

BUSINESS PLAN

DROWZ GUARDIAN

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ROAD GUARD TECHNOLOGIES SDN BHD

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BUSINESS PLAN

ROAD GUARD TECHNOLOGIES

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Business Plan prepared April 2024
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DECLARATION

We hereby declare that:

- (1) This UBTZ3016 Entrepreneurial project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this Entrepreneurial project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the Entrepreneurial project.
- (4) The word count of this Entrepreneurial Project is 11,971.

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1.0 EXECUTIVE SUMMARY

1.1 The Opportunity

Statistics in Malaysia indicate that driver carelessness is a significant contributing factor to road accidents, often resulting from occurrences of microsleep. Over 20% of road accidents in the country are attributed to drivers falling asleep or feeling drowsy. The availability of microsleep prevention products in the Malaysian market is limited. The ADAS system is currently limited to expensive or high-spec cars, which creates an excellent opportunity for us to focus on a niche market segment and promote our product.

1.2 The Description of the Business

Road Guard Technologies offers a microsleep preventor named “Drowz Guardian” by developing an eye detection technology to identify the presence or absence of driver drowsiness. This product aims to reduce accidents caused by microsleep, a common hazard among drivers. The driver will be alerted via alarm buzzer if they are in a drowsy state. Upon the driver's awakening, the alarm buzzer will stop sounding.

1.3 Competitive Advantage

Our product, Drowz Guardian, is unique and different from the other products in the market. The current microsleep prevention product available in Malaysia's market is a behind-the-ear wearable device, but it may cause discomfort for individuals who drive long distances or for drivers who wear glasses. As first movers, we employ eye detection technology to detect whether the driver is in a microsleep situation.

1.4 Target Market

Our customer segments are budget-conscious consumers, entry-level car buyers, and e-hailing or taxi drivers. They usually buy or use cars without ADAS and specifically lack a microsleep prevention feature. This product will be necessary for taxi or e-hailing drivers, as fatigue and extended hours of driving increase the risk to microsleep.

1.5 Management Team

Road Guard Technologies Sdn. Bhd. was established by four founders. Ms Yong Chee Yun holds the position of Chief Executive Officer. Mr Meah Chee Yong is the Chief Technology Officer and Chief Operating Officer. Mr Chen Kai Jun is the Chief Financial Officer, and Mr Pang Cheng Yao is the Chief Operating and Administrative Officer.

1.6 Brief Summary of the Financial Projections

Annual sales growth is anticipated, with figures rising from 8,500 units in year one to 52,000 units in year five. We plan to purchase 500 extra units of raw materials annually to accommodate unexpected increases in sales. It was anticipated that the cumulative sales would reach RM 2,045,000 in the initial year and RM 12,440,000 by the end of the fifth year. We project that the first year will net loss will amount to RM 260,120 while RM 908,932 net profit by the fifth year. The projected payback period is about 4 years.

1.7 Description of What the Business Needs

Our company has RM 300,000 as the total fund. Funding will come from the founders and government grants (CRADLE). A sum of RM150,000 will be contributed to the business by all proprietors, of which each will contribute RM37,500. On the other hand, we plan to apply for a government grant known as CIP SPARK, which is a grant of up to RM150,000 from CRADLE. The capital will be utilized as our start-up capital.

1.8 Exit Strategy for Investor

Our exit strategy includes several shareholder value streams. We intend to begin by making business attractive to strategic buyers and competitors. While we recognise the potential for individual founder exits, we offer a partial buyout strategy that allows departing founders to obtain a portion of their shares while maintaining business continuity. As the business evolves, we may consider an initial public offering to access the public markets, raise capital, and provide liquidity for all founders by selling shares on a stock exchange. This flexible strategy meets our stakeholders' different needs and preferences.

2.0 THE BUSINESS

2.1. The Description of the Business

2.1.1 The Name, Logo, and Location of Proposed Business

2.1.1.1 The Name of the Company

Road Guard Technologies Sdn. Bhd. has been officially chosen as our company's name after a comprehensive deliberation conducted by our top management. "Road Guard Technologies" was selected because it conveys the corporate goal of providing safety-driving solutions. This strategic designation boosts our company's market position and resonates with potential clients. Incorporating the term "Technologies" within the company's name conveys a sense of ingenuity and sophisticated resolutions. This name, in turn, fosters assurance among potential customers that we are actively addressing road safety while driving with cutting-edge technology. Henceforth, this attribute renders customers readily identifiable to our company, thereby providing prospective customers with a clear understanding of our company's operations and offerings.

2.1.1.2 The Logo of the Company

Figure 2.1: Road Guard Technologies Sdn. Bhd.'s Logo



The logo, featuring the iconic 'R,' has been the cornerstone of Road Guard Technologies Sdn. Bhd.'s identity. We breathe new life into this emblem, infusing it with a spirit of 'Revolution.' The letter 'R' no longer solely represents the word 'Road'; rather, it embodies our steadfast dedication to transforming the landscape of road safety technology. It motivates us to innovate and challenge norms, leading to a new age of road safety solutions.

The visual representation of our logo resembles a road, symbolising the specific industry in which our company operates. This design choice ensures that our logo is easily identifiable about our products while also conveying our company's commitment to continuous expansion and growth.

The use of yellow in the "R" of our logo is deliberate and strategic, as yellow evokes a sense of caution, safety, and positivity. These qualities align perfectly with our company's overarching objective of accident prevention and promoting a happier and safer road experience.

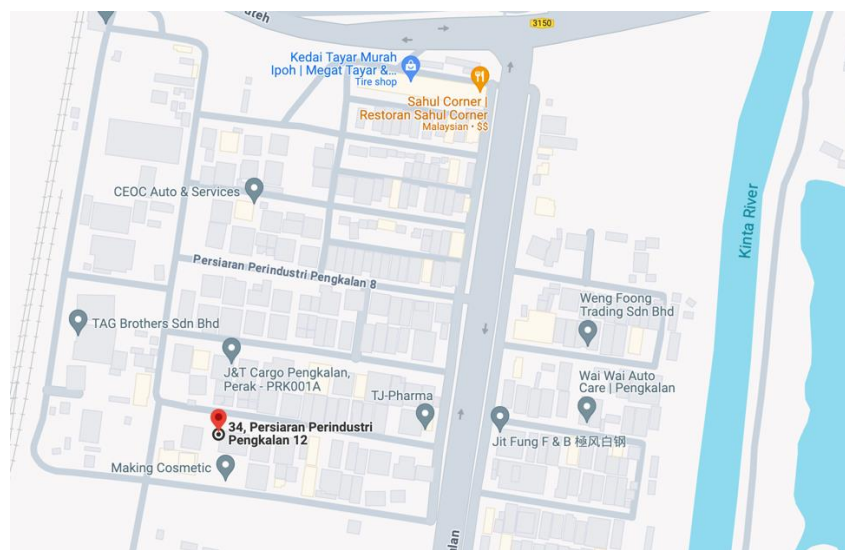
2.1.1.2 The Location of the Company

The location of the administration office and manufacturing plant are in Ipoh, Perak. The rationale behind this proposition stems from the favourable combination of cost-effective rental and labour expenses. Perak Investment Management Centre (2022) states that the rental rates for prime office space in Ipoh are among the most affordable compared to other states, ranking

at 4 out of 13. Thus, the proposed business venture in Ipoh, Perak presents a significantly lower risk profile when compared to regions characterised by high living costs.

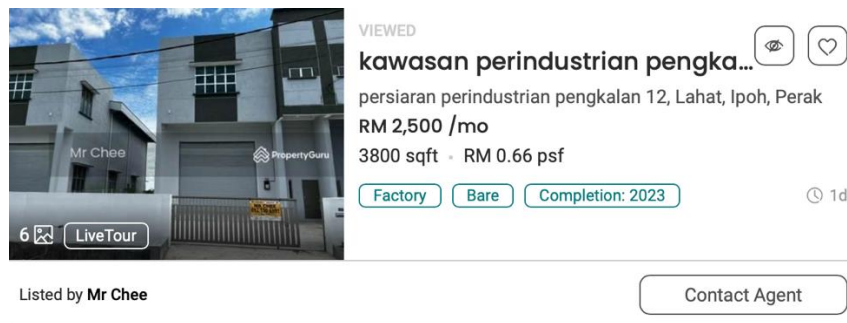
Our company will be selected to set up at 34, Persiaran Perindustrian Pengkalan 12, Lahat, Ipoh, Perak. This 1.5-storey semi-d factory, available for lease at a monthly rental rate of RM 2500, is considered affordable and presents an up-and-coming prospect for a sustainable and lucrative business endeavour. In consideration of our company has just started, and we need a space that is both adequately sized and cost-effective for our operational needs; therefore, this building has become our choice as the company's location. The first floor of the chosen premises will serve as our manufacturing plant, while the second floor shall be designated as our administration office.

Figure 2.2: Location of Road Guard Technologies Sdn. Bhd.



Source: Google. (n.d.). [Google map of 34, Persiaran Perindustrian Pengkalan 12, Lahat, Ipoh, Perak]. Retrieved January 22, 2024, from <https://www.google.com/maps/dir//34,+Persiaran+Perindustri+Pengkalan+12,+Kawasan+Perindustrian+Pengkalan,+31650+Ipoh,+Perak/@4.5357082,101.051847,17z/data=!4m8!4m7!1m0!1m5!1m1!1s0x31cae93924c665c3:0x4cdf7401c1ee7472!2m2!1d101.0544219!2d4.5357082?entry=ttu>

Figure 2.3: Monthly Rental Evidence



Source: Property Guru. (2024, March 24). *Kawasan perindustrian pengkalan*. <https://www.propertyguru.com.my/property-listing/kawasan-perindustrian-pengkalan-for-rent-by-mr-chee-36954044>

2.1.2 Nature of Business / Product or Services Offer

Road Guard Technologies Sdn. Bhd. is a private limited company established by four founders. It is a manufacturing business company specialising in providing innovative solutions by introducing new products to reduce road accidents and enhance road safety while driving. Our business market is Advanced Driver Assistance System (ADAS), while our main focused sector is the Driver Monitoring System (DMS) industry.

Our flagship product, the Drowz Guardian, is a cutting-edge microsleep eye-detection warning Rear Mirror designed to address a critical market need. Our product's primary goal is to reduce accidents and ensure everyone travels more safely by offering high-quality, life-saving solutions that improve driver awareness and road safety. The eye detection sensor will track the driver's eye from time to time, record real-time footage of the driver and detect the driver's current situation, whether awake or drowsy. If the system catches the driver's eye closed for at least 1.5 seconds, it triggers an alarm buzzer to alert the driver, thus preventing potential accidents. The alarm turns off when the driver awakens, guaranteeing road safety and alertness.

2.1.3 Company Missions and Objectives

Mission

To proactively enhance road safety by delivering real-time alerts and invaluable insights that anticipate and prevent potential accidents.

Vision

To build a world in which every journey is a safe journey.

Objectives

- To gain and sustain company's profit.
- Expand our product line into new markets.
- To maintain workplaces safer and healthier.
- To provide higher-quality products to customers.

Core Values

- Prioritisation of the safety of individuals on the road.
- Prioritise ethics, honesty, openness, and accountability to stakeholders.
- Consistently pursuing innovative ideas that push the boundaries of car safety.
- Continuously improve, accept feedback, adapt to change, and refine solutions to lead road safety.

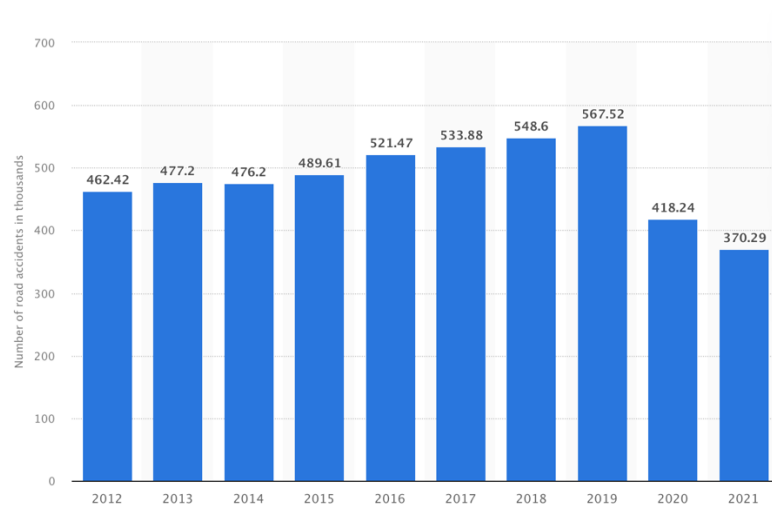
2.2 The Opportunity

2.2.1 Problems to be Solved or Needs to be Filled

The World Health Organisation has reported that over a million lives are tragically lost in road accidents every year. Shockingly, this means that a person loses their life every 63 seconds. Additionally, there is an alarming rate of injuries, with at least one person getting injured every 3 seconds in road accidents around the globe (Kassim et al., 2021). According to Statista (2023), Malaysia's road accident rate has gradually increased from 2012 to 2019. During this period, the number of cases rose from 462,420 to 567,520. In 2020 and 2021, Malaysia's Movement

Control Order led to a decline in accidents, although they remained a cause for concern, with 418,240 and 370,290 cases, respectively.

Bar Chart 2.1: Statistic of Number of Road Accidents In Malaysia from 2012 to 2021



Source: Statista. (2023). *Number of road accidents in Malaysia from 2012 to 2021.* <https://www.statista.com/statistics/794875/number-of-road-accidents-malaysia/>

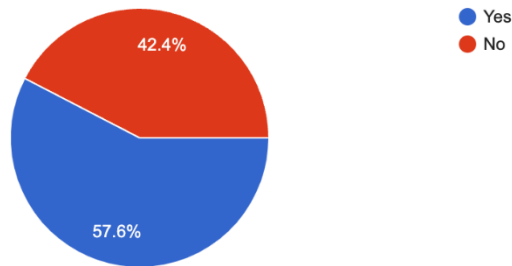
In Malaysia, a study by the Malaysian Institute of Road Safety Research (MIROS) revealed that fatigue significantly contributes to car, lorry, and bus crashes (Hasan et al., 2021). The director of the Bukit Aman Traffic Investigation and Enforcement Department, Datuk Mat Kasim Karim, stated that over 20% of road accidents in the country are attributed to drivers falling asleep, feeling drowsy, or daydreaming (The Star, 2022).

Based on statistical data released by the Royal Malaysia Police, a total of 1,305 fatalities were documented during the period from 2011 to 2021. The leading cause of these tragic incidents was drivers experiencing drowsiness and unintentionally falling asleep while operating their vehicles (Cheah, 2022). When drivers become drowsy, their ability to maintain vehicle control diminishes, often leading to unfortunate accidents (Gurubhagavatula, 2022).

Pie Chart 2.1: Have You Ever Been Involved in A Near-Miss Or An Accident Due To Microsleep?

Have you ever been involved in a near-miss or an accident due to microsleep?

356 responses



Source: Developed for the research

Lim (2023) states that statistics in Malaysia indicate that driver carelessness is a significant contributing factor to road accidents, often resulting from occurrences of microsleep. Microsleep, as highlighted by Datuk Dr. S. Ravih, an esteemed Nephrology and Internal Medicine expert at Melaka Putra Specialist Hospital, is a highly unpredictable phenomenon that significantly contributes to frequent highway accidents. Meanwhile, Tan Sri Lee Lam Thye, a specialist in road safety, emphasised that the rising number of travel accidents has emerged as a major cause for concern about occupational safety and health within the nation (Malay Mail, 2019). Our survey shows 57.6% (205 out of 356) respondents have been involved in a near-miss or an accident due to microsleep.

Figure 2.4: Foreign Competitor's Product Price

RD Overseas

Anti Sleep Alarm for Drivers

★★★★★
Based on 5 Reviews

Rs. ~~16,999.00~~ Rs. 14,999.00 11% off

Offers

- 50% Cashback up to ₹100 on Airtel Payment Bank
- Upto ₹25 Cashback on Amazon Pay Wallet
- Get 5% Cashback up to ₹500 on Simpl

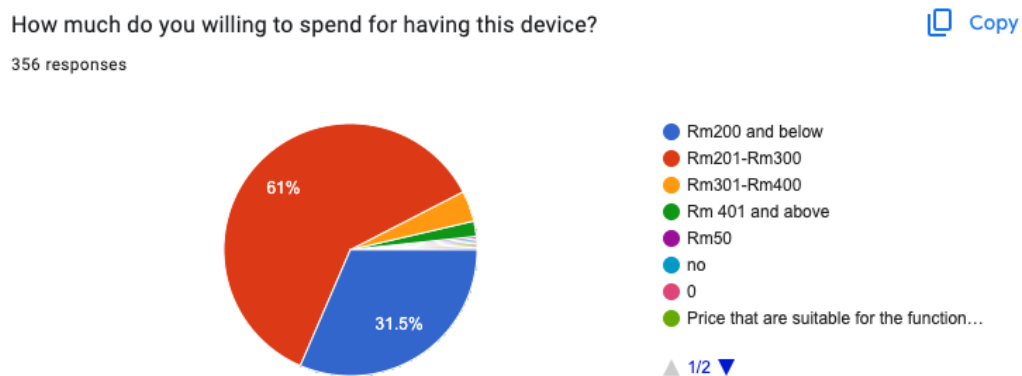
Quantity: 1

Add to cart

Source: RD Overseas. (n.d.). *Anti sleep alarm for drivers*.
<https://rdoverseas.com/products/anti-sleep-alarm-for-drivers>

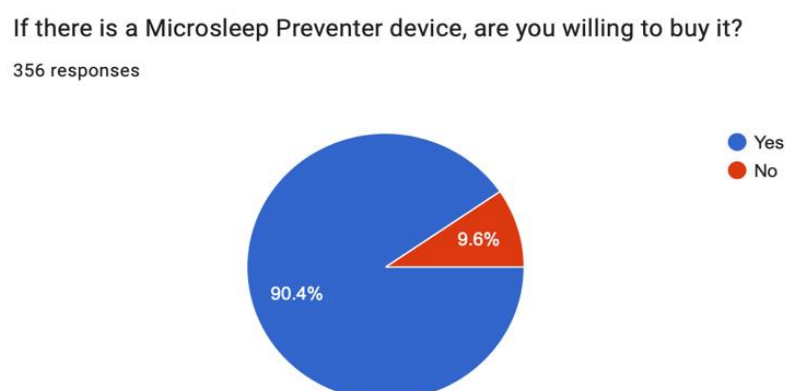
Furthermore, the availability of microsleep prevention products in the Malaysian market is limited. Many microsleep prevention products are designed to be worn behind the right ear alarm when the head tilts 15° to 20° . Wearing it while driving long distances may be uncomfortable for drivers with eyeglasses. Only a few foreign companies provide devices like ours that employ eye-detection technology for improved accuracy and driver comfort but are expensive. For instance, the Anti Sleep Alarm, manufactured in India by Rajatdeep Overseas Pvt. Ltd., is priced at RM 860.

