhandari, 2020). As a result of having, it appears more "scientific," which could appeal to researchers seeking specific causal answers. Because this entails the application of software, quantitative evaluation is typically completed faster. Because of the vast number of responses, it is possible to generalise to a greater population than the study population.

3.3 Descriptive Research

In their research materials, the Descriptive Survey research Design requires the researcher to provide in-depth explanations or explanations of the topic or circumstance that they are examining. This type of study design is purely theoretical in nature, and it comprises the researcher collecting data, analysing it, organizing it, and then delivering it in a form that others can understand. It is the most comprehensive type of research design. A descriptive research design could employ a variety of different research approaches to study one or more variables (SL Siedlecki, 2020).

In descriptive, as compared to exploratory studies, the researcher has no control over or ability to manipulate any of the variables; instead, he or she simply observes and measures them. In other words, while qualitative research can be utilised for descriptive reasons, a descriptive research design technique is frequently regarded as a type of quantitative research. This is even though qualitative research can also be used for these reasons. To ensure that the findings are accurate and can be relied upon, the research methodology should be created in an appropriate manner.

3.4 Data Collection

Data collection is the systematic acquisition and evaluation of information on variables of interest that allows researchers to test hypotheses, answer research questions, and evaluated outcomes. (Syed Muhammad Sajjad Kabir, 2016). In statistical analysis, data collecting is extremely important (Oluwatosin Victor Ajayi, 2017). Data collection is either quantitatively or qualitatively divided into two types of data collection. In this study, the researcher chose to use quantitative survey questionnaires to render empirical data collection processes. The questionnaire will be distributed to a selected group of respondents in the online business since the focus of the study is on integration of business performance online. Even recorded is the data collection (Melissa 2014). The main advantage of survey research has been described

by Beatrix et al. (2006) with minimal expenditure, researchers able to reach many respondents. Following that, parts of the story of information can be gathered, and researchers can undertake statistical manipulations that allow for different uses of the data set during data analysis. Primary and secondary information are the two sorts of data collection procedures.

3.4.1 Primary Data

The word "primary data" refers to information that the researcher obtains for the first time (Oluwatosin Victor Ajayi, 2017). Primary data sources are limited and obtaining such data may be difficult due to a lack of population or respondents' unwillingness to cooperate (Syed Muhammad Sajjad Kabir, 2016). In their research, researchers employed various types of primary data sources, such as surveys (Syed Muhammad Sajjad Kabir, 2016). Information gathered from a sample of respondents who took part in a survey is referred to as "survey data." To do research, this information is also gathered from the target audience on certain concerns. A sample of respondents' feedback and opinions must be gathered through various channels. For example, the study was conducted using a variety of data collection methods, such as online questionnaires and telephone surveys. A questionnaire is an observational technique in which respondents are given a set of written items to respond to and are asked to do so in writing. Respondents were given a list of written items to answer by simply marking what they believed or could accept on a scale of one to ten. Questionnaires are open-ended or closed-ended questions to which respondents respond, according to Syed Muhammad Sajjad Kabir (2016). They can be given over the phone, via mail, in person in a public area, or at an institute using electronic mail, fax, and other methods.

3.4.2 Secondary Data

Information obtained by researchers from previously published research publications is referred to as secondary data collection (Jameel, Bismah, and Umair Majid, 2018). Secondary data isn't always as reliable as primary data. However, it is still useful when the researcher is unable to obtain preliminary data, and secondary sources can assist the researcher in obtaining the necessary information (Syed Muhammad Sajjad Kabir, 2016). Secondary data can be gathered in a variety of ways, including journals, online articles, magazines, newspapers, and books (Melissa P. Johnston, 2017).

3.5 Location of Research

The location of research plays a crucial role in information flows and the creation of knowledge networks in manufacturing industries. The purpose of this study is to propose that a locational perspective is essential to our understanding of the structure and functioning of research activity. This study aims to determine the implementation and management practices of the Occupational Safety and Health Act (OSHA) at the Panasonic Appliances Air-Conditioning Malaysia Sdn. Bhd. The factory is located at Lot 2, Persiaran Tengku Ampuan, Seksyen 21, Shah Alam Industrial Site, 40300 Shah Alam, Selangor Darul Ehsan, Malaysia.

3.6 Research Strategy

A research plan supports a researcher in deciding on the best data collection and analysis technique. As a result, when conducting the study, it is vital to adopt the suitable strategy. It is critical to distinguish between a research methodology and a research technique. Research approaches, which can relate to specific techniques employed to conduct out a study, are examples of methodologies. There are several

classifications for research methodology. The term "research technique" can refer to a research methodology, research approach, research approach, or even a research framework. In most cases, research methodologies are statistical, subjective, or a mixture of both. Research procedures, on a more practical level, provide a specified structure, guideline, or direction for research efforts.

3.6.1 Research Instrument

The research instrument is the tools for measuring including the questionnaire and the scale selected for data collection in the field of research. Information on the function of the unit, population coverage, selected calculated variables, and more.

3.6.2 Sampling Design

Sampling is called a decision-making mechanism which is the respondent and the research subject, and the procedure can be categorized as probable or unlikely. This requires a decision on the characteristics that will be decided for the study, including its age, the method of recruitment and the number of samples and their comparison with studies Non-probability sampling is the sampling technique chosen for this research that shows that the strategy on which sample selection is focused on researchers convenience, and that non-probability samples (2016), according to Etikan et al., improve the targeting process when people are very large and difficult to randomize. The word "probability sampling" refers to the process of picking a sample from a population based on the randomization principle, which is also known as "random selection" or "chance." Probability sampling is more complicated to implement, takes more time, and frequently results in greater costs than non-probability sampling. Non-probability sampling is a methodology for selecting units from a population using a method based on personal taste. Non-probability sampling is a quick, simple, and low-cost method of data collection. This is because it does not require a full survey frame.

The Krejcie and Morgan Sampling Method is being used by the researchers in this study. Krejcie & Morgan (1970) developed a table utilising the sample size formula for finite population to make figuring out the sample size for a finite population easier.

3.6.3 Sampling Technique

The selection of the entities to be included in the sample may be referred to as the sampling technique, which can also be a name or other form of identification for the procedure. Market research professionals frequently employ a number of sampling techniques. This enables them to avoid conducting research on the entire population in order to obtain insights that may be put into practise. It is also a time and money-saving strategy. It is feasible to employ sampling strategies to obtain the most accurate findings from a research survey (M Alvi, 2016).

The simple method for sampling was chosen to execute the data collection strategy. According to Borges (2017), those who occur during the data collection process pick a sample from an appropriate sampling technique. Etikan et al. (2016) stress in their work that convenient sampling describing the selected sample is easily available, inexpensive, time-consuming, and simple to pick.

3.6.4 Sampling Plan

A sample plan is a precise overview of which measurements will be made at what times, on which material, in what way, and by whom. Additionally, the plan will specify how the measurements will be collected. The rules of probability are followed by a statistical sampling strategy, which enables you to draw reasonable conclusions about a population based on the statistics of the samples that have been collected from it. It is also a phrase that is used extensively in research investigations, which give an outline since research is undertaken. It explains which group is going to be surveyed, how large the sample should be, and how the respondents are going to be selected from the overall population. The risks associated with accepting or rejecting a large quantity of a product need to be quantified, discussed, and agreed upon. Sampling plans and sampling systems make it possible to conduct risk assessments for both the producer and the consumer when it comes to accepting or rejecting large quantities of a product (M Aslam & M Azam, 2013).

TABLE 1
Table for Determining Sample Size from a Given Population

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

Note.—*N* is population size.
S is sample size.

Figure 3.2: Sample Size Estimation Table

Source: (Krejcie & Morgan, 1970)

3.6.5 Pilot Test

Pilot testing is a rehearsal of the research study that enables the researcher to test the research technique with a limited number of test participants before conducting the main study. This is done before the researcher conducts the main investigation. Although this is an extra step, the time spent doing it could be the most productive for any study endeavor. The evaluation of the practicability of the planned more extensive investigation is the fundamental objective of a pilot study. A cost and sample size estimate for the larger research may also be derived from the results of the pilot test, if desired. Depending on the context, a pilot test may also be referred to as a pilot experiment, pilot project, pilot study, feasibility study, or pilot run (J Morgenstern, A Kuerbis & P Amrhein, 2012).

The pilot study is performed to determine the underlying parameters and factor analysis is conducted. Cronbach's coefficient of alpha reliability for internal consistency is measured as a reliability analysis to verify potential ambiguity or confusion of the population and test variables of the study. The general Cronbach alpha value should be greater than 0.70, according to Pallant (2007). To test the validity of the questions, 20 participants will participate in the study. To obtain the alpha value, Cronbach uses the IBM SPSS Statistic (SPSS) version 26.0 to measure the data collected during the pilot test.