Pie Chart 2.2: How Much Do You Willing To Spend For Having This Device?



Source: Developed for the research

Pie Chart 2.3: If There Is A Microsleep Preventer Device, Are You Willing To Buy It?



Source: Developed for the research

Our study found that 90.4% (322 out of 356) would buy a Microsleep Preventor if available. Only 2% of respondents would spend RM 401 or more on this product. Thus, the gap between the demand and supply and the price of microsleep preventor is our business opportunity.

ADAS systems in cars may address the issue of microsleep by analyzing various metrics, such as deviations from lane position and autonomous emergency braking, to monitor the driver's behavior and alert drivers to correct their position. However, the ADAS system is currently limited to expensive or high-spec cars, which creates an excellent opportunity for us to target budget-conscious consumers, entry-level car buyers, and e-hailing car buyers. For example, the Advanced Safety Assist system is exclusively available on the highest specs of the Perodua Bezza (Perodua, n.d.).

2.2.2 How the Proposed Business Solves the Problem or Fills the Need

Our company has developed a solution to address the issue of microsleep, a leading cause of accidents and a potential danger to other drivers on the road. We are introducing Drowz Guardian, our innovative microsleep prevention product. This product serves as a helpful reminder for drivers by detecting when their eyes are partially or fully closed.

Our product has a simple and minimalist design, seamlessly integrating a microsleep prevention electronic board into a car's rear mirror. It offers a hassle-free experience, allowing easy plug-and-play installation like other car cams. We use a rear mirror as the outer casing of the microsleep prevention because it will make our product more user-friendly and easier to install in a wide range of vehicles, making it a better place for capturing drivers' eye movement.

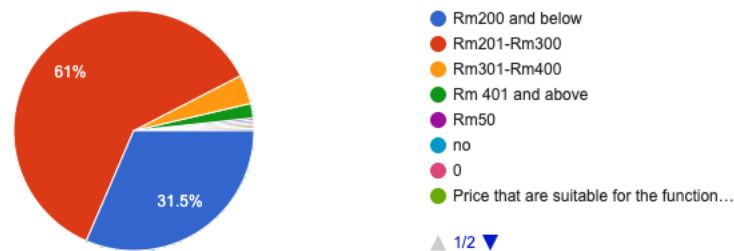
When drivers experience microsleep, they may unintentionally fall asleep for a few seconds. Microsleep is an occurrence that happens so rapidly that individuals experiencing it may not even be aware that they have dozed off. Our product uses an advanced eye detection sensor to monitor the driver's eye movements continuously. The system will capture live footage of the driver and analyse their current state, alerting them if they appear drowsy. When the system detects the driver's eyes closing, an alarm buzzer will be activated to notify the driver promptly.

Pie Chart 2.4: How Much Do You Willing To Spend For Having This Device?

How much do you willing to spend for having this device?

 Copy

356 responses



Source: Developed for the research

Our business-to-customer microsleeper preventor costs RM 250 and business-to-business RM 230 to close the pricing difference. Our price is profitable and competitive. Our research found that 61% of respondents would spend between RM 201 and RM 300 for this products. Therefore, our product's price is within the means of potential consumers, which may encourage more individuals to purchase and utilise our product. Our cost-plus pricing may explain the large price differential between our product and RD Overseas', but not bad quality. We wanted market share by undercutting competitors as a new brand.

2.3 Competitive Advantages

2.3.1 Description of the Business Model

Table 2.1: Business Model Canvas of Road Guard Technologies

Key Partners	Key Activities	Values	Customer Relationship	Customer Segments
<ul style="list-style-type: none"> • Motherboard suppliers • Camera module suppliers • Alarm buzzer suppliers 	<ul style="list-style-type: none"> • Research and development • Manufacturing and Production • Product Testing and Quality control 	<p>Proposition</p> <ul style="list-style-type: none"> • Cutting-Edge Safety Solutions • Enhanced Driving Experience 	<ul style="list-style-type: none"> • Pre-sales Consultation • Installation Support • After-sale Service 	<ul style="list-style-type: none"> • Budget-Conscious Consumers • Entry-Level Car Buyers

<ul style="list-style-type: none"> • Rear mirror suppliers 	<ul style="list-style-type: none"> • Labelling and packaging • Marketing and Sales 	<ul style="list-style-type: none"> • Accident Prevention 		<ul style="list-style-type: none"> • E-hailing or taxi drivers
	<p>Key Resources</p> <ul style="list-style-type: none"> • Intellectual properties • IT infrastructure • Qualified workers • Manufacturing Facilities • Financial resource • Distribution Network 		<p>Channels</p> <ul style="list-style-type: none"> • Online Shopping platform • Retail distribution channel • Collaboration • Social Media • Website 	
<p>Cost Structure</p> <ul style="list-style-type: none"> • Research and Development • Manufacturing • Marketing and Sales • General and Administrative • After-Sales Support 			<p>Revenue Streams</p> <ul style="list-style-type: none"> • Product Sales 	

2.3.1.1 Key Partners

The suppliers of our electronic components, **motherboard**, **camera module**, and **alarm buzzer**, play a crucial role in our operations as they provide us with high-quality components essential for our product. They are necessary to ensure our production is smooth and the product is reliable. **Rear mirror suppliers** are key partners that provide customized rear mirrors with a simple and minimalist design by seamlessly integrating with our electronic components. Also, we will engage with at least two key suppliers for each electronic component to eliminate delays or component shortages.

2.3.1.2 Key Activities

We continuously do **research and development (R&D)** to enhance, improve, or develop more advanced products, which makes our company more competitive. The following key activity is **manufacturing and production** to produce Drowz Guardian by programming and assembling the raw materials such as the electronic mother board, cable, alarm, and so on. We will undertake **product testing and quality control** by having feasibility tests on every product to verify that it is completely functional, safe to use, and in good condition to satisfy our customers' expectations.

We **label and package** our merchandise before shipping. We provide product details like our logo so customers may promptly recognise our products. Labelling and packaging protect our items throughout transportation and display. **Marketing and sales** are important to our company strategy, and we use Facebook and Instagram to increase brand awareness, website traffic, and conversion rates. Product sales will rise with a good marketing approach.

2.3.1.3 Values Proposition

Our value proposition is focused on developing innovative safety solutions that revolutionize the driving experience and prioritize accident prevention. We offer customers **cutting-edge safety solutions** that use eye detection to alert drivers experiencing microsleep. The eye detection device instantly detects drivers' eye movements, preventing accidents. Providing such solutions gives customers an **enhanced driving experience** by ensuring unparalleled safety on the road for a more secure and enjoyable journey. We prioritize **accident prevention** to decrease road mishaps, showing customers our dedication to creating a better driving environment and road safety.

2.3.1.4 Customer Relationship

Through **pre-sales consulting**, we seek to give tailored counsel and practical solutions to help consumers make well-informed decisions that meet their individual needs. We are committed to delivering exceptional service from purchase by offering comprehensive **installation support** to ensure a seamless setup experience for our valued customers. Although our products are user-friendly, we understand that some people may need assistance and are here

to provide the necessary support. Additionally, we are dedicated to providing exceptional **after-sale service** to our customers. This covers troubleshooting guidance, maintenance, customer feedback forms, and promptly resolving any issues arising after their purchase. We intend to develop long-term connections with our customers by providing excellent service and support throughout their product experience.

2.3.1.5 Customer Segments

Our customer segments are budget-conscious consumers, entry-level car buyers, and e-hailing or taxi drivers, who usually buy or use cars without ADAS and specifically lack a microsleeep prevention feature. **Budget-conscious consumers** and **entry-level car buyers** usually prefer to purchase second-hand or new cars with lower specs. According to a report by Mordor Intelligence (2024), the Malaysia used automobile market was worth USD 25.14 Billion in 2021 and is projected to reach USD 35.25 Billion by 2027, growing 5.4% annually. Typically, a used car refers to an older model vehicle not equipped with ADAS. Moreover, this product will be necessary for **taxi or e-hailing drivers**, as fatigue and extended hours of driving increase the risk to microsleeep. Also, they usually use their car, which may not be new or high-end cars with microsleeep detectors.

2.3.1.6 Key Resources

Intellectual properties, such as trademarks and patents, are our intangible key resources, which we utilize to protect our rights and maintain a competitive edge in the market. Our **IT infrastructure**, which includes hardware components such as monitors, keyboards, and network devices, enables us to interact with those electronic components. Our **qualified workforce** is an essential human resource, contributing to the company's innovation and productivity by possessing skills, knowledge, ideas, and values. In terms of **manufacturing**, we utilize facilities equipped with tools like soldering irons to assemble electronic components, making our product more long-lasting. The availability of our **financial resources** allows us to innovate and incorporate progressive attributes into our product. Our principal sources of funding are contributions from founders and government grants. By distributing our product through various channels, a **distribution network** is a critical resource that can increase the visibility of our products and expand our customer base.

2.3.1.7 Channels

We use **online platforms** to provide convenience and establish a direct connection between customers worldwide and our products. Our profile is managed and built on popular online shopping platforms like Shopee and Lazada. A smooth and user-friendly online presence makes browsing, purchasing, and customer assistance easy. In addition to our online platform, we actively participate in **retail distribution channels** to enhance brand visibility and drive sales. This strategy lets potential customers see our products when they pass those retail stores. Furthermore, we plan to employ **collaboration** as a growth channel by collaborating with companies like Grab, which allows us to leverage resources and customer bases, promoting mutually beneficial prospects. For instance, our company offers Drowz Guardian to their employees, and Grab can effectively mitigate the risk of accidents caused by microsleep among their employees. We will create a **company website** and actively engage with **social media** platforms, including Facebook and Instagram, to foster connections and share information with current and potential customers.

2.3.1.8 Cost Structure

R&D is crucial, demonstrating our dedication to innovation and staying ahead of technical advances in this quickly growing industry. It is continual and expensive. Costs associated with **manufacturing**, including direct materials, direct labor, and manufacturing overhead, are also crucial for industrial work order efficiency. We must invest in marketing and sales expenditures to promote our products and reach our target market. For instance, social media advertising and promotional campaigns such as pop-up events. **General and administrative costs** comprise a range of operational expenditures, such as personnel pay, office renting, utilities, and other essential company expenses. **After-sales support** includes allocating funds for customer service, technical support (including installation), and warranties to enable quick and effective help after product purchase.

2.3.1.9 Revenue Streams

Our primary revenue source is **product sales**. Our product, Drowz Guardian, generates sales by targeting individual customers and businesses. We maximize this income stream by using effective marketing and sales techniques and focusing on customer satisfaction.

2.3.2 How the Business will Create Sustainable Competitive Advantages

2.3.2.1 Product Differentiation

Our product, Drowz Guardian, is an innovative and unique product that differentiates from the current market. The current microsleep prevention product available in Malaysia's market is a behind-the-ear wearable device, but it may cause discomfort for individuals who drive long distances or for drivers who wear glasses. We, as first movers, employ eye detection technology to detect whether the driver is in a microsleep situation. The use of eye detection technology allows for more precise and rapid detection, but the application of this technology in microsleep prevention solutions is little to none. Recognising that first-mover advantage is limited in its effectiveness over time, R&D is a continuous activity for us to maintain product differentiation and expand sustainable competitive advantages.

2.3.2.2 Efficient Supply Chain Management

We will have a solid partnership with our electric component suppliers, which will enable us to secure more favourable pricing when procuring our raw materials from them. As the electric components, such as the motherboard, will launch a new version from time to time, our suppliers will notify us when they receive the latest version of the motherboard. This ensures that our product remains technologically advanced and provides an enhanced experience for our customers. Getting credit extended from solid partnership suppliers also enables our company to improve liquidity and establish a durable competitive edge.

2.3.2.3 Outstanding Customer Service

By continually delivering exceptional customer service, we distinguish ourselves from rivals and establish long-lasting competitive advantages. For example, we provide comprehensive installation support to guarantee a smooth setup process for our customers and are committed to delivering great after-sale support to our customers. This encompasses providing technical assistance, delivering maintenance recommendations, presenting a customer feedback form, and immediately addressing any post-purchase difficulties. Promptly addressing customer

issues and listening to their concerns enables our company to cultivate trust and loyalty among our customers.

2.3.2.4 Exceptional Management Team

We are committed to providing educational opportunities for all team members to ensure they have up-to-date knowledge of the industry. Our management team have the necessary abilities and competence to lead our company towards a more prosperous future. Our proficient team members will adapt to the regulatory changes in the market and continuous market research, making our business stay agile and responsive to the market changes. We establish rules, goals, checkpoints, and objectives to enhance employee productivity while also offering support and inspiration, with a focus beyond only maximising profit margins. As each team member experiences personal growth and professional development, our company will also progress and advance.

2.4 Current Status and Requirement

2.4.1 Description of Where the Business Stands Today and What the Business Needs to Move Forward

At present, our company has positioned our microsleeper preventer product as a reputable supplier of advanced safety solutions explicitly designed for cars without microsleeper detector in ADAS (Advanced Driver Assistance System). The specific concentration on this aspect has received favourable responses and established credibility among a wide range of customers, including those who prioritize affordability and individuals who are in the market for their first vehicle and are interested in practical safety improvements..

To grow our business, we must investigate and innovate. R&D will help us lead safety technology development and meet consumer needs. Furthermore, tailoring our solutions to cater to the distinct requirements of various consumer segments would augment the attractiveness and significance of our services. Enhancing cooperation with specialist merchants will facilitate the broader availability of our products.

Moreover, instilling knowledge in our clientele regarding the significance of safety and the distinctive advantages offered by our solutions will cultivate increased acceptance and allegiance. The active pursuit of feedback from customers and partners will be a beneficial means of obtaining insights to enhance our current offers and find opportunities for improvement.

Table 2.2: Projected Milestones

Projected Milestones	2024												2025	
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Market Survey														
Creating Business Plan														
Prototype Designation and Testing														
Proposed Business Plan to Investors														
Funding Approved and Received														
Business Registration														
Looking for Location														
Construction and Renovation Office and Manufacturing Plant														
Recruitment														
Training Program														
EPF and SOCSO Registrations														
SIRIM Label Registration														
Start Production of Drowz Guardian														
Promotion and Advertising														
Company Grand Opening Ceremony														
Achieve RM 50,000 Sales (200 units)														

Source: Developed for the research

Before developing our business strategy, we completed a market survey to learn about microsleep prevention and product demand. Three months were spent on our thorough business plan and prototype creation and testing. We expect to pitch investors our Drowz Guardian business strategy in June 2024 and receive funds by August 2024.

Our business and trademark were registered with the government and MyIPO in September 2024. After selecting a suitable office and manufacturing space, we will renovate it, hire skilled workers, and train them to improve their performance. Employee EPF and SOCSO will be done in October 2024.

After SIRIM label registration, we will commence product production, marketing, and promotional activities in December 2024 to increase product visibility. Finally, we projected a January 2025 corporate grand opening and RM 50,000 sales in February 2025.

3.0 INDUSTRY ANALYSIS

3.1 Industry Description

3.1.1 Industry Trends

In the rapidly evolving Driver Monitoring System (DMS) industry, integration with Advanced Driver Assistance Systems (ADAS) is a prominent trend, enhancing driver safety by combining features like lane-keeping assistance and driver fatigue detection (Kankoriya & Khatal, 2024). Regulatory mandates for DMS installation in commercial vehicles have gained traction, driving adoption for improved road safety. DMS technology is also evolving to emphasize driver fatigue detection, focusing on preventing accidents due to drowsy driving (Perrotte et al., 2024). DMS accuracy is improved by powerful AI and machine learning, even in challenging circumstances. Data security and privacy are also becoming increasingly important. As customer knowledge of DMS's benefits develops, so does its adoption, especially in passenger vehicles. Companies in the DMS sector are reducing costs to make this technology more affordable and expanding into new areas with road safety issues.

3.1.2 Industry Size

According to FMI (2023), The Driver Monitoring System (DMS) market is anticipated to expand its roots at a steady CAGR of 7.5% between 2023 and 2033. The market is expected to have a market share of US\$ 9.3 billion by 2033, while it will likely be valued at US\$ 4.5 billion in 2023. However, it's crucial to recognize that industry size can vary significantly by region and market segment. The DMS market size was relatively larger in regions with robust road safety regulations and advanced automotive technologies, such as North America and Europe. Moreover, the industry size has been influenced by factors such as increasing awareness of road safety, government regulations, and technological advancements.

The Asia Pacific Driver Monitoring Systems Market will witness market growth of 10.5% CAGR during the forecast period between 2023 and 2029. The Asia Pacific Driver Monitoring Systems (DMS) Market is poised for significant expansion, with an anticipated Compound Annual Growth Rate (CAGR) of 10.5% during the forecast period from 2023 to 2029 (KBV Research, 2023). Road safety concerns, strict regulations, and incorporating modern DMS technology into automobiles have driven this expansion. Technological advances and increased car demand in the Asia Pacific create advantageous market conditions, making DMS solutions increasingly crucial for driver safety and attention on the region's roadways.

In Malaysia, several companies in Malaysia offer Driver Monitoring Systems. One such company is the **EUP Fleet Management System** (EUP, n.d.), which provides a better solution for managing vehicles with multiple functions and easy-to-use features. **Guardian South East Asia** (GuardianSEA, n.d.) provides GPS vehicle tracking, a Dash Cam with live streaming and recording, driver safety scoring, and alarm systems. To prevent road accidents, they provide a driver tiredness and sleepiness monitoring system with cutting-edge detecting technology.

3.1.3 Industry Attractiveness

Road Guard Technologies Sdn. Bhd. used Porter's Five Forces theory to examine the attractiveness of the industry.

Table 3.1: Porter's Five Forces of Road Guard Technologies Sdn. Bhd.

Competitive Force	Low	Moderate	High
Bargaining Power of Buyers		√	
Bargaining Power of Suppliers	√		
Threat of Substitution		√	
Threat of New Entrants	√		
Rivalry within Industry		√	

Source: Developed for the research

Bargaining Power of Buyers (Moderate):

The global driver monitoring system (DMS) market is expanding due to rising demand for safety features (Allied Market Research, 2022). Still, there are just a few driver-monitoring

device vendors in Malaysia, resulting in buyers having less bargaining power over prices. Customers can, however, move to a foreign vendor of driver monitoring gadgets. Aside from that, the market typically services two types of buyers: end consumers and car accessory resellers. End users have little bargaining power because they only purchase one driver-monitoring device per car. However, automobile accessory wholesalers usually negotiate a lower unit price and buy in bulk (Amoussou, 2024).

Bargaining Power of Suppliers (Low):

Suppliers have low bargaining power in the DMS industry. Based on our research, this is primarily because the essential components, such as buzzers, cameras, and motherboards, are readily available from online and offline providers. Companies may select suppliers based on price, quality, and dependability with so many possibilities, restricting their power to set terms or pricing. Furthermore, the availability of alternative suppliers guarantees competition among them, thereby reducing supplier power when negotiating.

Threat of Substitution (Moderate):

The threat of substitution is rated as moderate as other products that fill the same need to prevent drowsiness demand. For example, a cheaper earpiece-style monitoring gadget is an alternative to driver monitoring. This availability of substitutes suggests that customers' switching costs are small. Furthermore, consumer perceptions of product differentiation influence substitution behaviors (Kopp, 2024). However, substitute products with more advanced technology are sold less in Malaysia.

Threat of New Entrants (Low):

The threat of new entrants is moderate in DMS industry. This is due to develop a driver monitoring device typically requires high capital requirements and specialized technical knowledge, this acts as the barriers to entry for new players (Allied Market Research, 2022). The Malaysia government is focusing more on the Malaysia Road Safety Plan (MRSP), which might affect the business by creating additional obstacles to entry for new firms through driver monitoring system laws and standards (Ministry of Transport Malaysia, 2022).

Rivalry Among Existing Competitors (Moderate):

Current players compete moderately as each company seeks to distinguish its products by delivering distinct and comparable features. Companies in the DMS industry continue to push

the boundaries, delivering innovative features and cutting-edge technology to improve safety and user experience (Chokesy, 2022). However, the number of competitors in the market is still limited in Malaysia, especially for companies using eye-detection technology as a solution.

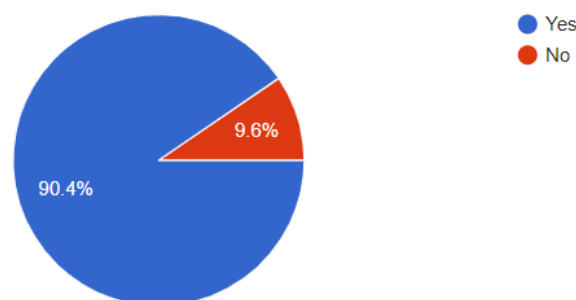
3.1.4 Profit Potential

The profit potential in the DMS industry is notably high, primarily driven by the increasing emphasis on road safety, the integration of ADAS in vehicles, and evolving regulatory requirements. As governments worldwide enforce stricter safety standards and encourage the adoption of DMS technology, the demand for these systems is set to surge (Aachal, 2023). Our survey showed that Drownz Guardian has a high-profit potential and an attractive opportunity in this sector.

Pie Chart 3.1: If There Is A Microsleep Preventer Device, Are You Willing To Buy It?

If there is a Microsleep Preventer device, are you willing to buy it?

356 responses



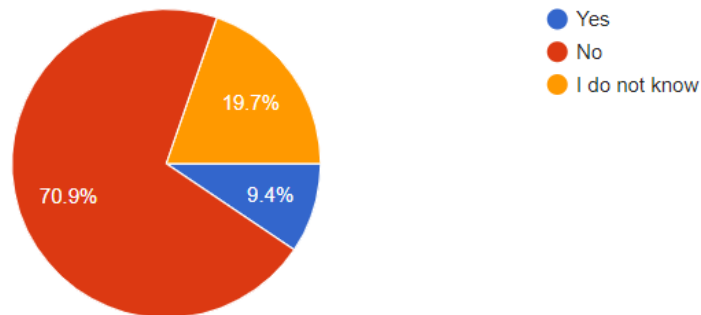
Source: Developed for the research

The pie chart demonstrates our microsleep preventor in a positive outlook. Our study found 90.4% of respondents indicating a desire to buy. The level of interest shows a strong knowledge of the importance of attention and security, especially when drowsiness might pose significant risks, such as operating or driving a car. Our survey supports our product's launch and implies that it will address the need for microsleep risk mitigation.

Pie Chart 3.2: Does The Car You Are Driving Have Features That Can Help Reduce The Effects of Microsleep? [e.g., Advanced Driver Assistance System (ADAS)]

Does the car you are driving have features that can help reduce the effects of microsleep? [e.g., Advanced Driver Assistance System (ADAS)]

488 responses



Source: Developed for the research

As shown in the preceding pie chart, 70.9% of respondents' vehicles lack an advanced driver assistance system. As a result, our survey indicates that our product, Drowz Guardian, has a significant opportunity to increase its market share, given the gap between microsleep preventor demand and supply.

3.2 Target Market

Road Guard Technologies' targets on budget-conscious consumers, entry-level car buyers, and e-hailing drivers which **vehicles that do not currently possess an Advanced Driver Assistance System (ADAS)**. While ADAS systems have made significant strides in improving road safety, there remains a significant portion of vehicles without access to these critical safety features. Our focus is on equipping these vehicles with our Microsleep Detector to provide an added layer of safety and reduce the risk of accidents caused by driver fatigue.

3.2.1 Budget-Conscious Consumers

Figure 3.1: Malaysia Used Car Market



Adapted from: Mordor Intelligence (2024). *Malaysia used car market size & share analysis - growth trends & forecasts (2024 - 2029)*

Budget-conscious consumers typically refer to the customers who purchase second-hand vehicles. These individuals are driven by cost-effectiveness and are attracted to the reduced depreciation rates and initial purchase price. The Malaysian used car market is expected to increase from USD 25.14 billion in 2024 to USD 35.25 billion in 2029. According to the report, the most popular used hatchback vehicles in Malaysia are the Perodua Myvi and Axia, both of which lack ADAS (Mordor Intelligence, 2022). Therefore, we offer microsleeep prevention devices with dependable functionality at a reasonable cost to meet their personality. This guarantees that consumers on a budget have access to tools that improve productivity and safety without surpassing their financial constraints.

3.2.2 Entry-level Car Buyers





Entry-level car consumers tend to choose lower-spec versions of newly released cars, bypassing additional features and driving assistance functions (CarExamer, 2024). First-time buyers may view higher-end models as unnecessary luxuries rather than prioritising the search for a reliable and cost-effective option that fits their financial constraints (Jackson, 2024).

3.2.3 E-Hailing Drivers or Taxi Drivers

E-hailing and taxi drivers who usually drive long hours risk microsleep as they frequently travel during late hours or overnight shifts (Li et al., 2019). The effects of microsleep can be particularly concerning for taxi and e-hailing drivers, as it not only puts their safety at risk but also places passengers and other vehicles at risk. Drowz Guardian allows drivers to suit various driving environments and personal preferences, ensuring excellent efficiency and ease of use.

3.3 Competitive Position within Target Market

Table 3.2: Competitive Analysis Grid for Road Guard Technologies Sdn. Bhd.

Name	Road Guard Technologies (Our company) 	Guardian South East Asia 	Movon 	RD Overseas 
Product Features	<ul style="list-style-type: none"> • Seamless with car rear-mirror • Eye Detection • Real-time drowsiness detection alerts • Plug and play • Universal Compatibility 	<ul style="list-style-type: none"> • Real-time drowsiness detection alerts • AI Dashcam for driver fatigue management • Data analytics for driver monitoring • In-cab seat audio and haptic alert 	<ul style="list-style-type: none"> • Camera-based • Detect distracted, drowsiness, yawning, phone use and smoking • Face ID function • Video recording 	<ul style="list-style-type: none"> • Adjustable sensitivity • Eye Monitoring • Easy installation • Universal compatibility

Price	<ul style="list-style-type: none"> • B2C RM250 • B2B RM230 	<ul style="list-style-type: none"> • Not Open to B2C 	<ul style="list-style-type: none"> • Not Open to B2C 	<ul style="list-style-type: none"> • Rs. 14,999 (RM860)
Brand-name recognition	In progress	Moderate	Moderate	High
Quality of Products/Services	High	High	High	Moderate
Country of Origin	Malaysia	Malaysia	Korea	India
Market Segment	B2C, B2B	B2B	B2B	B2C
Access to distribution channel	Medium	Low	High	Moderate

Adapted from: Guardian South East Asia (n.d.). *Driver monitoring system.*; Movon (n.d.). *Driver fatigue safety monitoring system.*; RD Overseas (n.d.). *Anti sleep alarm for drivers.*

4.0 MARKETING PLAN

4.1 Product Feasibility Analysis

4.1.1 Full Description of the Product

Figure 4.1: Prototype of Drowz Guardian



Source: Developed for the research

Road Guard Technologies Sdn. Bhd is a company that provides road safety products. Intending to decrease the cases of car accidents due to microsleep, our company introduced Drowz Guardian to fill the market gap. It is our first product, a microsleep preventor. It uses eye detection technology and is designed seamlessly with the rear mirror. An alarm buzzer will alert the driver when the infrared camera detects the driver is in drowsiness status in 1.5 seconds. Our company will continue to develop and introduce subsequent generations.

The key feature of Drowz Guardian is real-time monitoring. Drowz Guardian constantly monitors driver vital signs and cognitive patterns, detecting the signs of drowsiness. It powers on via a plug-and-play technique and is powered by type-c. The power supply is 5V/3A, and users are advised to use a 15W supply. An infrared camera and eye detection technology catch the driver's eye closed to predict the onset of microsleep accurately. The 5MP night vision camera modules have infrared lighting and a night vision mode; with 1W power 850nm infrared photographic lights, they can work well even in low-light conditions, which means no matter whether the driver is wearing sunglasses or in a dark environment, our product can still work perfectly. Therefore, the external factors will not affect the use of our product.

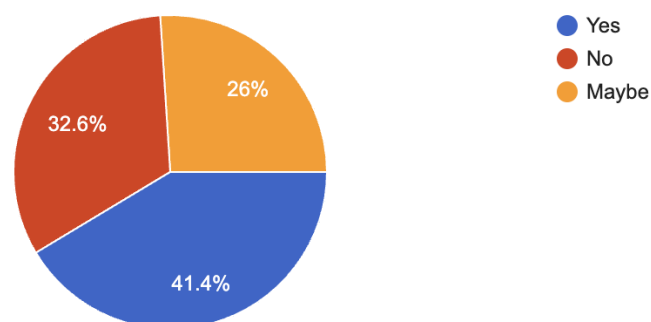
4.1.2 Concept Testing

We surveyed 508 individuals aged 17 to 60 or older regarding the necessity of microsleep preventers. Respondents without a driver's licence will be unable to complete the survey. Thus, the overall number of respondents will differ from some survey questions.

Pie Chart 4.1: Have You Ever Felt Sleepy While Driving?

Have you ever felt sleepy while driving?

488 responses



Source: Developed for the research

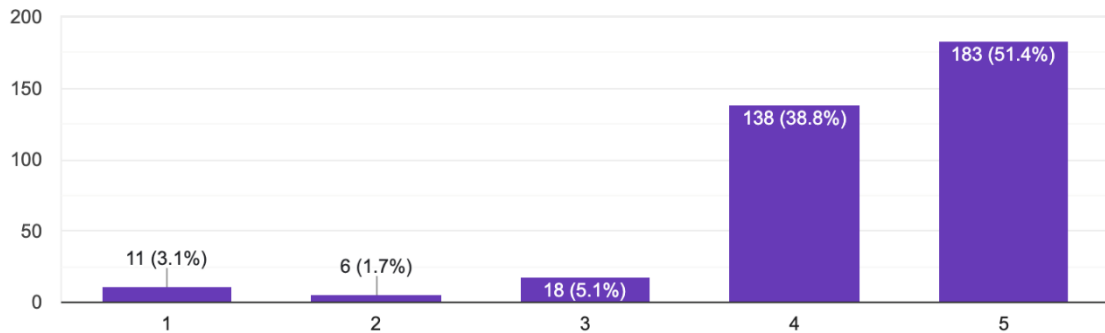
The survey showed that 41.4% of the respondents felt sleepy while driving. 26% of the respondents thought they might feel drowsy while driving, which is common as most individuals are unaware they are microsleeping. Therefore, devices that prevent microsleep while driving are needed to assure driver safety.

Bar Chart 4.1: How Concerned Are You About The Potential Dangers of Microsleep While Driving?

How concerned are you about the potential dangers of microsleep while driving?

 Copy

356 responses



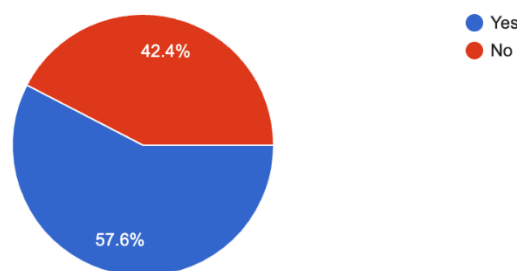
Source: Developed for the research

From the bar chart, we can see that the majority of our respondents are concerned about the potential dangers of microsleeping while driving. This data means that they possess a considerable level of awareness regarding microsleep products and may even consider purchasing them.

Pie Chart 4.2: Have You Ever Been involved In A Near-Miss Or An Accident Due To Microsleep?

Have you ever been involved in a near-miss or an accident due to microsleep?

356 responses



Source: Developed for the research

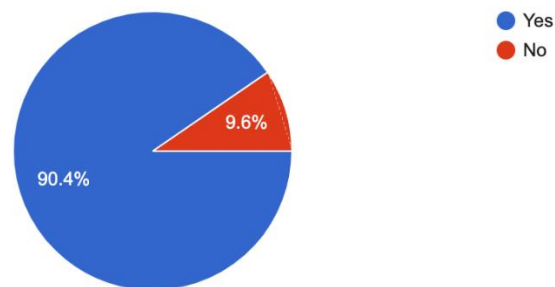
Based on our survey results, it is evident that most of the respondents (57.6%) have experienced either an accident or a near-miss because of microsleeping. The data points out that microsleep

is indeed hazardous and has the potential to induce avoidable harm. As a result, a device capable of preventing microsleep is critical and indispensable.

Pie Chart 4.3: If There Is A Microsleep Preventer Device, Are You Willing To Buy It?

If there is a Microsleep Preventer device, are you willing to buy it?

356 responses



Source: Developed for the research

Out of the total 356 respondents, 322 (90.4%) are inclined to purchase a microsleep preventer device if one were to become available. The findings of this survey demonstrate that our product, Drowz Guardia, matches customers' needs and desires.

4.2 Pricing Strategy: Cost-Plus Pricing

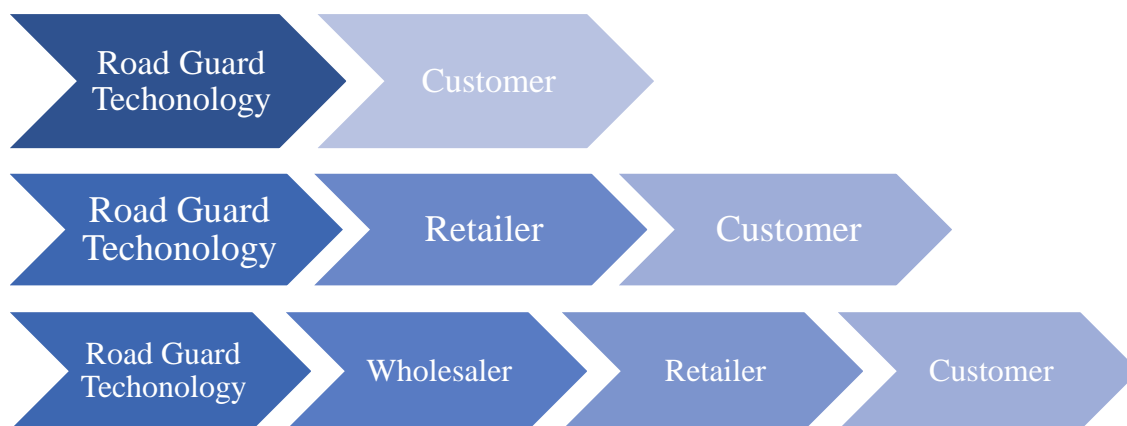
Our pricing strategy follows a cost-plus model, ensuring affordability while sustaining a positive return. The pricing formula involves adding a markup amount to the product's unit cost. This approach requires minimal market research and guarantees coverage of costs, allowing for consistent profitability.