Table 3.1: Cronbach’s Alpha and Internal Consistency

Alpha Range	Internal Consistency
Below .60	Unacceptable
Between .60 and .65	Undesirable
Between .65 and .70	Minimal Acceptable
Between .70 and .80	Respectable
Between .80 and .90	Very Good
Above .90	Excellent

3.7 Development of Questionnaire

The data collection method is performed through a questionnaire survey as a quantitative approach to the research design chosen. The analysis was developed to carefully consider the literature review and to collect data by a large group of survey respondents based on previous studies. The set of questions is based on a variable in this research that seeks to find proof of the transformation of the offline to online enterprise between small and micro-enterprises. The questionnaire contains five important sections, which are sections A, B, C and D. Section A includes the interviewee's general questions, such as gender, ethnicity, gender, and job demographics. This segment examines the expectations and the extent of the respondents 'acceptance' of the company and their expertise before addressing specific aspects of the implementation and management practices of Occupational Safety and Health Act (OSHA) in the manufacturing industries.

The question in section B is based on the conceptual framework in this report, which relates the necessity of health and safety policy in the Manufacturing industries. 6 Likert scale for the estimation of variables is used for this analysis. The resulting scale measure is considered: 1 represents Strongly Disagree, 2 represents Disagree, 3 represents Slightly Disagree, 4 represents Slightly Agree, 5 represents Agree and 6 represents Strongly Agree is a firmly agreed scale. Section C questions about identify the methods are used in the organization to implement the health and safety policy and Section D is about the the organization's preparedness for any occurrence involving the health and safety of employees in the workplace.

3.7.1 Variables

Table 3.2: Factor Influence Accident

No	Items	Sources
	Factors Influence Accident (FIA)	
1	When I'm pressed for time, Usually I fail to adhere to proper safe work procedures.	Institute for Work & Health, 2016
2	Work in an environment where the noise level is so loud that I must raise my voice when communicating with persons who are less than one meter away.	
3	Work in a bent, twisted, or awkward work posture	
4	Spend at least three hours each day performing repetitive motions with your hands or wrists, such as assembling, cleaning, pulling, or pushing.	
5	Experience being bullied or harassed at work	
6	Manually Lift, carry, or push objects weighing more than 10 kg by hand at least 5 times each day.	

Table 3.3: OSHA Implementation

No	Items	Source
	OSHA Implementation (OI)	
1	Management strictly complies with all safety regulations and guidelines	(Yusri,2012)
2	Managers and supervisors seem concerned about worker safety in the organization	
3	Company provides adequate personal protective equipment to employees	
4	The organization sets clear protocols, particularly for worker safety and health	
5	The company has their own security policy	

Table 3.4: Work Environment

No	Items	Source
	Work Environment (WE)	
1	There is open communication about safety issues in the workplace	(Rumaizah,2021)
2	The organization performs frequent scale safety inspections	
3	The organisation provides motivation to all employees	
4	The company's environment is constantly clean and tidy	
5	The company installs fire extinguishers in strategic places.	
6	I received a thorough explanation of the organization's safety and health policies	
7	I have the opportunity to contribute suggestions to my company's safety and health programme	

Table 3.5: Safety Training

No	Items	Source
	Safety Training (ST)	
1	New employees are given training to understand safety rules and procedures	(Nelsin, 2011)
2	The management encourages staff to participate in safety programmes	
3	All new employee obtains safety and health training	
4	Safety training is held regularly from time to time	
5	The company conducts emergency training in the event of a workplace accident	
6	My organization's safety and health training programme are directly tied to my workplace safety requirements	

Table 3.6: Safety Training

No	Items	Source
	Marketplace Accident (MA)	
1	Slips, trips and falls are cause for marketplace accidents	(Lincy,2007)
2	physical exertion is cause for marketplace accidents	
3	stress is cause for marketplace accidents	
4	Collision cause for marketplace accidents	
5	Safety committee is measures taken to ensure industrial safety in the organization	

3.8 Issue of Validity and Reliability

The criteria of validity and reliability are used to evaluate research quality. They demonstrate the precision with which a technique, methodology, or test measure something. The constancy of a measure is known as its dependability, whereas its precision is known as its validity. Researchers must consider validity and reliability while creating a study design, organising procedures, and writing up results, especially in quantitative studies.

3.8.1 Validity

Beatriz et al. (2016) define validity as the primary instrument degree that has been developed. If there is legitimacy on the instrument and the validity of the study, it is evidence of the understanding of the measurement. Assessment of instrument validity, which includes face validity, material validity, validity of criteria and design

validity, are often listed as four. Each has an important influence on the research in its entirety. It shows the high level of quality of this work towards a high degree of confidence.

3.8.2 Reliability

According to Saunders et al., reliability is defined as consistency in determining a procedure for collecting research data or an analytical process (2008). Because reliability can also be described as a measurement function, Beatriz and colleagues (2006) argue that describing reliability in the score is preferable to checking. Reliability in the primary research information collection process means that a meta-analysis should be measurable, visible, and fully defined to explain behavior, outcomes and design of the study, subject characteristics, and other relevant variable. Because the analysis uses a quantitative approach, the reliability of data includes time consistency, the data collection process, and the data collector.

3.9 Time Horizon

Longitudinal and cross-sectional are the two categories of time spans that may be distinguished. To get an answer to a research issue, one might conduct a study in which the data are only collected once, potentially over the course of many days, weeks, or even months. One-shot studies, often known as cross-sectional studies, are another name for these kinds of research. To be able to provide a solution to the research question, the researcher may, in some circumstances, find it necessary to conduct research on individuals or phenomena at more than one point in time. For instance, the researcher would wish to look at how workers behaved both before and after there was a shift in top management to determine what kind of consequences the management shift had. In this case, the research is neither cross-sectional nor of the one-shot kind rather, it is carried out longitudinally over the course of a length of time. This is

because data are acquired at two separate periods in time. These kinds of investigations are referred to as longitudinal studies.

3.10 Summary

Chapter 3 have discussed a lot about the research methodology. At the first place, the researcher has done the introduction about the research methodology and continued with others point to discussed such as research design, location of the research, research strategy and others. This chapter has shown the important of research methodology to the researcher in this study. More information on the chosen research design, the appropriate sampling procedure, and the data collection process plan can be obtained through the conceptual system overview. The focus of this study is mainly small and micro-enterprise respondents but is focused on collecting data from the population.

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

The findings reported by the researchers using the "Statistical Package for Social Science (SPSS) Version 26 are discussed in this chapter. This analysis relates to the validity, pilot test, reliability, descriptive analysis, multiple regression analysis, and correlation analysis. The analysis included in this chapter. The quantitative data explain these findings and the data discuss the results based on research objectives. The aim is to ditermine the necessity of health and safety policy in the Manufacturing.

The questionnaire had been distributed to 103 respondent who works at Panasonic Appliances Air-Conditioning Malaysia Sdn. Bhd. This survey is successful, and the researcher gets positive feedback from the respondent. Before proceeding with additional data collecting, the questionnaire was evaluated as a pilot

testing method to test the questionnaire's reliability and validity by selecting 20 individuals to answer the questions. The frequency of respondents who have already responded to this question is determined using descriptive analysis, followed by scale measurements that offer the reliability analysis result.

This chapter includes included data analysis for the pilot test, descriptive analysis, Pearson's correlation, inferential analysis, and hypothesis testing. Finally, I concluded the chapter.

4.1 Descriptive Analysis

4.1.1 General Information of Respondents

These parts were discussed about coefficient data summarizing. Descriptive analysis was measures of central tendency and measures of variability that include the mean, median, mode, standard deviation, variance, the minimum and maximum variables. General information of respondents refers to the demographic profile which including gender, department, age, work experience and education level. A total of 103 respondent (Panasonic Appliances Air- Conditioning Malaysia Sdn. Bhd.Shah Alam) as demographic sample profiles have been gathered by the researcher in this study.

4.1.1.1 Respondent’s Demographic

The demographics of the respondent were analysed with descriptive statistics and divided into preliminary categories, primarily with a view to summarizing data from the questionnaires. The data analysis reveals the fundamental features of the population of the 140 respondents and the findings for the portion of the questionnaire.

4.1.1.2 Gender of Respondents

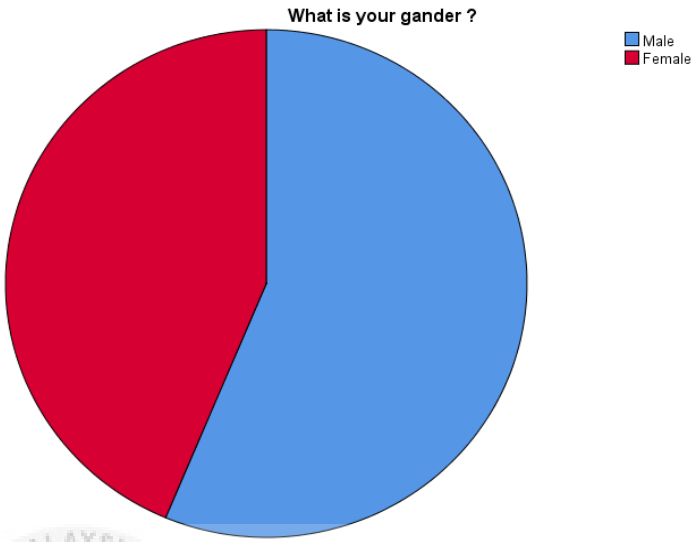

Figure 4.1: Gender of the respondents

Table 4.1 Respondent's Gender

Gander					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	58	56.3	56.3	56.3
	Female	45	43.7	43.7	100.0
	Total	103	100.0	100.0	

Figure 4.1 above is related to the information of genders which were obtained from the survey among 103 respondents. The findings show that 56.3 % (n= 58) were male and 43.7% (n=45) were female respondents. This shows that the number of male respondents is outnumbered famle respondents, due to the approch of data collection towards male communities. manufacturing has long-been an industry that's dominated by male workers. This is because of outdated assumptions and stereotypes.

4.1.1.3 Department of Respondents

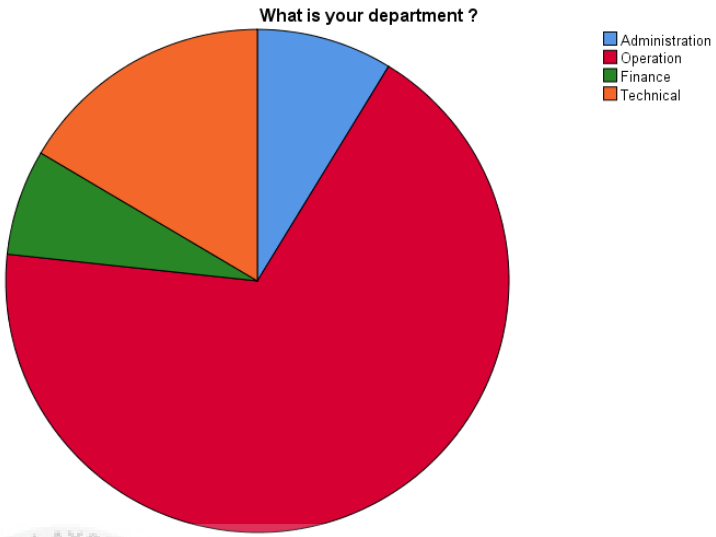

Figure 4.2: Department of the respondents

Table 4.2: Respondent's Department

Department					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Administration	9	8.7	8.7	8.7
	Operation	70	68.0	68.0	76.7
	Finance	7	6.8	6.8	83.5
	Technical	17	16.5	16.5	100.0
	Total	103	100.0	100.0	

Figure 4.2 above presented the age of respondent has been divided into 4 categories which are Administration, Operation, Finance and Technical. The highest department group that response to the survey was Operation, where total 70 (68%) out of 103 respondents. It is followed by Technical with total 17 (16.5%). Then there were 9 respondents (8.7%) are from Administration. While the lowest department group that response to the questionnaire was the respondents whose from Finance, where only 7 (6.8%) respondents.

4.1.1.4 Age of Respondents

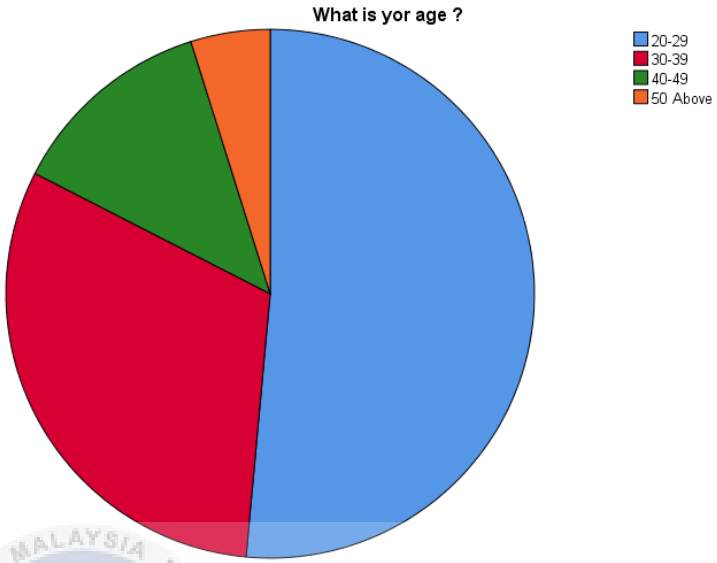

Figure 4.3: Age of the respondents

Table 4.3: Respondent's Age

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-29	53	51.5	51.5	51.5
	30-39	32	31.1	31.1	82.5
	40-49	13	12.6	12.6	95.1
	50 Above	5	4.9	4.9	100.0
	Total	103	100.0	100.0	

Figure 4.3 shows that the age of respondents that took part in this survey. Based on the pie chart above, there were 51.1% (n=53) age group from 20-29 years old respondents while 31.1% (n=32) were age group 30-39 respondents. For age group 40-49 years old, there were 13 respondents (12.6%) of them whom participated in this survey. There was only five respondent (4.9%) which age group 50 above from this survey.

4.1.1.5 Work Experience of Respondents

Figure 4.4: Work Experience of the respondents

Table 4.4 Respondent's Work Experience

Experience					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 years	22	21.4	21.4	21.4
	1-5 years	44	42.7	42.7	64.1
	6-10 years	25	24.3	24.3	88.3
	>11 years	12	11.7	11.7	100.0
	Total	103	100.0	100.0	

According to Figure 4.4, it is shows that the work experience of respondents. Based on the data, most of the respondents have 1-5 years work experience whis is total 44 (42.7%). After that, among the total of 103 respondents, there were 25 (24.3%) respondents have 6-10 years work experience, followed by less than 1 years work experience which was 22 (21.4%) respondents. At last, there were only 12 (11.7%) respondents belong to more 11 years work experience.

4.1.1.6 Education Level of Respondents

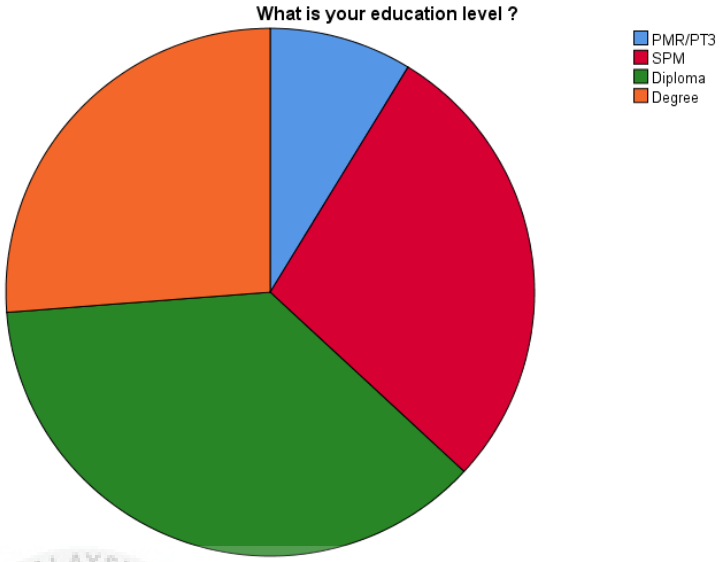

Figure 4.5: Education level of the respondents

Table 4.5: Respondent's Education level

Education level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PMR/PT 3	9	8.7	8.7	8.7
	SPM	29	28.2	28.2	36.9
	Diploma	38	36.9	36.9	73.8
	Degree	27	26.2	26.2	100.0
	Total	103	100.0	100.0	

Figure 4.5 illustrates the education level of respondents in manufacturing industries. Based on the figure above the highest education level that response to the survey was Diploma, were total 38 respondents (36.9%) out of 103 respondents. It is followed by SPM with total 29 respondents (28.2%). Then there were 27 respondents (26.2%) were from Degree and the lowest group that response to the questionnare were from PMR/PT3 which was 9 respondents (8.7%).