The reason we chose this pricing strategy is that it is easy to implement, which just needs to define the product's unit cost and target profit margin. This strategy can save our time and money while also lowering the risk of underpriced or overpriced items or services. Besides, this pricing strategy ensures that one will recoup expenses and generate a profit, and the markup can be modified in accordance with market conditions and financial objectives. Additionally, cost increases can be transferred to customers, thereby preserving profitability.

Furthermore, our product's high degree of differentiation and the scarcity of competition in the Malaysian market support the viability of cost-plus pricing as a strategy for capturing value. By implementing this pricing strategy, our organization has the potential to achieve substantial differentiation, raised consumer confidence, decreased risk of price competition, and consistent, predictable profits.

4.3 Channels of Distribution: Hybrid Channel

Figure 4.2: Hybrid Distribution Channel of Road Guard Technologies Sdn.Bhd.



Source: Developed for the research

Our company decided to apply a **hybrid channel** to distribute our product, which involves **direct and indirect channels**. Mixed channels are utilized to increase consumer accessibility by ensuring that as many customers as possible are reached, which aims to ultimately increase sales and company profit.

The products can be sold directly to customers through our company website and official e-commerce platforms such as Shopee and Lazada. This direct channel can facilitate a high level of consumer engagement for our company. Thus, it can increase customer satisfaction and build customer loyalty.

Our product will be distributed via indirect channels, utilizing wholesalers and retailers as intermediaries. By using indirect channels, our company can expand its customer base without incurring additional marketing expenses.

4.4 Promotion and advertising

4.4.1 Promotion

4.4.1.1 Early Bird Promotion

An "Early Bird" campaign will provide the first 100 pre-orders a 20% discount before the product launches. The goal is to drive sales, stimulate customer engagement, and rapidly capture market share. Customers are motivated to make earlier purchasing decisions by obtaining a deal or exclusive offer, which ultimately results in higher sales. Moreover, consumers who take advantage of early bird promotions are more likely to share their excellent experiences with others, resulting in word-of-mouth marketing and attracting new consumers.

4.4.1.2 Referral Marketing

Our company will use the referral marketing strategy to gain more sales through the contribution of current customers. Existing customers who recommend our products to new customers by using the referral code when paying the order will receive a 20% discount coupon for our products. Based on the findings of Wise (2023), it is evident that referral programmes contribute to sales growth, as 92% of consumers place trust in personal referrals, 91% of millennials purchase products recommended by friends, and 83% of consumers express readiness to recommend a product. Existing customers who are satisfied with our product and want to earn the discount voucher will assist our company in enhancing brand exposure through word-of-mouth. On the other hand, referral marketing can help the company target both referrers and referred consumers (Berman, 2016). From the supporting data above, we can assume that referral marketing is one of the effective ways to attract sales and build brand awareness.

4.4.1.3 Organize Contest with Free Prizes (Giveaway)

We plan to organize a giveaway campaign to build brand awareness and image quickly. Participants must contribute Drowz Guardian-related photographs, videos, or testimonials for this giveaway promotion. The most liked social media post wins an RM 500 cash voucher. This strategy produces excellent material for our marketing efforts and displays our brand from our customers' perspective, providing potential consumers with more references and raising purchase likelihood.

4.4.2 Advertising

4.4.2.1 Car Advertising by Collaborating with Grab

Our company is determined to reach customers through car advertising. For example, we will wrap our product's poster in the car or put the poster inside the vehicle. By using this strategy, our ads will appear in residential neighborhoods, coffee shops, marketplaces, parking lots, retail complexes, workplaces, and restaurants, as well as heavily traveled thoroughfares.

According to Ganbold (2023), a survey conducted in 2021 shows that 94% of respondents in Malaysia Choose Grab as their favorite e-hailing app. Therefore, we plan to partner with Grab to implement the car advertising strategy because Malaysia has over 100,000 Grab drivers (Cheong, 20203). As a result, we can amplify our brand message, communicate the benefits of our products to a broad audience, and drive engagement and adoption among Grab drivers and passengers.

4.4.2.2 Social Media Content

Dixon (2024) reports that Facebook, YouTube, WhatsApp, Instagram, and TikTok had the most active users in January 2024. Thus, we will raise awareness on various social media channels. Malaysia has 28.68 million active social media users in January 2024, according to DataReportal. Beginning in 2024, Meta's advertising resources reported 22.35 million Malaysian Facebook members (Kemp, 2024).

Our organization will establish a social media account for our brand, which will be utilized to increase awareness by consistently posting product-related videos and content. By using social media as a marketing strategy, we can expose our product to many users on social media. The information presented in the social media post relating to our product will enhance consumers' comprehension of it. Additionally, social media content enables us to interact with consumers through comments and feedback, which strengthens customer loyalty.

4.4.2.3 Collaborate with Influencers

By partnering with influencers, we can leverage their influence and credibility to magnify our brand message, educate our consumers about the benefits of our products, and drive adoption. For example, we can collaborate with those influencers who often share content about automotive safety or knowledge with their audience because their audiences may closely match our target audience. In addition to promoting and demonstrating our product to their audiences, influencers may employ unboxing and reviewing methods. Thus, these strategic partnerships not only increase awareness of our products but also create a stronger connection with our target audience and inspire safer driving consciousness.

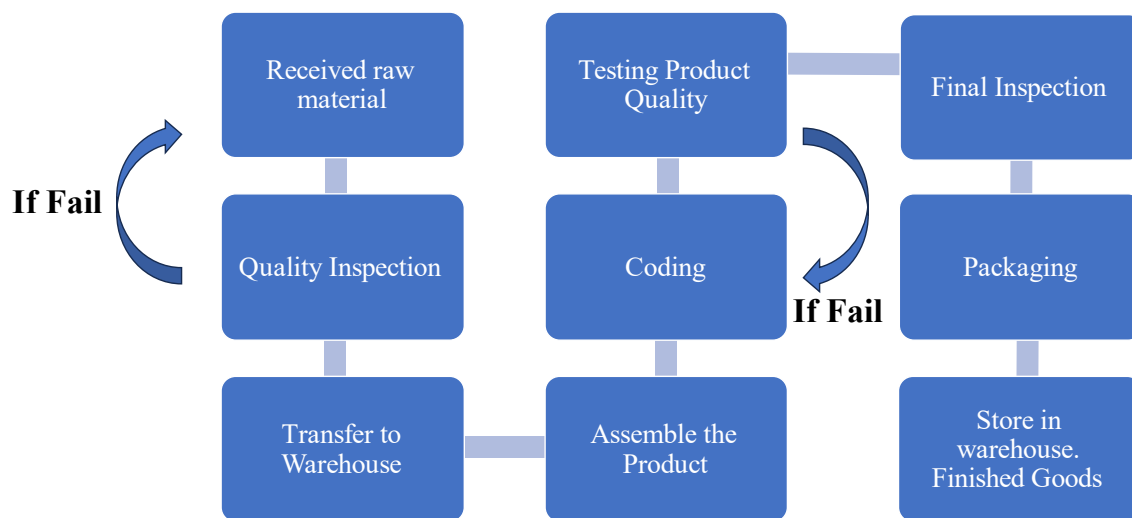
4.4.2.4 Company Website

A company website is an essential part of any modern marketing and advertising strategy. A well-designed and informative website is the central hub of a brand that showcases products or services, engages the audience, and drives conversions. Therefore, we will create our company website to provide our customers with up-to-date and reliable information anytime, anywhere, and make it easy for them to check out our company's products even during non-office hours. Also, customers may increase their credibility with our company and see us as a professional company that provides a high-quality product.

5.0 PRODUCTION PLAN

5.1 Manufacturing Process of Drowz Guardian

Figure 5.1: Manufacturing Process in Road Guard Technologies Sdn. Bhd.



Source: Developed for the research

5.1.1 Received Raw Materials

When raw materials arrive, we check the invoice against the raw materials. This involves matching product production, volumes, and pricing. A supervisor signs the invoice to confirm we received everything as intended. We also enter all the information into our inventory system to track what we have. We physically inspect the items to ensure they meet our quality requirements and are in excellent condition.

5.1.2 Quality Inspection

We inspect each component using a standardized quality inspection checklist to guarantee our goods match our high standards. This approach promotes accountability and uniformity by

having designated staff sign and date inspections. Random samples from each batch of raw materials are functionally tested, including the alarm buzzer's sound quality and responsiveness, the camera's image capture quality and compatibility in a dim environment, and the Raspberry Pi 4 Model B's connectivity options and GPIO status. If a component falls short of our requirements, we will return it to the suppliers. This standard procedure assures that our goods perform consistently in real-world scenarios while maintaining our quality and customer satisfaction.

5.1.3 Transfer to Workshop

The workshop will assemble approved raw materials after quality inspection. Bubble-wrapping each raw material will reduce the damage from transition impacts such as severe shaking. Raw electronic components are extremely sensitive in this scenario. We will place them in the appropriate specified boxes to guarantee double protection and extra cushioning. We understand the fragility of electric components like the Raspberry Pi 4 Model B and camera modules. These components will be separately wrapped to prevent static discharge and physical damage. Each package will be tagged with handling instructions, batch numbers, and contents to streamline production.

5.1.4 Assemble the Product

To keep Drowz Guardian running smoothly, install the latest Pi Operating System on an SD card from the Raspberry Pi website. We will then attach the SD card to the Raspberry Pi 4 Model B as the motherboard's system storage, build the camera modules and alarm buzzer. To secure them, we will solder the buzzer in GPIO. We will connect screens, keyboards, and mice via HDMI and USB as vital coding tools. After finishing, we will program in Python, employing 68 key points of facial landmarks for eye-detection vision. Our company will give programmers a checklist to record code outcomes for future development.

5.1.5 Coding

Once everything is complete, we will begin programming in Python language by using 68 key points facial landmarks as an eye-detection vision technique in OpenCV. Road Guard

Technologies will also provide programmers with a checklist to record all code execution results for future reference research and development.

5.1.6 Testing Product Quality

We will evaluate product quality thoroughly after assembly. Designed functional, reliability, and performance tests in this section, including tests to verify alarm buzzer responsiveness and accuracy and tests to ensure buzzer reliability sounds when the system detects drowsiness while wearing sunglasses or in a dim environment. In case of issues, the programmer will diagnose and troubleshoot hardware components, update and upgrade software using commands, software, and hardware configurations, or record to give customers the best product.

5.1.7 Final Inspection

Road Guard Technologies will conduct a few aspects of inspection during the final inspection phase, including functionality, safety, and performance inspection. The technician will test the accuracy of Drowz Guardian's eye-detection technology and buzzer. In addition, we will inspect Drowz Guardian's stability to avoid it falling while driving, which could lead to dangerous circumstances.

5.1.8 Packaging

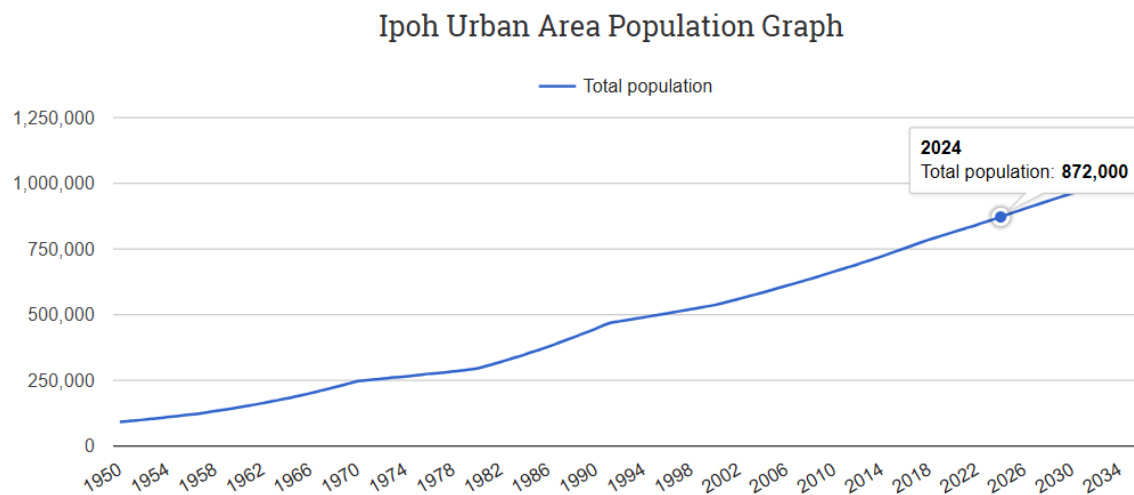
Our packaging process has primary, secondary, and tertiary stages of handling and dispatching our Drowz Guardian product safely. The primary packing begins with securely wrapping each Drowz Guardian unit for transport. Secondary packing uses larger boxes and bubble wrap to protect the individually wrapped units. Tertiary packaging involves arranging finished products for storage in our warehouse. Each box at this step is labeled with a series number to facilitate inventory tracking. This systematic strategy ensures that our products are protected at all stages, from packaging to delivery, maintaining the highest integrity and high standards until they reach customers.

5.1.9 Store in Warehouse

Drowz Guardian are properly stored in our warehouse after final inspection, packaging, and labelling. Our central warehouse stores Drowz Guardian boxes, which are sealed and branded with series numbers for convenient tracking. Inventory management systems track stock levels and movement in real time, reducing stock shortages and surplus inventory. We maintain Drowz Guardian in a safe and controlled environment until delivery, proving our commitment to high-quality products and excellent service.

5.2 Availability of Qualified Labour Pool

Figure 5.2: Ipoh Urban Area Population Graph



Source: PopulationStat. (2024). *Ipoh, Malaysia Population.*
<https://populationstat.com/malaysia/ipoh>

Our manufacturing factory will be in Ipoh, Perak, with a population of 872,000 in 2024 (PopulationStat, 2024). High-quality Ipoh schools include Quest International University Perak, Sunway College Ipoh, and TAJ International College. University of Tunku Abdul Rahman (UTAR) and Tunku Abdul Rahman University of Management and Technology (TARUMT) in Kampar, as well as Universiti Teknologi Petronas (UTP) and UiTM in Sri Iskandar, Perak, offer technology courses near Ipoh.

Pusat Aspirasi Anak Perak (PASAK) provides Technical and Vocational Education and Training (TVET), is also located in Ipoh, Perak (Pasak, n.d.), it will provide a large labour pool in technology and innovation, allowing Road Guard Technologies to hire skilled talent to grow the business.

Table 5.1 Labour Pool of Service

Job Description	Number of Workers Required
<p>Job Title: Production Workers</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> • Assemble the components according to the instructions and specifications. • Inspect material quality and accuracy before production. • Follow safety protocols and guidelines in workplace. <p>Qualifications:</p> <ul style="list-style-type: none"> • High school diploma or equivalent. • Previous production or manufacturing experience is preferred but not necessary. • Strong attention to detail and accuracy in work. • Be willing to learn. <p>Skills:</p> <ul style="list-style-type: none"> • Manual skill: Ability using tools and building components. • Detail-oriented: Thoroughly inspect materials and products for quality. • Time management: Task completion within set deadlines. • Organizational abilities include the ability to organize inventory and have a tidy environment. 	<p>5</p>

<p>Job Title: Programmer</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> • Test and debug code to guarantee appropriate functionality and identify issues. • Document code and technical specs for future use and maintenance. • Participate in code reviews and offer constructive feedback to peers. <p>Qualifications:</p> <ul style="list-style-type: none"> • Bachelor's degree in computer science, software engineering, or related field. • Proven programming or software development experience. • Proficient in Java, C++, and Python programming languages. <p>Skills:</p> <ul style="list-style-type: none"> • Proficient in one or more programming languages. • Data structures, algorithms, and object-oriented design knowledge. • Good debugging and troubleshooting skills. • Ability to learn new technologies and languages as needed. 	1
<p>Job Title: Salesperson</p> <p>Responsibilities:</p> <ul style="list-style-type: none"> • Conduct pre-sales consultations to identify customer needs, requirements, and pain points. • Offer expert information on product characteristics and capabilities during pre-sales. • Work with technicians to address consumer inquiries about product information and compatibility. • Follow up with customers. <p>Qualifications:</p> <ul style="list-style-type: none"> • Experience in sales, preferably in a related area. • Excellent communication and interpersonal skills. 	2

- Strong problem-solving and analytical skills.
- Open to travel and flexible work hours.

Skills:

- Ability to consult with clients to uncover their needs and provide tailored solutions.
- Building and maintaining great connections with consumers and colleagues.
- Active listening involves identifying and addressing client needs.
- Able to adapt sales techniques to consumer feedback and market conditions.

Source: Developed for the research

5.3 Physical Plant

The administrative office and manufacturing plant are located at 34, Persiaran Perindustrian Pengkalan 12, Lahat, Ipoh, Perak. Business premises rent costs RM 2,500 per month.