4.1.2 Mean Score Analysis for Variable

Mean score used to identify and receive the information related to the characteristics of specific problem. The result will show on all variable such as Factor Incluence Accident (FIA), OSHA Implementation (OI), Work Environment (WE), Safety Training (ST) and Marketplace Accident (MA) that used for the study of the implementation and management practices of the Occupational Safety and Health Act (OSHA). The data will be determined through minimum, maximum, mean, and standard deviation. Besides that, the researcher utilizes a 5- point Likert Scale for measuring total 30 items that related to the study of research.

4.1.2.1 Factor Influences Accident

Table 4.6: Mean Analysis Score for Factor Influences Accident

	N	Minimum	Maximum	Mean	Std. Deviation
FIA 1	103	3	5	4.27	.689
FIA 2	103	3	5	4.23	.597
FIA 3	103	3	5	4.23	.717
FIA 4	103	3	5	4.22	.753
FIA 5	103	2	5	4.21	.709
FIA 6	103	3	5	4.23	.703
Valid N (listwise)	103				

Table 4.6 describe the descriptive statistic of the independent variable which is Factor Influence Accident (FIA). It illustrates that the scale of minimum rating for each item is 3 while the maximum rating is 5. According to the table, the results show that the highest mean value is 4.27 with the term of ‘When I'm pressed for time, Usually I fail to adhere to proper safe work procedures.’ And its standard deviation was 0.689. it shows that When I'm pressed for time, Usually I fail to adhere to proper safe work procedures will effect factor influence accident. Besides, for the item on ‘work in an environment where the noise level is so loud that I must raise my voice when communicating with persons who are less than one meter away’ had the mean value of 4.23 with standard deviation value of 0.597 while for the item ‘Work in bent, twisted or awkward work posture’ and ‘ Mnually lift, carry, or push objects weighting

more than 10 kg by hand at least 5 times each day' also got the same value of mean which is 4.23 with standard deviation 0.717 and 0.703. Next, item of 'Spend at least three hours each day performing repetitive motions with your hands or wrists, such as assembling, cleaning, pulling, or pushing.' Had a mean value of 4.22 and standard deviation 0.753. At last, the lowest mean value is for item 'Experience being bullied or harassed at work.' Is 4.21 with standard deviation 0.709.

4.1.2.2 OSHA Implementation

Table 4.7: Mean Analysis Score for OSHA Implementation

	N	Minimum	Maximum	Mean	Std. Deviation
OI 1	103	3	5	4.22	.576
OI 2	103	3	5	4.28	.678
OI 3	103	3	5	4.35	.667
OI 4	103	3	5	4.26	.671
OI 5	103	3	5	4.34	.635
Valid N (listwise)	103				

Table 4.7 demonstrates on the descriptive statistics of OSHA Implementation (OI). From the table, it shows the scale of minimum rating for each item is 3 while the scale of maximum rating is 5. The results revealed that the item 'Company provides adequate personal protective equipment to employees' scored the highest mean value 4.35 and its standard deviation value is 0.667. This proved that the reliability of information provided is high and most of the respondents are agree about it. Next, item of 'The company has their own security policy' Had the mean value of 4.34 with standard deviation of 0.635 while the item of 'Managers and supervisors seem concerned about worker safety in the organization' had the mean value of 4.28 with standard deviation of 0.678. The item of 'The organization sets clear protocols, particularly for worker safety and health' showed a mean value of 4.26 and standard deviation of 0.671. Lastly, the item of 'Management strictly complies with all safety regulations and guidelines' had the least mean value which was 4.22 with standard deviation 0.576.

4.1.2.3 Work Environment

Table 4.8: Mean Analysis Score for Work Environment

	N	Minimum	Maximum	Mean	Std. Deviation
WE 1	103	3	5	4.40	.632
WE 2	103	3	5	4.22	.593
WE 3	103	3	5	4.68	.564
WE4	103	3	5	4.36	.575
WE 5	103	3	5	4.22	.656
WE 6	103	3	5	4.04	.394
WE 7	103	3	5	4.34	.635
Valid N (listwise)	103				

Table 4.8 demonstrates on the descriptive statistics of Work Environment (WE). As refered to the table, the rating with minimum scale is 3 while the rating with maximum scale is 5. The results obtained indicate that the item 'The organisation provides motivation to all employees' has the highest mean value of 4.68 while standard deviation value of 0.564. And for item 'There is open communication about safety issues in the workplace' got the value of mean which is 4.40 with standard deviation 0.632. Next, the third highest mean value is with item on 'The company's environment is constantly clean and tidy' where the mean value was 4.36 and standard deviation value of 0.575. Moreover, the item on 'I received a thorough explanation of the organization's safety and health policies.' had the mean value of 4.34 with standard deviation value of 0.635 while the item on 'The organization performs frequent scale safety inspections' had the mean value of 4.22 with standard deviation value of 0.593 and for the item 'The company specifies appropriate attire protocol' also got the same value of mean which is 4.22 with standard deviation 0.656. The least mean value is on the item of 'The company installs fire extinguishers in strategic places.' where mean value was 4.04 with its standard deviation of 0.394.

4.1.2.4 Safety Training

Table 4.9: Mean Analysis Score for Safety Training

	N	Minimum	Maximum	Mean	Std. Deviation
ST 1	103	3	5	4.44	.572
ST 2	103	3	5	4.36	.655
ST 3	103	2	5	4.41	.617
ST 4	103	3	5	4.38	.612
ST 5	103	3	5	4.33	.632
ST 6	103	3	5	4.38	.643
Valid N (listwise)	103				

Table 4.9 relates to the descriptive statistics of Safety Training (ST) which the independent variable of the study. The table shows the minimum scale rating is 2 while the maximum scale is 5. The item of 'New employees are given training to understand safety rules and procedures' had the highest mean value which was 4.44 with standard deviation of 0.572 then followed by the second-highest mean of item on 'All new employee obtains safety and health training' where the mean value was 4.41 with its standard deviation 0.617. Besides, the item on 'Safety training is held regularly from time to time' and 'My organization's safety and health training programme are directly tied to my workplace safety requirements' gain the same mean value which is 4.38 with its standard deviation of 0.612 and 0.643 respectively. Next, for item 'The management encourages staff to participate in safety programmes' had the mean value of 4.36 with standard deviation 0.655. The low mean of the outcome shows that the method of this factor is 4.33 and standard deviation value is 0.632 which is the item of 'The company conducts emergency training in the event of a workplace accident'

4.1.2.5 Marketplace Accident

Table 4.10: Mean Analysis Score for Marketplace Accident

	N	Minimum	Maximum	Mean	Std. Deviation
MT 1	103	3	5	4.40	.583
MT 2	103	3	5	4.25	.737
MT 3	103	3	5	4.32	.598
MT 4	103	3	5	4.22	.685
MT 5	103	3	5	4.31	.686
Valid N (listwise)	103				

Table 4.10 refers to the descriptive statistics of the dependent variable which is Market Place Accident (MA). According to the table above, the rating with minimum scale for this factor is 3 while the rating with maximum scale is 5. From the results analysed, the highest mean value is 4.40 and associate with the item 'Slips, trips, and falls are cause for marketplace accidents', while its standard deviation is 0.583. This proved that majority of the respondents agree that Slips, trips, and falls are cause for marketplace accidents can cause for marketplace accidents. Next, the second- highest item is 'stress is cause for marketplace accidents' had a mean value of 4.32 and standard deviation is 0.598 while the item 'Safety committee is measures taken to ensure industrial safety in the organization' had a mean value of 4.31 and standard deviation of 0.686. Furthermore, the mean value for item 'physical exertion is cause for marketplace accidents' gain the mean value of 4.25 with its standard deviation 0.737. The least mean value in this factor is 4.22 and standard deviation value is 0.685 which is the item of 'Collision cause for marketplace accidents'. The low mean of the outcome shows that the stress in workplace not efffect the accident.

4.2 Reliability Analysis and Validity Test

The goal is to understand the accuracy and stability of the results of the test or scale. The reliability test, the test is accurate if the constant result is obtained after the calculated attribute is assumed to be unchanged in the interval between tests, but the check may have entirely different types from those tested. Therefore, researchers tested the reliable data obtained from Cronbach's Alpha. The Alpha of the Cronbach may be a constant burden that points to how well things are connected to each other. If it's generally deemed to be bad in reliability of less than 0.60 while reliability of less than 0.70 is acceptable and fine in a range of 0.80. Pallant (2007) notes that the alpha value of General Cronbach should be above 0.70 to take into account the data is highly appropriate.

Table 4.6 below presents the realibility analysis of the data collected on all independent variables and dependent variable in this research. As refer to the above table, it shows reliability value of total 29 items in the online survey with 103 respondents. The result of Cronbach's Alpha show 0.891 which is significantly higher than 0.70. According to Malhotra (2012), the measurement of Cronbach's Alpha in reliability analysis indicates the value ≤ 0.60 considers as not reliable and poor. However, if the reliability value more than ≥ 0.70, it considers as highly and excellent for acceptable. Overall, the reliability analysis of this study is highly acceptable.

Table 4.11: Realibility Analysis of All Items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standaradized Items	N of Items
.891	.950	29

Table 4.11 illustrates on the reliability analysis of Cronbach's Alpha for each variable in the study included independent and dependent. The range of all variables

is situated between 0.630 to 0.915. These high reliability values prove that the whole alpha coefficient value for each variable is acceptable and good condition. As refer to the table above, the Cronbach's Alpha value for Factor Influences Accident (α=0.915), OSHA Implementation (α=0.630), Work Environment (α=0.830), Safety Training (α=0.722), and Marketplace Accident (α=0.774).

Table 4.12: Realibility Analysis of Each Items

	Variables	Cronbach's Alpha	No. of Items	Result
Independent Variables	Factor Influences Accident	.915	6	Excellent
	OSHA Implementation	.630	5	Questionable
	Work Environment	.830	7	Good
	Safety Training	.722	6	Acceptable
Dependent Variable	Marketplace Accident	.774	5	Acceptable

Table 4.13: Recommended Alpha Range

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

4.3 Pearson Correlation Analysis

Pearson correlation analysis is a method that applied to analyse the relationship between one dependent variable and one independent variable. This technique can also be utilized to identify the effectiveness or strength relationship between dependent

variable in this study which is Marketplace Accident and independent variables which include Factor Influences Accident, OSHA Implementation, Work Environment, Safety Training and Marketplace Accident. In relates the strength of relationship, the value of correlation coefficient is varying between +1 and -1. Besides, the value that closer to +1 or -1 indicate that the strength of relationship which is strong among two variables whereas the relationship is weak when the value is closer to 0.

Table 4.14: Pearson Correlation Coefficient for Each Variable

Correlations						
		Mean_FIA	Mean_OI	Mean_WE	Mean_ST	Mean_MT
Mean_FIA	Pearson Correlation	1	.400**	.603**	.423**	.632**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	103	103	103	103	103
Mean_OI	Pearson Correlation	.400**	1	.434**	.164	.529**
	Sig. (2-tailed)	.000		.000	.098	.000
	N	103	103	103	103	103
Mean_WE	Pearson Correlation	.603**	.434**	1	.385**	.707**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	103	103	103	103	103
Mean_ST	Pearson Correlation	.423**	.164	.385**	1	.403**
	Sig. (2-tailed)	.000	.098	.000		.000
	N	103	103	103	103	103
Mean_MT	Pearson Correlation	.632**	.529**	.707**	.403**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	103	103	103	103	103
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 4.14 above illustrates the correlation result of all independent variables which include Factor Influences Accident, OSHA Implementation, Work Environment and Safety Training while dependent variable which is Marketplace Accident. The above results clearly stated that all independent variables record a positive and significant relationship toward dependent variable as the correlation coefficient (r) values are higher than or in the range of 0.4 to 7.0. From the table, the correlation result of first variable which is Factor Influence Accident illustrate toward dependent variable, the test is significant as stated with the significant r = 0.632, while p-value = 0.000, $p < 0.001$. Thus, these two variables have a strong relationship.

Table 4.15: Pearson Correlation Coefficient table

Coefficient Rage	Strength of Association
± 0.91 to ± 1.00	Very strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
± 0.00 to ± 0.20	Slight, almost negligible

Next, for the second independent variable which is OSHA Implementation the correlation relation result toward Marketplace Accident stated that they have a significant relationship. This is because the value of test correlation coefficient, r = 0.529 while p-value = 0.000 where $p < 0.001$. Hence, these two variables illustrate a moderate relationship. Apart from that, followed by the independent variable that is Work Environment towards dependent variable, which is Marketplace Accident, the results indicate that the test is significant where, r = 0.707 and p-value = 0.000, $p < 0.001$. Therefore, both variables have a strong relationship. Additionally, the independent variable which is Safety Training toward dependent variable that is Marketplace Accident. According to the Table 4.8 the factor of Safety Training was signifigantly correlated to Marketplace Accident in positive correlation, where r =0.403 and p-value = 0.000, $p < 0.001$. Thus, both variables indicate a moderate relation to each variable.

4.4 Interfential Statistic

This section is discussed in the context of inferential statistics regarding the theory, model and query. For example, the researcher uses inferential statistics to decide whether the degree defined by this study could be trustworthy one or that one would unwittingly happen. Analysis of the variance (ANOVA), regression analysis, and inferential statistics also known as the General Model which include t-test.

Inferential statistics is a method that used random sample of data collected from the population to identify and analyse them. Results in inferential statistics are important and can assist in the analysis process, particularly when the evaluation on population is not optimal. Other than that, inferential statistics are also critical in interpretations of whether the variations among samples are dependable or are likely to arise by chance. Thus, inferential statistics help to provide inferences regarding the more general state of data collection.

4.4.1 Multiple Regression Analysis

Multiple regression analysis is a technique that used to forecast the value of a variable according to a value of two or more variables. This method can use to analyse correlation among the independent and dependent variables. Furthermore, multiple regression analysis helps to explain the relationship among all independent variables (Factor Influences Accident, OSHA Implementation, Work Environment and Safety Training) while dependent variable which is (Marketplace Accident). The outcomes of the regression analysis will be shown in equation.

4.4.1.1 Multiple Regression Analysis Between Dependent Variables and Independent Variable

Table 4.16: Model Summary of Multiple Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784[a]	.614	.599	.22080
a. Predictors: (Constant), Mean_ST, Mean_FIA, Mean_WE, Mean_OI				

Table 4.16 revealed the results of regression analysis of relationship among independent variables and dependent variable. The independent variables that included for measurement are Factor Influences Accident, OSHA Implementation, Work Environment and Safety Training. Based on the table above, the correlation coefficient (R) shows the value 0.784 and indicates as a strong degree of correlation. Hence, there is a positive and strong relationship been identified since the R value is more than 0.70. Moreover, the R square value in this model is 0.614 which indicates that dependent variable (Marketplace Accident) is affected 61.4% by the independent variables (Factor Influences Accident, OSHA Implementation, Work Environment and Safety Training). While the remaining (100% - 61.4% = 38.6%) are influenced by other factors that are not included in this research.

Table 4.17: Regression Analysis on ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.612	4	1.903	39.032	.000[b]
	Residual	4.778	98	.049		
	Total	12.390	102			
a. Dependent Variable: Mean_MT						
b. Predictors: (Constant), Mean_ST, Mean_OI, Mean_WE, Mean_FIA						

Table 4.17 above shows the ANOVA analysis of this study of research, refer to the table, F-test is used to determine the data from survey that demonstrate a good fit in the model. The results show F value is 39.032 while the significant value, p is 0.000 which is lower than significance level 0.01. Thus, it is clearly showed that all independent variables (Factor Influences Accident, OSHA Implementation, Work Environment and Safety Training) are significantly influencing on the dependent variable (Marketplace Accident).

Table 4.18: Regression Analysis on Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.109	.382		-.284	.777
	Mean_FIA	.229	.078	.242	2.917	.004
	Mean_OI	.206	.063	.233	3.282	.001
	Mean_WE	.483	.095	.421	5.071	.000
	Mean_ST	.107	.075	.100	1.420	.159
a. Dependent Variable: Mean_MT						

Table 4.18 illustrates that the degree of coefficient beta values for each of the independent variables that have effect on the dependent variable. The results in the above table reveal that $\beta 1 = 0.229$, $\beta 2 = 0.206$, $\beta 3 = 0.483$ and $\beta 4 = 0.107$ repectively to all independent variables. According to the table, Work Environment (WE) has the highest coefficient beta value where $\beta = 0.483$ with $t = 5.071$ and $p < 0.005$ as compared to other variables. It indicates that safety training factor has strong influence on the marketplace accident (dependent variable). Additionally, this explores that there are 48.3% variation in dependent variable cause to Work Enviroment. Moreover, factor incluence accident (FIA) is the second lanrgest predictor of independent variable as it has beta value of $\beta = 0.229$, $t = 2.917$ and $p < 0.005$. this shows that 22.9% variation in factor incluence accident in marketplace. After that, follow by OSHA implementation (OI) which record beta value of $\beta = 0.206$, $t = 3.282$ and $p < 0.005$ with the viriation of 20.6%. Lastly, Safety Training (ST) has the lowest impact towards

dependent variable as its β = 0.107, t = 1.420 and p > 0.005 with a variation of 10.7%. For item Safety Training is not significant under consitions of p-value must below than 0.005. The value is bigger than actual score for p-value. This is resulting in multiple regression analysis is negetive significant in safety training towards marketplace accident.