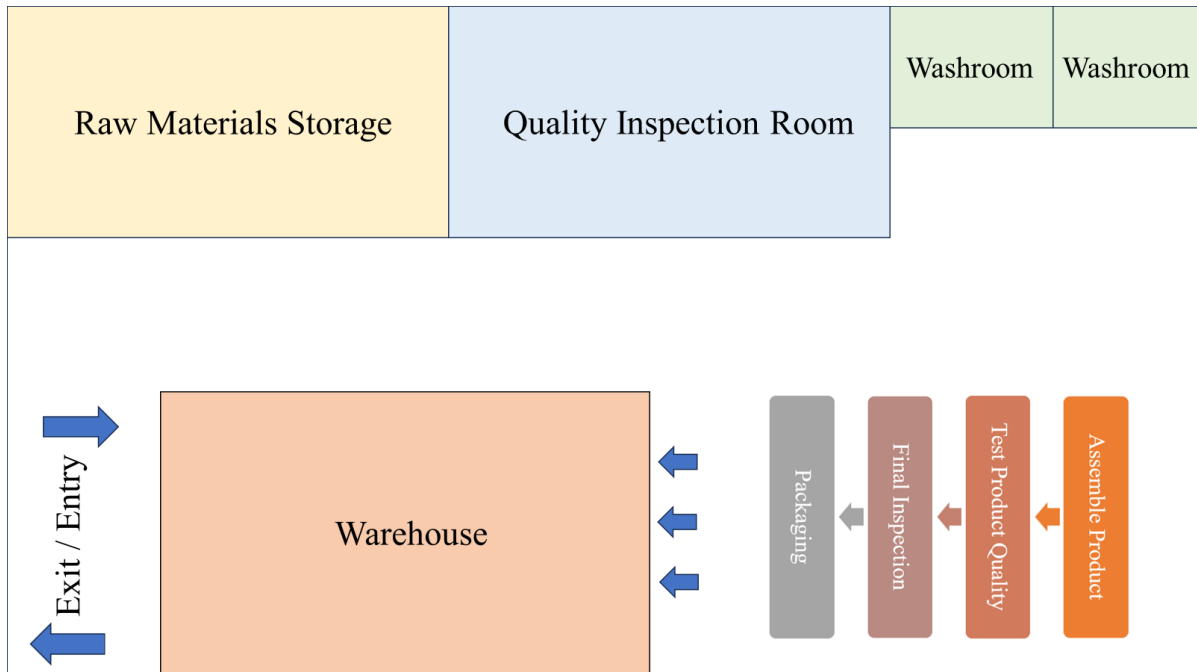
Figure 5.3: Location of Road Guard Technologies Sdn. Bhd.



Source: Google. (n.d.). [Google map of 34, Persiaran Perindustrian Pengkalan 12, Lahat, Ipoh, Perak]. Retrieved January 22, 2024, from <https://www.google.com/maps/dir//34,+Persiaran+Perindustri+Pengkalan+12,+Kawasan+Perindustrian+Pengkalan,+31650+Ipoh,+Perak/@4.5357082,101.051847,17z/data=!4m8!4m7!1>

m0!1m5!1m1!1s0x31cae93924c665c3:0x4cdf7401c1ee7472!2m2!1d101.0544219!2d4.5357082?entry=ttu

Figure 5.4: Ground Floor: Manufacturing Plant Map



Source: Developed for the research

Figure 5.5: Ground Floor: Manufacturing Plant Design



Source: Developed for the research

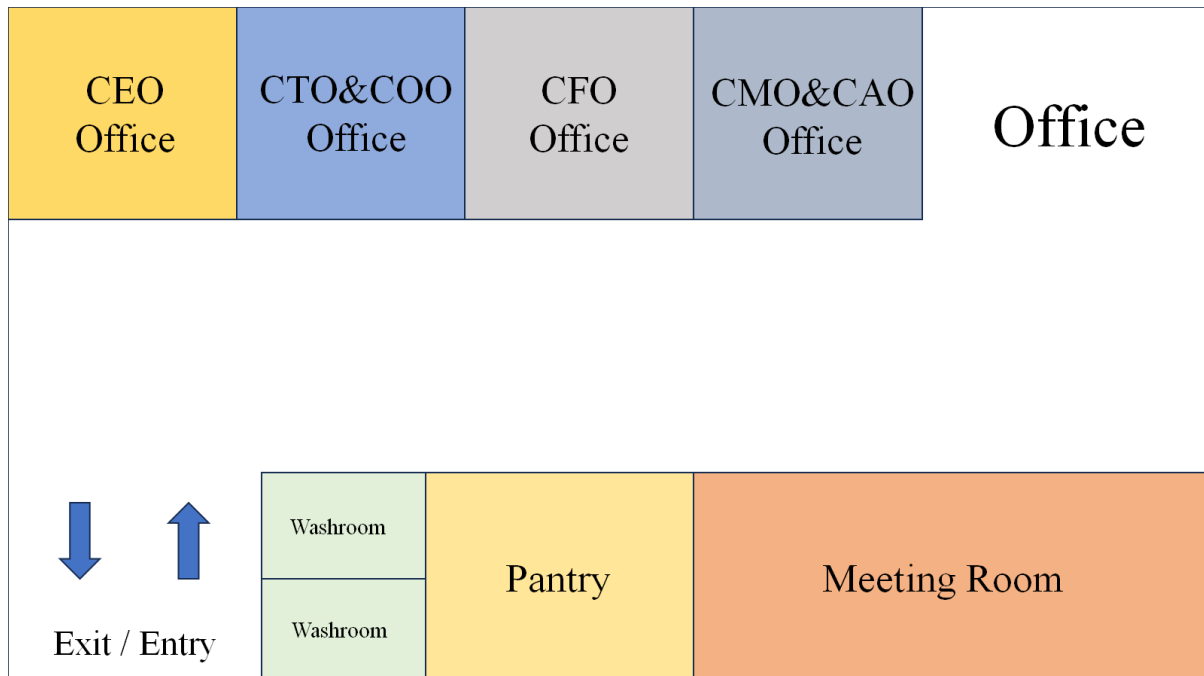
Figure 5.4 and 5.5 show our manufacturing plant structure, which exemplifies an approach to both efficiency and safety, with a strong emphasis on optimizing material flow and reducing

potential risks. The strategic placement of the raw material storage area nearest to the entry serves two purposes: it not only speeds up the unloading process from incoming trucks but also reduces the possibility of accidents, such as items falling apart during transfer.

After initial quality testing, our expert quality control crew transports the raw materials to the nearby quality inspection room for inspection. Materials are moved to the workshop for product assembly after quality verification. Specific stations are set up throughout the workshop for each manufacturing stage, from component integration to final assembly. This planned architecture boosts workflow and team collaboration. A final inspection ensures that all components fulfill specifications and standards after assembly and testing.

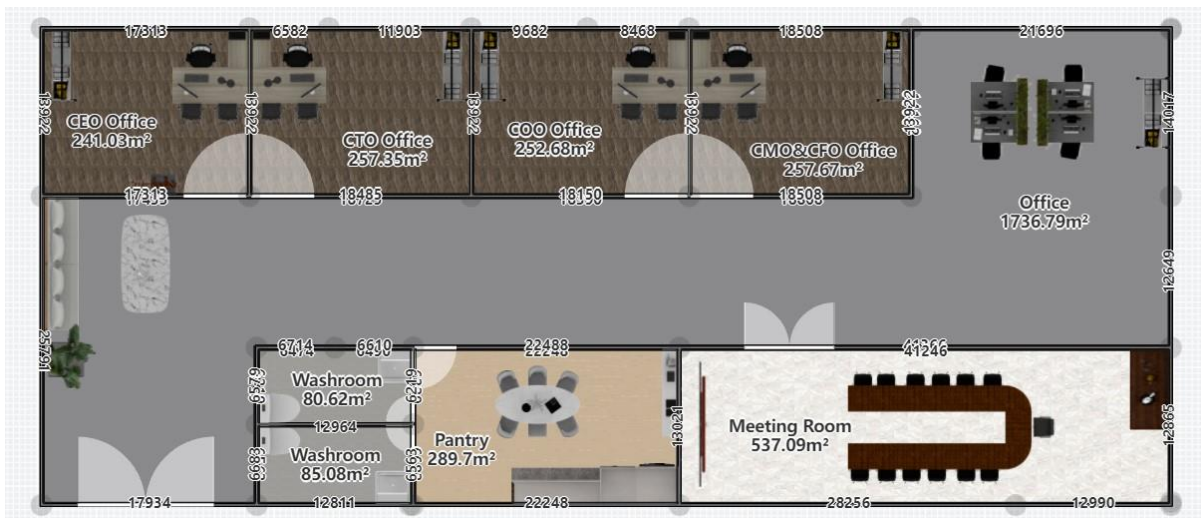
Finally, finished goods are efficiently transported to the warehouse for distribution. The warehouse includes two entrances for accepting finished goods from the workshop and putting them onto trucks for delivery. Divided access and outflow points optimize warehouse traffic flow, reducing overcrowding and simplifying operations.

Figure 5.6: First Floor: Administrative Office Map



Source: Developed for the research

Figure 5.7: First Floor: Administrative Office Design



Source: Developed for the research

Figures 5.6 and 5.7 show the arrangement of our administration office for our team. It encourages strategic planning and focused work with the CEO, CTO, COO, CMO, and CFO offices. Worker collaboration is also encouraged in an open-plan office. Modern meeting rooms facilitate communication and decision-making, while a pantry area allows for breaks and socializing. Our design prioritizes efficiency, creativity, and employee well-being to create an engaging and supportive workplace.

5.4 Machinery and Equipment

5.4.1 Production Machineries and Equipment

Table 5.2: Production Machineries and Equipment in Road Guard Technologies Sdn. Bhd.

Production Machineries and Equipment		
Particulars	Quantity (units)	Price per unit (RM)
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	2	1099
Stanley Phillips; Posidrive; Slotted Screwdriver Set, 10-Piece	7	120
Packaging equipment	2	1200

Workbenches	10	800
Sunglasses for testing	5	100
T26D SUGON T26 Precision Lead-free Electric Soldering Station	5	515
Fire Extinguisher 9kg ABC Dry Powder	5	138
3 In 1 Foldable Floor Scrub Brush Broom And Dustpan Set	3	40
AFIAH Plastic Chair	10	29
Heavy duty rack 200KGS/ per level	10	97
Heavy duty industrial container	20	20
Acer Nitro VG240YU 60.5 cm (23.8") 2560 x 1440 pixels Quad HD LED Black	8	460
Logitech MK220 Wireless Keyboard and Mouse Combo	8	65
Raspberry Pi Micro-HDMI to standard HDMI, 2m Black	8	45
Dell inspiration 15 laptop 12th Generation Intel® Core™ i3-1215U	2	1999
Xiaomi Mi 360 Home security Camera CCTV 1080P	4	105
Safety Shoes with Steel Cap and Steel Sole Low Cut with Anti-Fire Leather	6	20
Deli Fingerprint Attendance Machine Time Recorder	1	129
First Aid Kit Box 19 items Inc Paracetamol	1	60
Fabric Gloves (1 dozen)	2	10
FELTON Trash Bin 22 Gallon With Flip Top Lid FDB 879 (85L)	1	38

5.4.2 Office Machineries and Equipment

Table 5.3: Office Machineries and Equipment in Road Guard Technologies Sdn. Bhd.

Office Equipment		
Particulars	Quantity (units)	Price per unit (RM)
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	2	1099
Office table	8	600

Office Chair	9	250
Canon Pixma E470 printer	1	329
Conference Table	1	1000
File cabinets	8	200
ViewSonic PA503W WXGA DLP projector	1	1510
Whiteboard	1	500
Diamond Cuckoo Hot & Cold Water Dispenser	1	1180
Fire Extinguisher 9kg ABC Dry Powder	2	138
NEC AT-40 Single Line Telephone	6	65
Hotdeal Meki 120D 72" x 96" (6x8) Motorized Projector Screen	1	646
Meeting Chair	9	300
Logitech MK220 Wireless Keyboard and Mouse Combo	6	65
Dell Inspiron 15 laptop 12th Generation Intel® Core™ i3-1215U	2	1999
Acer Nitro VG240YU 60.5 cm (23.8") 2560 x 1440 pixels Quad HD LED Black	6	460
Xiaomi Mi 360 Home security Camera CCTV 1080P	2	105
Pensonic 20L Microwave Oven PEN-PMW2005	1	243
Sharp 50L Minibar Fridge SJM60MK	1	489
Wooden Rectangle Dining Table 120x70cm with 4 Chairs	1	590
COMIX 4 Section File Holder	8	20
PCN Plastic Waste Paper Basket	8	3
FELTON Trash Bin 22 Gallon With Flip Top Lid FDB 879 (85L)	1	38

5.5 Names of Raw Materials Suppliers

Table 5.4: Names of Raw Materials Suppliers in Road Guard Technologies Sdn. Bhd.

Raw Materials	Suppliers
	Cytron Technologies Sdn Bhd Tel: +604 48 0668

<p>Raspberry Pi 4 Model B (4GB)</p>	<p>Email: support@cytron.io Address: 1, Lorong Industri Impian 1 Taman Industri Impian, 14000 Bukit Mertajam, Pulau Pinang, Malaysia.</p> <p>Autobotic Sdn Bhd Tel: +603 4031 1233 Email: quotation@autobotic.com.my Address: No.46-1 (1st Floor, Plaza KLTS Block C, Jln Gombak, Setapak, 53000 Kuala Lumpur, Federal Territory of Kuala Lumpur</p> <p>Mouser Electronics Tel: +604 299 1302 Email: malaysia@mouser.com Address: E-gate, 1-3-1, 1, Lebu Tunku Kudin 2, 11700 Gelugor, Pulau Pinang.</p>
<p>5MP Night Vision Camera for Raspberry Pi (RPI-CAMERA-NV)</p>	<p>Cytron Technologies Sdn Bhd Tel: +604 48 0668 Email: support@cytron.io Address: 1, Lorong Industri Impian 1 Taman Industri Impian, 14000 Bukit Mertajam, Pulau Pinang, Malaysia.</p> <p>SGRobot.my Tel: +6016- 2956886 Email: admin@sgrobot.my Address: - (Online Platform)</p>
	<p>Kingston Technology Tel: 1800-812078 Email: kingston.com/support</p>

<p>32GB- Kingston Micro SD Card Class 10 100MB/s</p>	<p>Address: - (Online Platform)</p> <p>Autobotic Sdn Bhd Tel: +603 4031 1233 Email: quotation@autobotic.com.my Address: No.46-1 (1st Floor, Plaza KLTS Block C, Jalan Gombak, Setapak, 53000 Kuala Lumpur, Federal Territory of Kuala Lumpur.</p>
<p>DC3-24V SFM-20B Active Piezoelectric Buzzer</p>	<p>Robotedu.my Tel: +6011-69691991 Email: robotedu.my@gmail.com Address: 3-g, Jalan Kajang Impian 1/2, Taman Kajang Impian, 43650 Bandar Baru Bangi, Selangor.</p> <p>Cytron Technologies Sdn Bhd Tel: +604 48 0668 Email: support@cytron.io Address: 1, Lorong Industri Impian 1 Taman Industri Impian, 14000 Bukit Mertajam, Pulau Pinang, Malaysia.</p> <p>Autobotic Sdn Bhd Tel: +603 4031 1233 Email: quotation@autobotic.com.my Address: No.46-1 (1st Floor, Plaza KLTS Block C, Jln Gombak, Setapak, 53000 Kuala Lumpur, Federal Territory of Kuala Lumpur.</p>
	<p>KDC Auto Industrial Co., LTD Tel: 886-6-2539099</p>

<p>Customized Rear Mirror</p>	<p>Email: kdcmirror@gmail.com Address: No. 116, Zheng Nan 6th St., Yong Kang Dist., Tainan City 71044, Taiwan.</p> <p>Sunway Autoparts Tel: +86 755 8253-8856 Email: info@sunwayautoparts.com Address: Room 3014, Tower 3, Excellence Century Center, Fuhua 3rd Road, Futian District, Shenzhen, 518048, Guangdong, China.</p>
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5.6 Quality Control

5.6.1 Setting Own Quality Standards

Road Guard Technologies has established our own quality benchmarks within the organization to optimize customer satisfaction. For instance, we ensure that all our products have sufficient solidity to avoid detachment. In addition, we will ensure that all the components of our product are securely fastened and that the case also seals tightly.

5.6.2 Supplier Selection

We have seven primary suppliers, and we research and communicate with them before placing orders to verify their reliability. We also select multiple suppliers for each raw materials to prevent any supply chain disruptions, price fluctuations, quality challenges, and logistical challenges could arise when relying completely on a single supplier. We seek to get raw materials to our standards so we can make high-quality items for consumers. We consistently maintain reliable suppliers who supply the highest quality components while deselecting those who cannot uphold such requirements.

5.6.3 Incoming Quality Inspection

We intend to perform three quality checks, beginning with the incoming quality inspection when we receive the raw materials from the supplier. Throughout the quality inspection, the technician team will carefully check the components' status and condition to ensure no defects in the raw materials. If any issues occur, the technician team will notify the supplier immediately.

5.6.4 Intermediate Quality Inspection

An intermediate quality inspection will be carried out during the production process. This involves assessing the functionality of the components, including the camera preview and alarm sound; our programmer will run a few types of commands to ensure the components function well without any errors and issues.

5.6.5 Final Quality Inspection

The final quality inspection will be carried out once our products are coded and assembled. The technician from our company will evaluate our product in various conditions during this quality inspection, including when the user is wearing sunglasses and in a dim environment. The technical team will also have a final check on eye-tracking accuracy.

5.6.6 Employee Training

We will conduct employee training to provide our employees with a comprehensive understanding of the company's quality standards and the precise requirements that products must satisfy. Training programs will implement so that employees can acquire problem-solving skills. Since coding is our primary task, employees must possess problem-solving abilities, including pinpointing bugs in the code.

5.6.7 Labelling and Packaging Quality Control

Packaging quality control is prioritized because we want to give the highest quality product to our customers. Therefore, we divided packaging into primary, secondary, and tertiary. The primary packaging refers to the package we use to carry our product. Next, we use larger boxes

to store Drowz Guardian and wrap it in bubble wrap to protect it. Finally, tertiary packaging includes volumes of Drowz Guardian that are packaged and stored at the warehouse. Each box will have a series number to track inventory and be organized.

5.7 Customer Support

5.7.1 Various Communication Channel Types

Road Guard Technologies offers multiple communication methods for seamless customer service. The first communication channel is a 24/7 customer service hotline with timely responses. We also provide WhatsApp messaging, automated live chat on the official website, and email to get more information. These platforms include pre-sales advice, such as our automated live chat on our website for Q&As. They can live chat with our customer support or use WhatsApp to get more information.

5.7.2 Social Media Support

We maintain social media platforms like Facebook, X (previously Twitter), TikTok, and Instagram to support customers as social media becomes more critical and widespread. Customer support requests can be sent via social media platforms using direct messages, mentions, and comments, offering a familiar and efficient line of communication. It allows our company to address concerns openly and provide customers with after-sales service via customer comments and reviews on social media platforms.