To interpreted p-value, researcher needs to find the significant number which makes the variables valid for this research. In this research, p-value is significant if the Alpha value is less than 0.005. From the table shown above, p-value of factor influence accident, OSHA implementation, and work environment score 0.004, 0.001 and 0.000 respectively. Those independent variables are significant which mean the p-value is smaller than significance level of 0.005. But, for Safety Training is not significant under conditions of p-value must be below than 0.005. The score for both variables is 0.159 respectively. The value for these variables is bigger than actual score for p-value. This resulting in multiple regression analysis safety training is negative significant in building customers' satisfaction towards Internet banking usage.

The relationship can be marked as the following equation from the analysis in Table 4.10 above:

Y (Dependent Variable) = -0.109 (Constant) + 0.229 (Factor Influence Accident) + 0.206 (OSHA Implementation) + 0.483 (Work Environment) + 0.107 (Safety Training).

4.5 Hypothesis Test

The hypothesis for this analysis is defined in Chapter 3 and so the researcher uses this section to interpret the hypothesis test based on Table 4.12 with an important value. The experiment is to measure the likelihood of acceptance or rejection of a particular hypothesis and to conduct the test using the data determined by the regression analysis to dependent variable. The relevant value should be < 0.005 during this hypothesis check.

Variable 1: Factor Influences Accident

Hypothesis 1:

H0: There is no significant between Factor Influences Accident in the Manufacturing industries H1: There is significant between Factor Influences Accident in the Manufacturing industries

Accepted H1

Table 4.12 revealed the relationship between factor influence accident and marketplace accident. The result marked significant value of factor influence accident, p = 0.004 which lower than 0.005. this shown that factor influence accident has significant relationship on marketplace accident. Thus, H1 is accepted in this study of research. There is a positive relationship between factor influence accident and marketplace accident.

According to Sakina & Omar (2018) Workers are at risk of occupational accidents while doing their jobs, and the hazards are greater in some occupations than others. Companies have traditionally adopted a single-cause approach to analyse occupational incidents. The focus is on the persons or their environment, and a single underlying cause of an incident is sought. The focus is on the human mistake as a result of risky acts or environmental conditions. This analytical approach, however, ignores the impact of work settings, organisational conditions, and worker knowledge on task performance and risk avoidance.

Variable 2: OSHA implementation

Hypothesis 2:

H0: There is no significant between OSHA Implementation in the Manufacturing industries
H1: There is significant between OSHA Implementation in the Manufacturing industries

Accepted H1

Table 4.12 revealed the relationship between OSHA implementation and marketplace accident. The result marked significant value of factor influence accident, p = 0.001 which lower than 0.005. this shown that OSHA implementation has significant relationship on marketplace accident. Thus, H1 is accepted in this study of research. There is a positive relationship between OSHA implementation and marketplace accident.

According to Ibrahim M. Shaluf & Fakhrul'razi Ahmadun (2003). That OSHA 1994 are drive as general duties of parties at collabortion is business in safety, health and welfare to people at work and other againts risk from activity of people at work. However, this act has reacted to ensure the parties was responsibility with their safety and health.

Variable 3: Work Environment

Hypothesis 3:

H0: There is no significant between Work Environment in the Manufacturing industries
H1: There is significant between Work Enviroment in the Manufacturing industries

Accepted H1

Table 4.12 revealed the relationship between work environment and marketplace accident. The result marked significant value of factor influence accident, p = 0.000 which lower than 0.005. this shown that work environment has significant relationship on marketplace accident. Thus, H1 is accepted in this study of research. There is a positive relationship between work environment and marketplace accident.

According to Pretrus and Kleiner (2013), the most crucial feature is that all employees of the organisation have the duty of addressing workplace safety collectively. on the statement, the workplace environment is linked to and influences worker safety.

Variable 4: Safety Training

Hypothesis 4:

H0: There is no significant between Safety Training in the Manufacturing industries
H1: There is significant between Safety Training in the Manufacturing industries

Rejected H0

Table 4.12 revealed the relationship between safety training and marketplace accident. The result marked significant value of factor influence accident, p = 0.000 which lower than 0.05. this shown that implementation has significant relationship on marketplace accident. Thus, H0 is rejected in this study of research. There is a negetive relationship between safety training and marketplace accident.

According to Ashraf A. Shikdar (2003) Employers' and employees' paucity of ergonomics understanding and awareness may have led to the workplace's poor acceptance of ergonomics. Management failed to inspect workplaces for dangerous elements, enforce safety laws, or offer instructions and guidance for safe behavior.

4.6 Summary

The research findings and data analysis are summarized in this chapter. The data were calculated by means of a questionnaire and replied to by 103 respondents via the Statistical Package for Social Science version 26.0. The chapter discusses six types of analyses such as frequency analysis, descriptive analyses, correlation analysis, analysis of reliability, regression and hypothesis introduced in Chapter 3. Three hypotheses were accepted in the research because of the significant value, $p < 0.005$ and one hypothesis rejected.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter is summarized under the following section. A description of the analysis is given, and the research results are analysed and interpreted. The importance of this work is discussed in the relationship between independent variables and significant of each affected variable towards the dependent variable Customer satisfaction and loyalty. The chapter concludes with Recommendations for more study. The scope of the conclusions below is limited to variable Customer satisfaction and loyalty. Therefore, certain findings, extended to other contexts, can give rise to incorrect assumptions. Even, in social planning initiatives these findings are important to the dwelling evolution process.

The scope of this study was focused on implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries.

RO1: To determine the necessity of health and safety policy in the Manufacturing industries

RO2: To identify the methods are used in the organization to implement the health and safety policy

RO3: To investigate the organization's preparedness for any occurrence involving the health and safety of employees in the workplace

5.1 Discussion of Finding

5.1.1 Objective 1: To determine the necessity of health and safety policy in the Manufacturing industries.

According to Geotsch (2002) The need of competent safety management is stressed while controlling the interface between system and people. Albert Heinrich, an early pioneer of preventing injuries and industrial safety, observed that human factors cause 88 % of workplace accidents. Based on the finding obtained in Chapter 4 which is Data Analysis, the researcher also found that the correlation value of marketplace accident is 0.632 which shows a strong relationship towardss dependent variable that is marketplace accident. Moreover, the researcher also found out that there was a significant value (< 0.005) of factor influence accident with marketplace accident. This revealed that there was significant positive relationship between both variables (β= 0.229, p = 0.004). As a result, the hypothetical relation between factor influence accident and marketplace accident was accepted. This also proven that the predictor of factor influence accident significantly affects the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries.

The findings were associated with the previous research by Donald and Young, (1996) where human factors have a large influence in the safety outcomes, greater attention is being directed on analysing the behavioural causes to technology failures, that is now frequently labelled "human error". Furthermore, the working conditions and attitudes of those who work within the firm have a significant impact on workplace

safety. As referred to the data alnalysis of factor influence accident in Chapter 4, the item on 'When I'm pressed for time, ussually I fail to adhere to proper procedures' had the highest mean which is 4.27 among all the items in factor influence accident. Besides, the item 'Work in a bent, twisted, or awkward work posture' showed the mean value of 4.28 was the second significant item that affects factor influence accident towards marketplace accident. This was supported by the research from Cooper and Phillips (1995) suggest that to enhance safety performance and promoting a safety culture, there must be a reciprocal relationship between safety management and safety behavior. This reciprocal relationship must reflect the interrelationship between individuals, jobs, and organization to ascertain the attainment of a strong and positive culture.

5.1.2 Objective 2: To identify the methods are used in the organization to implement the health and safety policy

An organisation would attempt to link the significance of OSHA implementation to employee OSHA awareness. Prior research has found that work surroundings have a substantial impact on OSHA awareness among employees, and the effect of a peer-led participatory safety and health training programme for Latino day labourers in manufacturing (Quintin, Kimmel, Marshall, Ochsner, Martino,2010). Based on the finding obtained in Chapter 4 which is Data Analysis, the researcher also found that the correlation value of OSHA Implementation is 0.529 which shows a moderate relationship towards dependent variable that is marketplace accident. Moreover, the researcher also found out that there was a significant value (< 0.005) of OSHA implementation with marketplace accident. This revealed that there was significant positive relationship between both variables (β= 0.206, p = 0.001). As a result, the hypothetical relation between OSHA Implementation and marketplace accident was accepted. This also proven that the predictor of OSHA Implementation significantly affects the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries.

According to Wolf, OSHA awareness is important because the programme can help to communicate knowledge on safety hazards, ensuring that workers can protect themselves (2011). Furthermore, awareness is the most important topic to present to the worker in the job before moving on to the next level. As referred to the data alnalysis OSHA Implementation in Chapter 4, the item on ‘Company provides adequate personal protective equipment to employees’ scored the highest mean value 4.35. Next, item of ‘The company has their own security policy’ had second highest significant item that affects OSHA Implementation towards marketplace accident. According to McCumber (2005), one of the most important safety precautions is OSHA awareness. Workers will be directly motivated to learn about OSHA, resulting in a better knowledge of their rights to a healthy and safe work environment. As a result, the study focuses on gear quality, OSHA training, and workplace culture as primary dimensions of OSHA awareness.

Uncritically accepted beliefs and assumptions that, while skewed, drive and direct our actions. When managers' frames of reference (Mezirow, 2000) are comprised of distorted presumptions such as safety is not a manager's role, workers are solely responsible for safety, accidents occur, or safety is simply not a consideration in the workplace, place of work actions and behaviours will be guided by those beliefs, that then become the events that contribute to the growth of the work environment. Based on the finding obtained in Chapter 4 which is Data Analysis, the researcher also found that the correlation value of work environment is 0.707 which shows a strong relationship towards dependent variable that is marketplace accident. Moreover, the researcher also found out that there was a significant value (< 0.005) of work environment with marketplace accident. This revealed that there was significant positive relationship between both variables (β= 0.483, p = 0.000). As a result, the hypothetical relation between work environment and marketplace accident was accepted. This also proven that the predictor of work environment significantly affects the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries.

A strong safety culture is influenced at four levels: external, organisational, workplace, and individual (Railway Group Safety Plan, 2002). A weak culture, on the other side, develops when management's values are not shared by the personnel. Thus, by embedding specific management practises in the firm, management may foster a strong safety culture Safety training should be addressed seriously in any business, regardless of the number of employees. It is your responsibility as an employer to offer safety standards, processes, and procedures for your employees. Preventive actions against workplace accidents and/or deaths are critical for maintaining a healthy, safe working environment (simplifiedsafety.com, 2018). As referred to the data analysis work environment in Chapter 4, the item on 'The organization provides motivation to all employees' scored the highest mean value which is 4.68, among all items in work enviroment. This was supported by Clarke (2003) That work environment is described as the underlying assumptions and ideas that organisational members hold regarding safety problems. This is reflected in the company's safety policy, rules, and procedures, as well as the attitudes, values, and behavioural norms of its managers, supervisors, and employees. The core of this concept is a shared set of beliefs and attitudes that prioritise safety.

5.1.3 Objective 3: To investigate the organization's preparedness for any occurrence involving the health and safety of employees in the workplace

Section 15(c) of the Occupational Health and Safety Act (514), states that the general duty of companies and self-employed persons is to offer such information, instruction, training, and supervision as is essential to safeguard the safety and health of workers at the workplace. The findings were associated with the previous research Hughes &Ferrett (2015). Other key areas of training include strengthening employees' abilities, knowledge, and attitudes to ensure they are more proficient in workplace OSH. Furthermore, OSHA's expertise and awareness will be enhanced through frequent training programmes (Nayanthara&Wimalaratene, 2012). As referred to the data finding obtained in Chapter 4 which is Data Analysis, the researcher also found that the correlation value of safety training is 0.403 which shows a moderate relationship towards dependent variable that is marketplace accident. Moreover, the

researcher also found out that there was a significant value (> 0.005) of work environment with marketplace accident. This revealed that there was significant positive relationship between both variables (β= 0.107, p = 0.159). As a result, the hypothetical relation between safety training and marketplace accident was rejected.

As referred to the data analysis work environment in Chapter 4, the item on 'The company conducts emergency training in the event of a workplace accident' had the lowest mean value which was 4.33. This shows that Panasonic Appliances Air-Conditioning Sdn Bhd. Not take a serious in conducting emergency training like fire drill, eartwake and many more about safety training it is will effect by the marketplace accident. All employers are obligated to ensure their worker are trained in workplace emergency produces. As we know that training is critical to ensuring that everyone understands what to do and when to act to avoid future disruptions to corporate operations. Staff may feel afraid if they are not properly taught; nonetheless, most will be able to act responsibly and return to work as soon as possible. Ideally, all of a company's employees will receive disaster response training to master the security and life safety protocols.

5.2 Research Contribution

This research investigates the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries. Therefore, this study is expected to introduce important of OSHA towards marketplace accident. This study can also show how effective management strategies in safety practices are in minimising workplace injuries. This study might also look into how effective management methods in a safety programme are at reducing workplace injuries. Vredenburgh cites Siehl and Martin (2002).

In addition, this research is essential for individuals and organization because they can use this knowledge to apply in their workplace to avoid accident in workplace.

The majority of them believed that the health and safety training programme should be adopted. It implies that the employees' safety and health are given the attention they deserve. The majority of respondents regarded the safety procedures and policies as good. This allows the company to improve its average ratings by routinely changing regulations when changes are required. Menufacturing workers, whether male or female, are individuals who directly perform operations in plants and have direct contact with equipment and machinery. Poor work attitude, insufficient education and expertise, and poor management supervision are all issues that put employees at risk. As a result, both employees and employers should prioritise increased training programmes and the enforcement of complying safety standards. As a result, it emphasises the significance of OSHA regulation and compliance with norms of practise in Malaysian manufacturing businesses. Some metrics that could not be included in the study, such as remuneration, level of workers' knowledge, workers' experience, and other important aspects, limit the scope of this study.

5.3 Recommendation of Further Research

The researchers give some research suggestions for future research goals in order to improve this study and improve the research quality. Because Malaysia has a high concentration of manufacturing companies, the researchers recommend that future study use a bigger sample size to get more precise and valid data. Furthermore, the 103 participants in this study are deemed a small sample size, insufficient to be typical of the broader population. Besides, the research framework introduced in this research proposed three contexts factor influence accident, OSHA Implementation, Work Environment, Safety Training. Every context in this framework needs to be empirically measured. Therefore, in future studies for further confirmatory findings, each context in this proposed model can be empirically tested. So, it is essential to consider the implementation and management practices of Occupational Safety and Health Act (OSHA) has caused many changes that have occurred primarily in the Manufacturing industries.

5.4 Limitations of the Study

There are several drawbacks of this study throughout the advancement of the work. Limitations are necessary for prospective researchers to understand and know how to increase the standard of study and respondents might not disclose their honest and true opinion. In conjunction with the short timeframe, the limitation identified is the limited sample size for the survey of questionnaires. Only 103 questionnaires have been distributed to public.

Secondly, researcher noticed that several respondents especially from different education level background cannot fully understand the content of questionnaires. Besides that, respondents also refuse to answer the questionnaires. Researcher explained well all the input and instrument regarding this study to the respondents in order to make them more understandable and can answer the questionnaires based on what they can understand.

Lastly, researcher gain not enough duration to study about the research within the given time. The time available to investigate a ressearch problem and analysis the data collection over stability of time is constrained. Thus, researcher need to enough ample time to study and explore more regarding the research issue that arises.

5.5 Conclusion

In summary, this research aims to know and understand about the implementation and management practices of Occupational Safety and Health Act (OSHA) in the Manufacturing industries. The analysis of the finding obtained from 103 respondents at Panasonic Appliances Air- Conditioning Malaysia Sdn. Bhd.Shah Alam and researcher also using Statistical Package for the Social Sciences (SPSS) to conduct this study. From the finding and discussion, the researcher found that factor influence accident, OSHA Implementation, work environment and safety training is positively associated and has significant relationship with marketplace accident. As a research model includes 3 hypotheses among the variables which is H1: there is a significant relationship between factor influence accident and marketplace accident, H2: there is significant relationship between OSHA implementation and marketplace accident, H3: there is a significant relationship between work environment and marketplace accident and H4: there is a not significant relationship between Safety training and marketplace accident. Three hypotheses are accepted with the p-value is less than 0.005 and one hypothesis is rejected.

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APPENDIX

APPENDIX 1

A. PSM 1 GANTT CHART

ACTIVITY/WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Identify the research														
Data collection														
Preperation for proposal														
Submit proposal														
Preparation Chapter 1														
Preparation Chapter 2														
Preparation Chapter 3														
Submit full report														
Make a correction														
Prepare slide for presentation PSM1														
Submit report and oral presentation														

B. PSM 2 GANTT CHART

ACTIVITY/WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Develop a questionnaire														
Distribute questionnaire														
Preperation for proposal														
Insert data into SPSS														
Preparation Chapter 4														
Preparation Chapter 5														
Meet supervisor to review Chapter 4 and 5														
Make a correction														
Prepare slide for presentation PSM2														
Presentation														
Submit report and oral presentation														

APPENDIX 3

D. QUESTIONNAIRES

Assalamualaikum and Greetings, I am Fatin Nur Hidayah Binti Mohd Radzuwan, a Final Year Student of Universiti Teknikal Malaysia Melaka (UTeM) with a Bachelor Degree in Technology Management with Honours (Technology Innovation). I am conducting my Final Year Project as part of my Degree Program entitles **Implementation and Management Practices of The Occupational Safety And Health Act (OSHA) In The Manufacturing Industries**. The objectives of the studies are a) to determine the necessity of health and safety policy in the Manufacturing industries. b) to identify the methods are used in the organization to implement the health and safety policy. c) to investigate the organization's preparedness for any occurrence involving the health and safety of employees in the workplace. This research is an academic project require by the University as one of the compulsory subjects for graduation. Therefore, all of the information collected is use for academic purposes only.