5.7.3 Physical Support

While the Drowz Guardian is plug-and-play, Road Guard Technologies recognizes that not all customers are comfortable installing it. Therefore, we offer physical support to ensure all consumers use our product. Pre-sales consultations help consumers make buying selections in addition to installation assistance. After-sales service includes troubleshooting, technical support, and maintenance or repair.

6.0 MANAGEMENT TEAM

Road Guard Technologies Sdn. Bhd. was founded by 4 founders who are Ms Yong Chee Yun, Mr Meah Chee Yong, Mr Chen Kai Jun, and Mr Pang Cheng Yao. Each founder has a particular job in this organisation and plays a vital role in managing and operating the company.

Figure 6.1 Management Team of Road Guard Technologies Sdn. Bhd.



6.1 Management Team of Road Guard Technologies Sdn. Bhd.

6.1.1 Chief Executive Officer (CEO)

Ms. Yong Chee Yun

Ms Yong is one of the founders of Road Guard Technology Sdn Bhd, and she holds the position of Chief Executive Officer (CEO). She recently completed her undergraduate studies at the University Tunku Abdul Rahman (UTAR), earning a Bachelor of Business Administration (Hons) Entrepreneurship. She is an opportunity chaser who is perpetually looking for a chance to launch her company. Additionally, Ms. Yong excels at communication and organisation-wide

management. In addition to facilitating communication and coordination among several departments, she is tasked with consolidating investor funds. Consequently, the organisation can function efficiently not solely in terms of finances but also in terms of operations. Ms Yong must periodically organise meetings to monitor the project's status and development. She is exceptionally adept at guiding the group through various phases and providing them with direction. Although Ms Yong is an effective decision-maker, she prefers to seek the opinions of other officers before reaching a significant resolution.

6.1.2 Chief Marketing Officer (CMO) & Chief Administrative Officer (CAO)

Mr. Pang Cheng Yao

Mr Pang Cheng Yao, also one of the founders, has been appointed the company's Chief Marketing Officer (CMO). He is a fresh graduate from the UTAR, earning a Bachelor of Business Administration (Hons) in Entrepreneurship. He exhibits a comprehensive comprehension of both marketing and management. He possesses exceptional analytic, negotiation, and persuasion skills. He has an in-depth understanding of market trends and customer demand. During his internship at a company specialising in marketing-related tasks, he gained hands-on experience working with target customers. Mr Pang is an ideal candidate for this position due to the market penetration and profit generation potential he could generate for the organisation by utilising his expertise and experience.

Not only that, but Mr Pang also holds the Chief Administrative Officer (CAO) position of the Road Guard Technology Sdn Bhd. He has extensive experience dealing with paperwork and administration since he studied at university.

6.1.3 Chief Technology Officer (CTO) & Chief Operation Officer (COO)

Mr. Meah Chee Yong

Mr Meah, also among the founders, has been designated as the Road Guard Technology Sdn Bhd's Chief Technology Officer (CTO). He possesses knowledge about the innovation of technology things and serves the role of the organisation's technology strategic visionary. His role entails the coordination of technological endeavours with the overarching business goals, guaranteeing that the product's technology bolsters the organisation's enduring expansion and viability. His responsibility is to supervise the design and execution of product technologies

that fulfil the requirements of the organisation. This involves ensuring the scalability, dependability, and security of the technology infrastructure, architecture, and systems through management. He also needs to collaborate extensively with cross-functional groups, such as operations, product management, and engineering, to ensure the successful completion of the product from conception to deployment.

Mr Meah is also good at executing the mission and ensuring the operation is on track. His primary responsibility as COO revolves around operational oversight. He has been assigned to convert the organisation's strategic vision into practical plans and operational strategies. He utilises basic operation management knowledge. This process ensures that all departments and functions align with the overarching objectives, promoting organisational coherence and synergy. Moreover, the role of the COO is crucial in facilitating organisational innovation and change. In a time marked by swift technological progress and shifting market forces, adjusting and generating different ideas is essential for maintaining long-term expansion.

6.1.4 Chief Financial Officer (CFO)

Mr. Chen Kai Jun

Currently, Mr Chen holds the Chief Financial Officer (CFO) position at Road Guard Technologies Sdn. Bhd. He completed his Bachelor of Administration (HONS) in the Entrepreneurship program at UTAR. Additionally, he is a co-founder of this organization. Furthermore, Mr Chen was the club's treasurer and was responsible for the finances. Hence, he is also experienced in handling an organization's finances. Mr Chen also shows interest in and excitement about managing the company's finances.

6.2 Key Professional Service Providers

6.2.1 Law Firm

Company Name: Lee Hishammuddin Allen & Gledhill

Address: Level 6, Menara 1 Dutamas, 1, Jln Dutamas 1, Solaris Dutamas,
50480 Kuala Lumpur, Federal Territory of Kuala Lumpur

Contact Number: 03-6208 5888

Email Address: enquiry@lh-ag.com

6.2.2 Accounting Firm

Company Name: Douglas Loh & Associates

Address: 3.01, 3rd Wisma Mpl, 3, Jalan Raja Chulan, Bukit Ceylon,
50200 Kuala Lumpur, Wilayah Persekutuan

Contact Number: 03-2145 9566

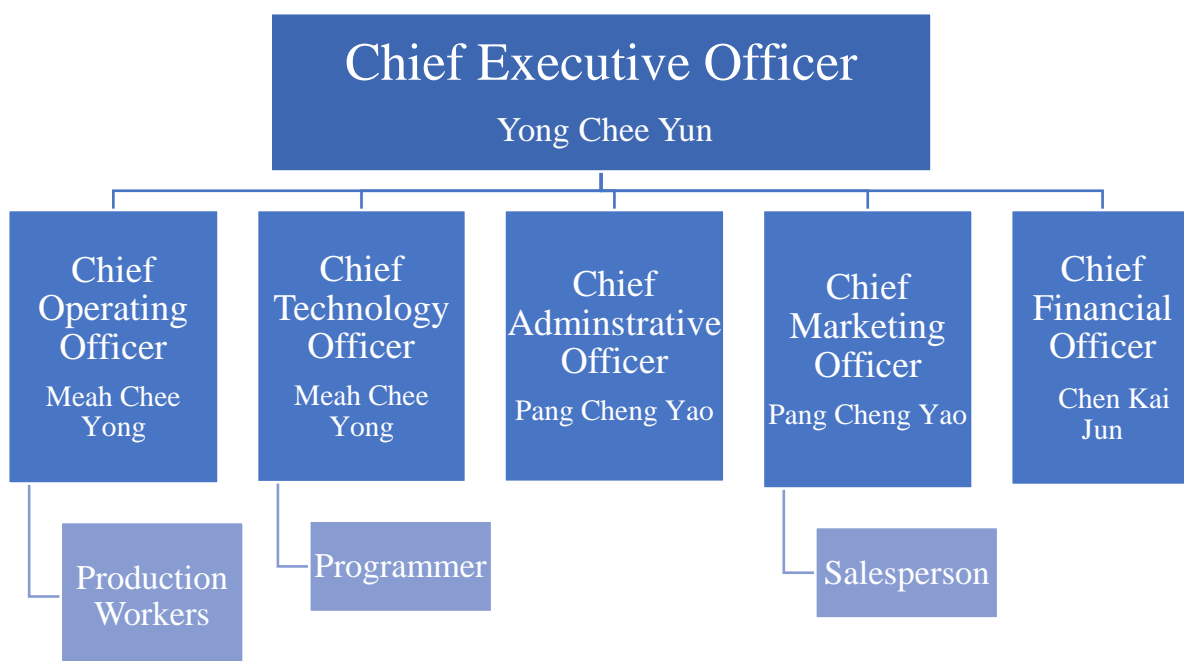
Email Address: Audit@douglasloh.com

7.0 COMPANY STRUCTURE, INTELLECTUAL PROPERTY AND OWNERSHIP

7.1 Organizational Structure

7.1.1 Organization Chart

Figure 7.1: Organization Chart of Road Guard Technologies Sdn. Bhd.



7.1.2 Description of Organizational Structure

Chief Executive Officer (CEO)

The CEO serves as a leader for the whole organization. The CEO is tasked with developing and implementing the organization's strategic vision. The CEO strategically determines how the organization will expand and endure by capitalizing on market trends, industry insights,

and internal capabilities. Moreover, she must make essential decisions controlling the company's life. As the ultimate decision-maker, the CEO must assess many variables, risks, and viewpoints to formulate rational assessments consistent with the organization's goals. Furthermore, she must find the investors or funds to expand the company. Hence, the company's size can grow by using the funds.

Chief Operating Officer (COO)

The primary responsibility of the COO is to deal with operational oversight. The individuals in question have converted the organization's strategic vision into practical plans and active strategies. This process ensures that all departments and functions align with the objectives, promoting organizational coherence and synergy. In addition, effective collaboration and communication are fundamental aspects of the duties of a COO. They function as an intermediary connecting various tiers of management, promoting effective communication channels, and cultivating a cooperative workplace atmosphere. Additionally, he is accountable for human resources management. Employees are critical to the success of an organization; therefore, fostering a skilled labor force is essential for long-term expansion.

Chief Technology Officer (CTO)

The main duty of the CTO is to supervise the development and implementation of technology solutions that meet the organization's requirements. This involves ensuring the scalability, dependability, and security of the technology infrastructure, architecture, and systems through management. The CTO collaborates extensively with cross-functional groups, such as operations, product management, and engineering, to ensure the successful completion of projects from inception to deployment. The CTO must also possess effective leadership and communication abilities to motivate and inspire their teams, cultivate an environment that encourages ongoing growth and improvement, and ensure that all members work together towards shared objectives. Moreover, he is also responsible for procuring the components used in the product.

Chief Marketing Officer (CMO)

The CMO is responsible for developing an all-encompassing marketing strategy following the overarching business objectives of the organization. This entails conducting market research, analyzing consumer trends, and identifying target audiences for strategic decision-making. The CMO plays a pivotal role in the management of the brand identity and reputation of the

organization. They ensure that all marketing channels and touchpoints feature the same brand positioning, messaging, and visual identity through their supervision of their development. The driving force behind customer acquisition and retention initiatives is a fundamental duty of the CMO. This includes the development and execution of marketing campaigns, lead generation strategies, and customer engagement programs to attract and retain customers.

Chief Financial Officer (CFO)

The CFO directs the financial planning, including budgeting, forecasting, and analysis. In close collaboration with other executives and department leaders, they formulate strategic financial plans based on the organization's goals and objectives. He also needs to ensure that he is preparing accurate and timely financial reporting. The CFO must oversee the organization's capital structure, including debt and equity financing. Funding options are assessed, terms with lenders or investors are negotiated, and the capital blend is optimized to facilitate the expansion and investment endeavours of the organization while reducing expenses and risks.

Chief Administrative Officer (CAO)

The administrative functions of an organization are under the supervision and coordination of the CAO. They contribute to formulating business and strategic plans, establish objectives for individual managers and departments, work with peers to execute policies and devise enhancements, supervise the allocation of resources and the budget, and offer direction to subordinate employees. In addition to resolving potential issues and ensuring timely reporting to senior management or regulatory agencies, a CAO may provide support in fundraising, among other responsibilities. CAO also needs to analyse audit reports and determine improvements to departmental workings.

7.2 Legal Structure

7.2.1 Legal Form of Organization

The business structure of Road Guard Technologies Sdn Bhd is a private limited company. In Malaysia, it is the most popular form of business entity. A private company is regarded as an independent legal entity. It can sue or be sued, purchase or sell property, conduct transactions

in its name, and possess perpetual succession. In a limited liability structure, the personal liability of shareholders for the debts of the company is waived. A shareholder's liability is restricted to the outstanding balance on their shares unless they furnish a personal guarantee for a loan extended to the company. Hence, it could protect the rights and benefits of the shareholders directly.

Table 7.1: Shareholders of Road Guard Technologies Sdn. Bhd.

Name	Position	Capital Contributed (RM)	Capital Contributed (%)
Yong Chee Yun	CEO	37,500	25
Pang Cheng Yao	CMO & CAO	37,500	25
Meah Chee Yong	CTO & COO	37,500	25
Chen Kai Jun	CFO	37,500	25
CRADLE CIP SPARK		150,000	-
Total		300,000	100

Source: Developed for the research

7.3 Intellectual Property

7.3.1 Trademark

Following the Trademarks Act 1976, Road Guard Technologies Sdn. Bhd. intends to register its trademark with the Intellectual Property Corporation of Malaysia (MyIPO) to safeguard its name, logo design, and other distinctive identifiers. It could prevent rivals or businesspeople from attempting to replicate or mimic our organization's brand for financial gain. A trademark refers to any illustrative sign that could differentiate one organisation's products from those of another. The trademark registration remains in effect and may be renewed every ten years from the date of application.

7.3.2 Patent

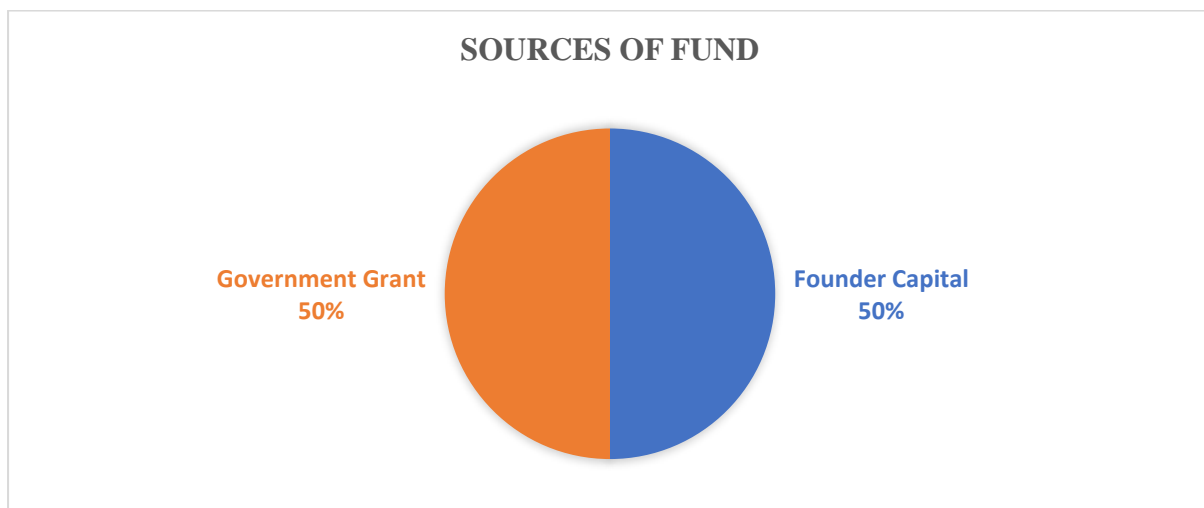
Furthermore, Road Guard Technologies Sdn Bhd will also register its product's patent with the Intellectual Property Corporation of Malaysia (MyIPO). A patent is an exclusive entitlement given to an inventor for an invention, which may take the form of a product or a process presenting a novel approach to performing a task or a technical resolution to an issue. The patent we possess, entitled "Design of Microsleep Preventor," is an essential component of our corporate approach. The patent, which can be awarded in 2024, safeguards our groundbreaking approach to the design and production of objects, thereby providing us with a notable edge over our competitors. Patent protection lasts for twenty years from the date of filing. Patents could protect the invention of the Road Guard Technologies Sdn. Bhd. from being imitated by other competitors.

8.0 FINANCIAL PLAN

This section determines the sources, amount, and the uses of funds. Pro forma financial statements are prepared to indicate the economic feasibility of the business plan.

8.1 Capital Requirements for the Next Five Years

Pie Chart 8.1: Sources of Fund For Road Guard Technologies Sdn. Bhd.



Source: Developed for the research

Total fund= RM150,000+ RM150,000= RM300,000

Funding will come from the founders and government grants (CRADLE). Each of the founders will contribute RM37,500 to the business, in total all the founders will contribute RM150,000. On the other hand, we will be planning to apply for a government grant, known as CIP SPARK, which is a grant of up to RM150,000 from CRADLE CIP SPARK. CIP SPARK is a conditional government grant, one of the conditions of which is that the recipient must reimburse the amount paid.

In short, we will have a total start-up fund of RM 300,000 from contribution of founders and government grant.

8.1.1 Uses of Funds - Start-up Cost

Table 8.1: Start-up Costs of Road Guard Technologies Sdn. Bhd.