Name: Fatin Nur Hidayah Binti Mohd Radzuwan

Contact no:

Email:

Supervisor’s name: Dr. Hasan bin Saleh

QUESTIONNAIRE

PART A (Demographic respondent)

The objective of this section is to collect some personal information on the respondent. This data will used to refine the analyses and will be treated in full confidentially. Please tick (/) on the space provided.

1. Gander
   - Male ☐
   - Female ☐

2. Department
   - Administration ☐
   - Operation ☐
   - Finance ☐
   - Technical ☐

3. Age
   - 20-29 ☐
   - 30-39 ☐
   - 40-49 ☐
   - 50 Above ☐

4. Work Experience
   - <1 Years ☐
   - 1-5 Years ☐
   - 6-10 Years ☐
   - >11 Years ☐

5. Education Level
   - PMR/PT3 ☐
   - SPM ☐
   - Diploma ☐
   - Degree ☐

Please indicate your opinion by ticking the appropriate number using the scale below:

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

PART B – Factor Influences Accident

Factor Influences Accident	1	2	3	4	5
When I'm pressed for time, Usually I fail to adhere to proper safe work procedures.					
Work in an environment where the noise level is so loud that I must raise my voice when communicating with persons who are less than one meter away.					
Work in a bent, twisted, or awkward work posture					
Spend at least three hours each day performing repetitive motions with your hands or wrists, such as assembling, cleaning, pulling, or pushing.					
Experience being bullied or harassed at work					
Manually Lift, carry, or push objects weighing more than 20 kg by hand at least 10 times each day.					

Part C – OSHA Implementation

OSHA Implementation	1	2	3	4	5
Management strictly complies with all safety regulations and guidelines					
Managers and supervisors seem unconcerned about worker safety in organization					
Company provides adequate personal protective equipment to employees					
The organisation sets clear protocols, particularly for worker safety and health					
The company has their own security policy					

Part D – Work Environment

Work Environment	1	2	3	4	5
There is open communication about safety issues in the workplace					
The organisation performs frequent scale safety inspections					
The organisation provides motivation to all employees					
The company's environment is constantly clean and tidy					
The company installs fire extinguishers in strategic places.					
I received a thorough explanation of the organization's safety and health policies					
I have the opportunity to contribute suggestions to my company's safety and health programme					

Part E – Safety Training

Safety Training	1	2	3	4	5
New employees are given training to understand safety rules and procedures					
The management encourages staff to participate in safety programmes					
All new employee obtains safety and health training					
Safety training is held regular from time to time					
The company conducts emergency training in the event of a workplace accident					
My organization's safety and health training programme are directly tied to my workplace safety requirements					

Part F – Marketplace Accident

Safety Training	1	2	3	4	5
Slips, trips and falls are cause for marketplace accidents					
physical exertion is cause for marketplace accidents					
stress is cause for marketplace accidents					
Collision cause for marketplace accidents					
Safety committee is measures taken to ensure industrial safety in the organization					

APPENDIX 4

E. RELIABILITY TEST FOR PILOT TEST

Realibility test for Variable 1: Factor Influence Accident

Reliability Statistics	
Cronbach's Alpha	N of Items
.915	6

Item Statistics			
	Mean	Std. Deviation	N
FIA 1	4.40	.681	20
FIA 2	4.40	.681	20
FIA 3	4.70	.470	20
FIA 4	4.55	.605	20
FIA 5	4.55	.605	20
FIA 6	4.40	.754	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FIA 1	22.60	6.779	.867	.884
FIA 2	22.60	6.779	.867	.884
FIA 3	22.30	8.642	.525	.928
FIA 4	22.45	7.208	.844	.889
FIA 5	22.45	7.208	.844	.889
FIA 6	22.60	7.095	.660	.919

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
27.00	10.316	3.212	6

Realibility test for Variable 2: OSHA Implementation

Reliability Statistics	
Cronbach's Alpha	N of Items
.630	5

Item Statistics			
	Mean	Std. Deviation	N
OI 1	4.40	.681	20
OI 2	4.45	.686	20
OI 3	4.40	.598	20
OI 4	4.40	.681	20
OI 5	4.40	.681	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OI 1	17.65	4.450	-.154	.807
OI 2	17.60	2.463	.713	.387
OI 3	17.65	2.871	.613	.469
OI 4	17.65	2.766	.549	.487
OI 5	17.65	3.082	.388	.574

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
22.05	4.471	2.114	5

Realibility test for Variable 3: Work Environment

Reliability Statistics	
Cronbach's Alpha	N of Items
.830	7

Item Statistics			
	Mean	Std. Deviation	N
WE 1	4.40	.681	20
WE 2	4.50	.607	20
WE 3	4.45	.605	20
WE 4	4.55	.686	20
WE 5	4.65	.587	20
WE 6	4.65	.489	20
WE 7	4.70	.571	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WE 1	27.50	6.684	.509	.820
WE 2	27.40	6.253	.763	.776
WE 3	27.45	5.945	.891	.753
WE 4	27.35	6.134	.686	.788
WE 5	27.25	6.197	.819	.767
WE 6	27.25	7.882	.297	.844
WE 7	27.20	8.168	.135	.869

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
31.90	8.937	2.989	7

Realibility test for Variable 4: Safety Training

Reliability Statistics	
Cronbach's Alpha	N of Items
.722	6

Item Statistics			
	Mean	Std. Deviation	N
ST 1	4.50	.607	20
ST 2	4.45	.686	20
ST 3	4.45	.686	20
ST 4	4.45	.605	20
ST 5	4.40	.754	20
ST 6	4.50	.688	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ST 1	22.25	5.355	.393	.701
ST 2	22.30	4.958	.458	.683
ST 3	22.30	5.063	.419	.695
ST 4	22.30	5.379	.386	.703
ST 5	22.35	4.661	.492	.673
ST 6	22.25	4.618	.587	.642

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
26.75	6.829	2.613	6

Realibility test for Dependent Variable: Marketplace Accident

Reliability Statistics	
Cronbach's Alpha	N of Items
.774	5

Item Statistics			
	Mean	Std. Deviation	N
MT 1	4.30	.733	20
MT 2	4.40	.681	20
MT 3	4.50	.607	20
MT 4	4.50	.607	20
MT 5	4.40	.681	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MT 1	17.80	3.326	.717	.667
MT 2	17.70	3.379	.774	.648
MT 3	17.60	4.989	.155	.844
MT 4	17.60	3.726	.719	.678
MT 5	17.70	4.116	.435	.771

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
22.10	5.779	2.404	5

Realibility test for All Variables

Reliability Statistics	
Cronbach's Alpha	N of Items
.891	29

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FIA 1	125.40	76.779	.828	.879
FIA 2	125.40	76.779	.828	.879
FIA 3	125.10	83.147	.437	.888
FIA 4	125.25	78.934	.727	.882
FIA 5	125.25	78.934	.727	.882
FIA 6	125.40	78.147	.630	.883
OI 1	125.40	76.779	.828	.879
OI 2	125.35	86.345	.024	.897
OI 3	125.40	85.516	.112	.894
OI 4	125.40	84.463	.175	.893
OI 5	125.40	88.358	-.133	.900
WE 1	125.40	76.779	.828	.879
WE 2	125.30	80.747	.550	.886
WE 3	125.35	79.924	.631	.884
WE 4	125.25	82.829	.305	.891
WE 5	125.15	81.818	.466	.887
WE 6	125.15	84.345	.282	.890
WE 7	125.10	87.674	-.083	.897
ST 1	125.30	86.642	.009	.896
ST 2	125.35	81.503	.415	.888
ST 3	125.35	82.766	.311	.891
ST 4	125.35	80.239	.601	.885
ST 5	125.40	79.832	.498	.886

ST 6	125.30	84.221	.192	.893
MT 1	125.50	75.421	.877	.877
MT 2	125.40	76.779	.828	.879
MT 3	125.30	85.379	.122	.894
MT 4	125.30	79.905	.631	.884
MT 5	125.40	83.305	.269	.891

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
129.80	87.116	9.334	29