Start-up Cost		
Particulars	Table	Cost (RM)
Assets		
Office Equipment	8.3	28,281
Machinery & Production Equipment	8.4	28,328
Total Asset		56,609
Expenses		
Sales and Marketing Cost	8.5	23,500
General Expenses	8.6	11,512
Administrative Expenses	8.7	9,984
Total Expenses		44,996
Total Start-up Cost		101,605

Table 8.2: Company's Start-up Cost Available

Start-up Cost Available	
	RM
Funding from Founders	150,000
Funding from Government Grant (CRADLE CIP SPARK)	150,000
(-) Total Start-up Cost	(101,605)
Start-up capital available	198,395

Table 8.3: Office Equipment Costs

Office Equipment Costs			
Particulars	Quantity (units)	Price per unit (RM)	Total (RM)
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	2	1,099	2,198
Office table	8	600	4,800
Office Chair	9	250	2,250
Canon Pixma E470 printer	1	329	329
Conference Table	1	1,000	1,000
File cabinets	8	200	1,600
ViewSonic PA503W WXGA DLP projector	1	1,510	1,510
Whiteboard	1	500	500
Diamond Cuckoo Hot & Cold Water Dispenser	1	1,180	1,180
Fire Extinguisher 9kg ABC Dry Powder	2	138	276
NEC AT-40 Single Line Telephone	6	65	390
Hotdeal Meki 120D 72" x 96" (6x8) Motorized Projector Screen	1	646	646
Meeting Chair	9	300	2,700
Logitech MK220 Wireless Keyboard and Mouse Combo	6	65	390
Dell Inspiron 15 laptop 12th Generation Intel® Core™ i3-1215U	2	1,999	3,998
Acer Nitro VG240YU 60.5 cm (23.8") 2560 x 1440 pixels Quad HD LED Black	6	460	2,760
Xiaomi Mi 360 Home security Camera CCTV 1080P	2	105	210
Pensonic 20L Microwave Oven PEN-PMW2005	1	243	243
Sharp 50L Minibar Fridge SJM60MK	1	489	489
Wooden Rectangle Dining Table 120x70cm with 4 Chairs	1	590	590
COMIX 4 Section File Holder	8	20	160

PCN Plastic Waste Paper Basket	8	3	24
FELTON Trash Bin 22 Gallon With Flip Top Lid FDB 879 (85L)	1	38	38
Total			28,281

Table 8.4: Machinery & Production Equipment Costs

Machinery & Production Equipment Cost			
Particulars	Quantity (units)	Price per unit (RM)	Total (RM)
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	2	1,099	2,198
Stanley Phillips; Posidrive; Slotted Screwdriver Set, 10-Piece	7	120	840
Packaging equipment	2	1,200	2,400
Workbenches	10	800	8,000
Sunglasses for testing	5	100	500
T26D SUGON T26 Precision Lead-free Electric Soldering Station	5	515	2,575
Fire Extinguisher 9kg ABC Dry Powder	5	138	690
3 In 1 Foldable Floor Scrub Brush Broom And Dustpan Set	3	40	120
AFIAH Plastic Chair	10	29	290
Heavy duty rack 200KGS/ per level	10	97	970
heavy duty industrial container	20	20	400
Acer Nitro VG240YU 60.5 cm (23.8") 2560 x 1440 pixels Quad HD LED Black	8	460	3,680
Logitech MK220 Wireless Keyboard and Mouse Combo	8	65	520
Raspberry Pi Micro-HDMI to standard HDMI, 2m Black	8	45	360

Dell Inspiron 15 laptop 12th Generation Intel® Core™ i3-1215U	2	1,999	3,998
Xiaomi Mi 360 Home security Camera CCTV 1080P	4	105	420
Safety Shoes with Steel Cap and Steel Sole Low Cut with Anti-Fire Leather	6	20	120
Deli Fingerprint Attendance Machine Time Recorder	1	129	129
First Aid Kit Box 19 items Inc Paracetamol	1	60	60
Fabric Gloves (1 dozen)	2	10	20
FELTON Trash Bin 22 Gallon With Flip Top Lid FDB 879 (85L)	1	38	38
Total			28,328

Table 8.5: Sales & Marketing Tools Costs

Sales and Marketing Costs	
Particulars	Total (RM)
Digital Advertising fee	8,000
Referral Marketing discount	10,000
Free Prizes (marketing campaign)	500
Early Bird Promotion (first year)	5,000
Total	23,500

Table 8.6: General Expenses

General Expenses			
Particulars	Months/ Quantity	Cost per Month (RM)	Total (RM)
Rental deposit	2	2,500	5,000
Utilities deposit	2	3,000	6,000
Unifi WIFI- 100mbps	1	97	97
Office Supplies:			

Ik Yellow Ik Natural A4 Paper 70Gsm 80Gsm 500S	10	12.5	125
Max Stapler HD-10K	8	6.5	52
50PCS 32mm Black Metal Clip Notes Letter Paper Clip Office Bind	2	29	58
COMIX Paper Clip (200 pieces) (29mm)	1	4	4
Mynazaa-Dexin Calculator KK-800A 8-digit electronic calculator	8	9.5	76
Deli Strong Adhesive Sticky Notes Yellow 100 Sheets (76x76mm) A00353	8	1	8
Artline 70 whiteboard Marker 1.5mm (12pcs/Box) Marker Pen	1	32	32
PILOT GEL PEN WINGEL 0.5 black 1box (12pcs)	2	30	60
Total Office supplies			415
Total			11,512

Table 8.7: Administrative Expenses

Administrative Expenses			
Particulars	Quantity (unit)	Cost per unit(RM)	Total (RM)
SSM Registration Fee	1	1,000	1,000
SIRIM Registration Fee	1	1,484	1,484
Patent Registration Fee	1	5,000	5,000
Trademark Registration Fee	1	2,500	2,500
Total			9,984

8.2 Overview of Financial Projections

8.2.1 Assumption

1. The rental of the office will be remaining the same at RM 30,000 per year from year 1 until year 5.
2. We are selling our product at RM 250 to the customers, while RM 230 to retailers and wholesalers. Therefore, we do not provide any discount allowed to the retailers and wholesalers.
3. We assume the product sales volume will increase every year from year 1 until year 5, from direct sales and indirect sales.
4. Every chief and salesperson of the company does not have any commission, and in the first five year there will be no any increase of salary for all the members in the company.
5. Starting from year 1, the company will hire 2 salesperson and 5 production workers and 1 programmer, while, starting from year 3, the company will hire additional 2 salesperson and 10 workers.
6. The tax rate for the first RM150,000 of income is 15%. For income between RM150,001 and RM600,000, the tax rate is 17%. and for income above RM600,001, the tax rate is 24%. These tax rates are expected to remain unchanged for the next five years.
7. We will purchase additional 500 units of raw materials than expected sales each year to cope with more sales than expected.
8. The expected account receivable will be 5% of the indirect sales, while the allowance for doubtful debt is 3% of the account receivable.
9. The depreciation rate for all fixed asset is 10% and this rate will be assumed to remain the same from year 1 to year 5.
10. The CIP SPARK government grant is a conditional grant that needs to be reimbursed, and we plan to start reimbursing it in year 4 and settle it in year 5.
11. The expenses for WIFI are expected to be fixed at RM1,164 per year from year 1 until year 5.

Table 8.8: The Quantity of Product Direct Sales in Each Year

Direct Sales	Year 1	Year 2	Year 3	Year 4	Year 5
Total Quantity of Sales (units)	4,500	6,000	12,000	18,000	24,000
Selling Price (RM)	250	250	250	250	250
Total sales (RM)	1,125,000	1,500,000	3,000,000	4,500,000	6,000,000

Table 8.9: The Quantity of Product Indirect Sales in Each Year

Indirect Sales	Year 1	Year 2	Year 3	Year 4	Year 5
Total Quantity of Sales (units)	4,000	7,000	15,000	20,000	28,000
Selling Price (RM)	230	230	230	230	230
Total sales (RM)	920,000	1,610,000	3,450,000	4,600,000	6,440,000

According to the FMI (2023) report, the driver monitoring system (DMS) market is expected to grow steadily at a CAGR of 7.5% between 2023 and 2033. The market is expected to reach a market share of USD 9.3 billion by 2033, while the market is likely to be valued at USD 4.5 billion in 2023. For the Malaysian market, a survey was conducted on the willingness to purchase such products, and 90.4% of the respondents indicated their desire to buy. Therefore, the market for drowsiness detection devices is large enough to support these sales volumes.

In the first and second years, sales volume will be low due to a lack of customer awareness of the need for the product and the possibility that customers may be sceptical about the usefulness of the product. From the third year onwards, we expect sales to increase significantly due to increased customer awareness and positive word-of-mouth. In the following years, the drowsy detection devices market has matured. We expect a steady increase in sales volume for the following years.

8.2.2 Total Materials Cost

Table 8.10: Cost to Produce one Drownz Guardian

Components	RM
Raspberry Pi 4 Model B (4GB)	140
5MP Night Vision Camera for Raspberry Pi (RPI-CAMERA-NV)	34
Jumper Wire	1
DC3-24V SFM-20B Active Piezoelectric Buzzer	1
Customized Rear mirror	10
32GB- KINGSTON Micro SD Card Class 10 100MB/s	20
Total	206

Table 8.11: Total Material Cost

Total Material Cost			
Year	Target Production (units)	Raw Material Cost (RM)	Total (RM)
2025	9,000	206	1,854,000
2026	13,500	206	2,781,000
2027	27,500	206	5,665,000
2028	38,500	206	7,931,000
2029	52,500	206	10,815,000

Table 8.12: Packaging Cost for One Unit of Product

Packaging cost			
Particular	Quantity (units)	Price per unit (RM)	Total (RM)
Packaging box	1	0.5	0.5
Bubble Wrap	1	0.2	0.2
Total			0.7

Table 8.13: Total Packaging Cost

Total Packaging Cost			
Year	Target Production (units)	Raw Material Cost (RM)	Total (RM)
2025	9000	0.7	6,300
2026	13500	0.7	9,450
2027	27500	0.7	19,250
2028	38500	0.7	26,950
2029	52500	0.7	36,750

8.2.3 Labour Cost

Table 8.14: Employees' Salary

	Year 1		Year 2		Year 3	
	Monthly salary (RM)	Annual salary (RM)	Monthly salary (RM)	Annual salary (RM)	Monthly salary (RM)	Annual salary (RM)
Top Management						
Chief Executive Officer	3,000	36,000	3,000	36,000	3,000	36,000
Chief Technology and Operation Officer	3,000	36,000	3,000	36,000	3,000	36,000
Chief Marketing and Administrative Officer	3,000	36,000	3,000	36,000	3,000	36,000
Chief Financial Officer	3,000	36,000	3,000	36,000	3,000	36,000
Normal Employee						
Programmer	3,000	36,000	3,000	36,000	3,000	36,000
Salesperson	4,000	48,000	4,000	48,000	8,000	96,000
Production worker	9,000	108,000	9,000	108,000	27,000	324,000

Total (RM)	28,000	336,000	28,000	336,000	50,000	600,000

	Year 4		Year 5	
	Monthly salary (RM)	Annual salary (RM)	Monthly salary (RM)	Annual salary (RM)
Top Management				
Chief Executive Officer	3,000	36,000	3,000	36,000
Chief Technology and Operation Officer	3,000	36,000	3,000	36,000
Chief Marketing and Administrative Officer	3,000	36,000	3,000	36,000
Chief Financial Officer	3,000	36,000	3,000	36,000
Normal Employee				
Programmer	3,000	36,000	3,000	36,000
Salesperson	8,000	96,000	8,000	96,000
Production worker	27,000	324,000	27,000	324,000
Total (RM)	50,000	600,000	50,000	600,000

The company consists of four founders as Chief Executive Officer, Chief Technology and Operation Officer, Chief Marketing and Administrative Officer, and Chief Financial Officer. Starting from year 1, the company will recruit 2 salesperson, 5 production workers and 1 programmer. While, starting from year 3, the company will recruit another 2 salesperson and 10 production workers. All chief and salesperson are not paid commissions. In addition, there will be no increase in salary during the first five years.

Table 8.15: Employees Provident Fund (EPF) Expenses

Item	Year 1 (RM)	Year 2 (RM)	Year 3 (RM)	Year 4 (RM)	Year 5 (RM)	Remarks
Employees EPF	43,680	43,680	78,000	78,000	78,000	13% of annual salary

Table 8.16: Total Employees' SOCSO Expenses

Total Employees' SOCSO Expenses					
	Year 1 (RM)	Year 2 (RM)	Year 3 (RM)	Year 4 (RM)	Year 5 (RM)
Top management					
Chief Executive Officer	619.8	619.8	619.8	619.8	619.8
Chief Technology and Operation Officer	619.8	619.8	619.8	619.8	619.8
Chief Marketing and Administrative Officer	619.8	619.8	619.8	619.8	619.8
Chief Financial Officer	619.8	619.8	619.8	619.8	619.8
Normal Employee					
Programmer	619.8	619.8	619.8	619.8	619.8
Salesperson*	819.6	819.6	1,639.2	1,639.2	1,639.2
Production worker*	1,839	1,839	5,517	5,517	5,517
Total	5,758	5,758	10,255	10,255	10,255

*Remarks: There are 2 salesperson in year 1 and 2, and total 4 salesperson in year 3, 4, and 5. There are 5 production workers in year 1 and 2, and total 15 workers in year 3, 4, and 5.

Table 8.17: SOCSO Contribution Expenses

SOCSO Contribution Expenses	
Total Monthly Wages	Employer Contribution (RM)
Wages between RM 1000 and RM 1100	18.35
Wages between RM 1100 and RM 1200	20.15
Wages between RM 1200 and RM 1300	21.85
Wages between RM 1300 and RM 1400	23.65
Wages between RM 1400 and RM 1500	25.35

Wages between RM 1500 and RM 1600	27.15
Wages between RM 1600 and RM 1700	28.85
Wages between RM 1700 and RM 1800	30.65
Wages between RM 1800 and RM 1900	32.35
Wages between RM 1900 and RM 2000	34.15
Wages between RM 2000 and RM 2100	35.85
Wages between RM 2100 and RM 2200	37.65
Wages between RM 2200 and RM 2300	39.35
Wages between RM 2300 and RM 2400	41.15
Wages between RM 2400 and RM 2500	42.85
Wages between RM 2500 and RM 2600	44.65
Wages between RM 2600 and RM 2700	46.35
Wages between RM 2700 and RM 2800	48.15
Wages between RM 2800 and RM 2900	49.85
Wages between RM 2900 and RM 3000	51.65
Wages between RM 3000 and RM 3100	53.35
Wages between RM 3100 and RM 3200	55.15

Source: Perkeso. (n.d.). *Contribution rate*. <https://www.perkeso.gov.my/en/our-services/employer-employee/kadar-caruman.html>

Table 8.18: Total Employees' EIS Expenses

Total Employees' EIS Expenses					
	Year 1	Year 2	Year 3	Year 4	Year 5
Top management	RM	RM	RM	RM	RM
Chief Executive Officer	70.8	70.8	70.8	70.8	70.8
Chief Technology and Operation officer	70.8	70.8	70.8	70.8	70.8
Chief Marketing and Administrative Officer	70.8	70.8	70.8	70.8	70.8
Chief Financial Officer	70.8	70.8	70.8	70.8	70.8
Normal Employee					
Programmer	70.8	70.8	70.8	70.8	70.8

Salesperson*	93.6	93.6	187.2	187.2	187.2
Production worker*	210	210	630	630	630
Total	658	658	1171	1171	1171

*Remarks: There are 2 salesperson in year 1 and 2, and total 4 salesperson in year 3, 4, and 5. There are 5 production workers in year 1 and 2, and total 15 workers in year 3, 4, and 5.

Table 8.19: EIS Contribution Expenses

EIS Contribution Expenses	
Total Monthly Wages	Employer's EIS Contribution
Wages between RM 1000 and RM 1100	RM2.10
Wages between RM 1100 and RM 1200	RM2.30
Wages between RM 1200 and RM 1300	RM2.50
Wages between RM 1300 and RM 1400	RM2.70
Wages between RM 1400 and RM 1500	RM2.90
Wages between RM 1500 and RM 1600	RM3.10
Wages between RM 1600 and RM 1700	RM3.30
Wages between RM 1700 and RM 1800	RM3.50
Wages between RM 1800 and RM 1900	RM3.70
Wages between RM 1900 and RM 2000	RM3.90
Wages between RM 2000 and RM 2100	RM4.10
Wages between RM 2100 and RM 2200	RM4.30
Wages between RM 2200 and RM 2300	RM4.50
Wages between RM 2300 and RM 2400	RM4.70
Wages between RM 2400 and RM 2500	RM4.90
Wages between RM 2500 and RM 2600	RM5.10
Wages between RM 2600 and RM 2700	RM5.30
Wages between RM 2700 and RM 2800	RM5.50
Wages between RM 2800 and RM 2900	RM5.70
Wages between RM 2900 and RM 3000	RM5.90

Wages between RM 3000 and RM 3100	RM6.10
Wages between RM 3100 and RM 3200	RM6.30

Source: Perkeso. (n.d.). *Contribution rate*. <https://www.perkeso.gov.my/en/our-services/employer-employee/kadar-caruman.html>

Table 8.20: Tax Expenses of the Company

Tax Expenses					
	Year 1	Year 2	Year 3	Year 4	Year 5
Income	RM	RM	RM	RM	RM
On First 150,000 (15%)	-	-	22,500	22,500	22,500
RM 150,001 to RM 600,000 (17%)	-	-	5,555	76,500	76,500
RM600,001 and above (24%)	-	-	-	6,279	128,789
Total	-	-	28,055	105,279	227,789

8.3 Pro Forma Income Statement (5 years)

Financial Statement 1: Pro Forma Income Statement for Year 2025 to 2029

Pro Forma Income Statement for Year 2025 to 2029					
	Projected 2025	Projected 2026	Projected 2027	Projected 2028	Projected 2029
	RM	RM	RM	RM	RM
Sales:					
Direct Sales	1,125,000	1,500,000	3,000,000	4,500,000	6,000,000
Indirect Sales	920,000	1,610,000	3,450,000	4,600,000	6,440,000
Total Sales	2,045,000	3,110,000	6,450,000	9,100,000	12,440,000
Less: Cost of goods Sold					
Opening Stock	-	103,000	206,000	309,000	412,000
Add: Carriage inward	6,000	8,000	13,000	18,000	23,000

Purchase of Raw Material	1,854,000	2,781,000	5,665,000	7,931,000	10,815,000
Less: Closing Stock	103,000	206,000	309,000	412,000	515,000
Packaging cost	6,300	9,450	19,250	26,950	36,750
Total COGS	1,763,300	2,592,450	5,388,250	7,563,950	10,359,750
Gross Profit	281,700	517,550	1,061,750	1,536,050	2,080,250
Operating Expenses:					
Salaries	336,000	336,000	600,000	600,000	600,000
EPF	43,680	43,680	78,000	78,000	78,000
SOCSSO	5,758	5,758	10,255	10,255	10,255
EIS	658	658	1,171	1,171	1,171
SSM Registration	1,000	-	-	-	-
Business Renewal Fee	-	60	60	60	60
Patent Registration Fee	5,000	-	-	-	-
Trademark Registration Fee	2,500	-	-	-	-
SIRIM Registration Fee	1,484	-	-	-	-
Rental	30,000	30,000	30,000	30,000	30,000
Utilities	50,000	55,000	60,500	66,550	73,205
Office Supplies	415	498	598	657	723
WIFI Expenses	1,164	1,164	1,164	1,164	1,164
Sales and Marketing Expenses	23,500	18,500	24,050	31,265	40,645
Research and Development	20,000	30,000	40,000	50,000	60,000
Repair and Maintenance for Production Equipment	5,000	5,750	6,613	7,604	8,745
Carriage Outward	10,000	13,000	18,000	23,000	28,000
Depreciation	5,661	7,161	8,661	10,161	11,661

Total Operating Expenses	541,820	547,229	879,071	909,888	943,629
Income Before Tax	(260,120)	(29,679)	182,679	626,162	1,136,621
Tax Expenses	-	-	28,055	105,279	227,789
Net Income	(260,120)	(29,679)	154,624	520,883	908,832

8.4 Cash Flow Projections (5 years)

Financial Statement 2: Pro Forma Cash Flow Statement for Year 2025 to 2029

Pro Forma Cash Flow Statement for Year 2025 to 2029					
	Projected 2025	Projected 2026	Projected 2027	Projected 2028	Projected 2029
	RM	RM	RM	RM	RM
Cash Flows from Operating Activities:					
Net income	(260,120)	(29,679)	154,624	520,883	908,832
Changes in working capital:					
Depreciation	5,661	7,161	8,661	10,161	11,661
Increase (Decrease) in Account Receivable	(44,620)	(33,465)	(89,240)	(55,775)	(89,240)
Increase (Decrease) in Inventory	(103,000)	(103,000)	(103,000)	(103,000)	(103,000)
Increase (Decrease) in Accrued Expenses	5,000	1,500	1,950	2,535	3,296
Increase (Decrease) in Account Payable	300,000	90,000	117,000	152,100	197,730
Increase (decrease) in Rental Deposit	(5,000)	-	-	-	-
Increase (decrease) in	(6,000)	-	-	-	-

Utility Deposit					
Total Adjustment	152,041	(37,804)	(64,629)	6,021	20,447
Net Cash Provided by Operating Activities	(108,079)	(67,483)	89,994	526,904	929,279
Cash Flows from Investing Activities:					
Purchase of Office Equipment	(28,281)	(5,000)	(5,000)	(5,000)	(5,000)
Purchase of Production Equipment	(28,328)	(10,000)	(10,000)	(10,000)	(10,000)
Trademark	(2,500)	-	-	-	-
Patent	(5,000)	-	-	-	-
Net Cash Flows Provided by Investing Activities	(64,109)	(15,000)	(15,000)	(15,000)	(15,000)
Cash Flow From Financing Activities:					
Increase Capital from Founders	150,000	-	-	-	-
Increase Capital from Government Grant	150,000	-	-	-	-
Reimbursement for Government Grant	-	-	-	(75,000)	(75,000)
Net Cash Flows Provided by Financing Activities	300,000	-	-	(75,000)	(75,000)
Net Increase (Decrease)	127,812	(82,483)	74,994	436,904	839,279

in Cash During the Year					
Cash and Cash Equivalents at the Beginning of the Year	-	127,812	45,329	120,323	557,228
Cash and Cash Equivalents at the End of the Year	127,812	45,329	120,323	557,228	1,396,507

8.5 Pro Forma Balance Sheet (5 years)

Financial Statement 3: Pro Forma Balance Sheet for Year 2025 to 2029

Pro Forma Balance Sheet for Year 2025 to 2029					
	Projected 2025	Projected 2026	Projected 2027	Projected 2028	Projected 2029
	RM	RM	RM	RM	RM
Current Asset:					
Cash and Cash Equivalents	127,812	45,329	120,323	557,228	1,396,507
Account Receivable (less allowance for doubtful debt)	44,620	78,085	167,325	223,100	312,340
Rental Deposit	5,000	5,000	5,000	5,000	5,000
Inventory	103,000	206,000	309,000	412,000	515,000
Utility Deposit	6,000	6,000	6,000	6,000	6,000
Total Current Asset	286,432	340,414	607,648	1,203,328	2,234,847
Fixed Asset:					
Office Equipment	28,281	33,281	38,281	43,281	48,281
Production Equipment	28,328	38,328	48,328	58,328	68,328
Total Office and Production Equipment	56,609	71,609	86,609	101,609	116,609
Accumulated Depreciation (-)(10%)	5,661	12,822	21,483	31,644	43,305

Net Office and Production Equipment	50,948	58,787	65,126	69,965	73,305
Total Fixed Asset	169,827	214,827	259,827	304,827	349,828
Intangible Asset:					
Trademark	2,500	2,500	2,500	2,500	2,500
Patent	5,000	5,000	5,000	5,000	5,000
Total Intangible Asset	7,500	7,500	7,500	7,500	7,500
Total Asset	344,880	406,701	680,275	1,280,793	2,315,651
Liability and Shareholders' Equity					
Current Liability:					
Account Payable	300,000	390,000	507,000	659,100	856,830
Accrued Expenses	5,000	6,500	8,450	10,985	14,281
Total Current Liability	305,000	396,500	515,450	670,085	871,111
Total Liability	305,000	396,500	515,450	670,085	871,111
Shareholder Equity:					
Retained Earnings	(260,120)	(289,799)	(135,175)	385,708	1,294,540
Capital from Government Grant	150,000	150,000	150,000	75,000	-
Capital from Founders	150,000	150,000	150,000	150,000	150,000
Total Shareholder Equity	39,880	10,201	164,825	610,708	1,444,540
Total Liability and Shareholders' Equity	344,880	406,701	680,275	1,280,793	2,315,651

8.6 Payback and Exit Strategy

8.6.1 Payback Period

Table 8.21: Payback Period of Road Guard Technologies Sdn. Bhd.

Year	Cash Flow of the Year	Accumulated Cash Flow
	RM	RM
0	(300,000)	(300,000)
1	(172,188)	(472,188)
2	(82,483)	(554,671)
3	74,994	(479,677)
4(a)	436,904	(42,773) (b)
5	839,279(c)	796,506

$$\begin{aligned}
 \text{Payback Period} &= a+(b/c) \\
 &= 4+0.051 \\
 &=4.051\text{years}
 \end{aligned}$$

8.6.2 Exit Strategy

As equal partners in this business, it is important that we have a clear, mutually beneficial exit strategy that protects our investment and ensures a smooth transition when exit opportunities become available. Our strategy is designed to optimize returns for all founders while maintaining the integrity and sustainability of the business.

Our comprehensive exit strategy encompasses multiple avenues for realizing shareholder value. Firstly, we aim to position the business as an attractive acquisition target for strategic buyers or competitors. At the same time, we recognize the potential for individual founder exits and have put in place a partial buyout programmed that allows departing founders to realize a portion of their shares while maintaining the continuity of the business. In addition, as the business matures, we may explore the option of an initial public offering to access the public markets, raise capital and provide liquidity for all founders through the sale of shares on a stock exchange. This approach ensures flexibility and conforms to the diverse needs and preferences of our stakeholders.

9.0 CRITICAL RISK FACTORS

9.1 Management Risks

9.1.1 Inexperienced Leadership

Road Guard Technology Sdn. Bhd. is a new company with a young management team. Having a young management team can enhance our firm's creativity and inventiveness. However, it can also be a disadvantage since they may lack experience effectively managing a company. When a management team lacks experience, it may bring crisis to the company due to an inability to make wise decisions and navigate complex business challenges, such as developing and implementing clear and compelling business strategies.

9.1.2 Potential Conflict among Management Team

Everyone possesses a unique perspective, problem-solving approach, and management style. Therefore, everyone has different ideas about the best way for the company, which may cause conflict within our management team. Internal discord can result in a negative corporate image and a decline in employee morale.

9.2 Marketing Risks

9.2.1 Inadequate Marketing Strategy

Marketing strategy usually collects the data from potential customers to tailor product offerings to their specific needs. Recently, there has been increased public concern around consumer data privacy, leading to new laws such as General Data Protection Regulation (GDPR), which focus

on privacy and anti-spam regulations. These laws protect the confidentiality of customers' email recipients and require users to provide consent before their data is captured to prevent vendors from using their data, which causes the need for a different marketing strategy to target them.

9.2.2 Ineffective Targeting

Ineffective targeting may occur if our company's marketing message lacks clarity or if the target customer is inadequately defined. By lacking clear brand messaging in our marketing activities, our company will fail to effectively engage with targeted customers since the intended message of our product will not reach them. This will result in our targeted customers not receiving the message we aim to convey, which would prompt them to purchase our product.

9.3 Operating Risks

9.3.1 Supply Chain Disruptions

There are a limited number of suppliers for our direct materials, such as motherboards and camera modules. If the materials we purchase are delayed, in limited supply, or of substandard quality by our suppliers, our company may be exposed to supply chain disruptions and affect our operations and production. This may cause a direct delay in our ability to complete and ship our product to customers.

9.3.2 Quality Control Risk

During the production process, we might face issues such as defective machinery, employee error, or raw material quality concerns. All of these will result in unstable product quality, and they are unexpected factors.

9.3.3 Human Resource Management

As our company is a start-up company with limited capital, we can offer a salary range in the middle as opposed to a greater range to retain our employees. This may increase the risk of employee turnover and have challenges in recruiting, training, and retaining qualified staff who can increase productivity. Having a risk of high employee turnover could have an adverse effect on our output, as new hires may be unfamiliar with the procedure and require additional time to finish their duties.

9.4 Intellectual Property Infringement

9.4.1 Trademark Infringement

Road Guard Technology Sdn. Bhd. has the risk of facing competitors using an unauthorized trademark, such as a brand name or logo, that is the same to us to confuse and mislead consumers by selling identical products. We are unable to control the quality of those products that violate our trademark. If the products have any problem, customers will mistakenly believe that we produce them, which would damage our brand image and reputation.

9.5 Changes in Technology

The rapid evolution and advancement of today's technology will make existing products, including ours, obsolete in the eyes of consumers in the near future. Technology-related risks are more difficult to manage due to the fact that implementing new IT programmes frequently necessitates the training of new personnel and the acquisition of new software.

9.6 Contingency Plans

9.6.1 Management Risks

To encounter inexperienced leadership, our company consistently organise leadership development programmes, including seminars and mentorship, to train and enhance the

abilities of leaders. Hiring an external advisory board or experienced consultants can also be implemented as they can provide their guidance and expertise on leadership issues or important decisions from a different perspective.

Besides, we can set up an open communication channel to facilitate the exchange of concerns, feedback, ideas, and rationales for working methods among team members. This channel can reduce management team conflict and promote an environment of open communication. Regularly scheduled team-building activities foster interpersonal connections and mutual understanding among members.

9.6.2 Marketing Risks

To effectively capture the attention of potential customers, we must closely monitor market trends and adjust our marketing strategy accordingly. It is essential to establish a diverse marketing strategy as it can boost reach and engagement while connecting with a broader demographic to overcome the risk of inadequate marketing strategy.

When we face the problem of ineffective targeting, we plan to re-evaluate our core demographic to ensure that our marketing effort is successful. Also, when redefining the target customers, we must seek the assistance of other coworkers to obtain a variety of perspectives, opinions, and surveying methodologies.

9.6.3 Operating Risks

Our company's inventory management will maintain a designated quantity of safety stock for important raw materials. Therefore, when we face supply chain disruptions, we will use the planned safety stock to serve as a buffer to provide the necessary time to resolve the issue without disrupting production.

When the quality control issue arises, re-manufacture the affected batches of products while monitoring the variables that impact the quality throughout production in real-time. Before it, we will inspect and repair the machine, people, and raw materials to ensure they are all in good condition.

We plan to conduct an exit interview to understand the motives for employee departures. We will then use this feedback to make necessary adjustments and fulfill their needs within our capabilities to retain talents.

9.6.4 Intellectual Property Infringement

Our company's brand name and logo are registered as trademarks. Upon identifying any trademark infringement, we will seek guidance from our legal advisors and promptly record all relevant information to protect ourselves against unauthorized actions that might damage our business reputation.

9.6.5 Changes in Technology

Our research and development department will consistently research emerging technologies to stay ahead of rivals and keep up with industry trends. Recruiting new talent is ongoing to ensure we can advance our core technology.

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APPENDICES

APPENDIX U1: Resume of Management Team



YONG CHEE YUN

PROFILE

Motivated student currently completing Bachelor's Degree in Business Administration with honours in Entrepreneurship. I am reliable, attentive to detail, and willing to learn about new technology and business issues. I have the capacity to work successfully both independently and in a group setting.

WORK EXPERIENCE

PROMOTER

Always Marketing (M) Sdn Bhd

- Worked part-time which assist in promoting the L'Oréal products at pop-up events, including making customers interested and explaining the products' function, to help achieve targeted sales
- Enhanced communication and sales skills from the process.

PROMOTER

JV global event

- Worked part-time which assist in promoting the Cadbury cookies at pop-up events, including making customers interested and explaining the products' function, to help achieve targeted sales.
- Carry all samples and tools
- Enhanced communication and sales skills from the process.

CASHIER

Summer Dessert Bakery Cafe Sdn Bhd

- Worked part-time assisting in welcoming visitors, keeping up with adjustments to the menu and sales procedures, and interacting with customers daily.
- Learned to use the system for ordering foods and beverages and closing and generating daily sales reports for the manager.

EDUCATION

**Bachelor of Business Administration
(Honours) Entrepreneurship**

2020 - 2024 ●

Universiti Tunku Abdul Rahman

- Course included general business knowledge and skills, entrepreneurial process and skills, business plan preparation and negotiation techniques, and public policies associated with the development of new business ventures.

CONTACT

✉ yongcheeyun86@gmail.com

☎ 011-5565 9552

📍 Bukit Mertajam, Penang

SKILLS

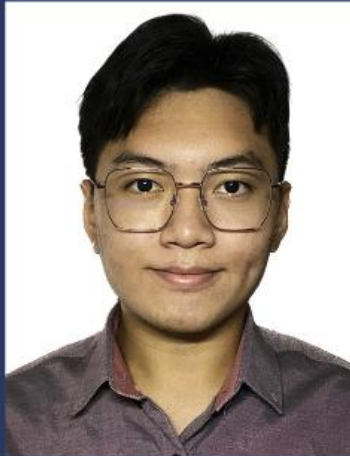
- Microsoft Office
- Social Media
- Collaboration
- Time management
- Stress management
- Communication

LANGUAGE

English ●●●●●

Mandarin ●●●●●

Bahasa Melayu ●●●●●



MEAH CHEE YONG

PROFILE

- I am an Entrepreneurship student from UTAR, Kampar.
- I consider myself a humble, responsible, and hardworking person.

OBJECTIVE

- I am eager for the opportunity to work in the company and gain valuable hands-on experience in the company.

CONTACT ME

 011-59426060

 cheeyong0914@gmail.com

 Sitiawan, Perak.

➤ EDUCATION

- **BACHELOR OF BUSINESS ADMINISTRATION (HONOURS) ENTREPRENEURSHIP, UTAR**
Expected graduation in year 2024
- **FOUNDATION IN ARTS, UTAR**
2020-2021
- **SPM, SMJK NAN HWA**
2015-2019

➤ LANGUAGE

- Fluent in English, Malay, and Chinese, with the ability to read, write, and speak each language

➤ SKILLS

- Good presentation skills
- Effective communication skills
- Able to use Microsoft Word, Microsoft Excel and Microsoft Powerpoint.
- Able to video editing

PANG CHENG YAO



DETAILS

ADDRESS

A-20,Taman
Koperasi,Jerantut,Pahang
Malaysia

PHONE

011-10962480

EMAIL

chengyao0120@gmail.com

SKILLS

Communication

Ability to Multitask

Effective Time Management

Microsoft Office

Ability to Work Under Pressure

Ability to Work in A Team

LANGUAGES

Bahasa Malaysia



English



Mandarin



EMPLOYMENT HISTORY

General Staff, Soon Hing Aluminium and Glass Jerantut
Oct 2017

Promoter , World Sweet House Johor Bahru
Dec 2019- Feb2020

Sales Assistant, Melium Designer Outlet Genting Highlands
Feb 2020 - Mar 2020

Administrator, Tcf Iron Steel Sdn Bhd Jerantut
Dec 2021 - Jan 2022

Internship, Marketer, V One Hardware Sdn Bhd Puchong
Oct 2023 - Jan 2024

EDUCATION

Sekolah Menengah Kebangsaan Jerantut Jerantut
Jan 201N F ov 2019

Foundation in Arts, University Tunku Abdul Rahman (UTAR) Kampar
Jun 2020 F Jun 2021

COURSES

BACHELOR OF BUSINESS ADMINISTRATION (HONOURS) ENTREPRENEURSHIP, University Tunku Abdul Rahman (UTAR)

Jun 2021



Chen Kai Jun

Internship Student

Details

Address

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Seremban, 70200
Malaysia

Phone

60126895279

Email

chenkaijun0121@gmail.com

Date / Place of birth

21 Jan 2002
Selangor

Driving license

D

Skills

Microsoft Office



Critical thinking and problem solving



Leadership Skills



Ability to Multitask



Languages

Mandarin



Cantonese



English



Bahasa Melayu



Profile

- Resourceful and dedicated High School student with excellent analytical skills and a demonstrated commitment to providing great customer service.
- Strong organizational abilities with proven success in managing multiple academic projects

Education

SMK CHAN WA , SPM in Pure Science

Jan 2015 – Dec 2019 📍 Seremban

- A full-time student who is also a prefect from the year 2017 to the year 2019
- Obtained 6A4B in Sijil Pelajaran Malaysia (SPM)

UNIVERSITI TUNKU ABDUL RAHMAN (UTAR), Foundation in Arts

May 2020 – Jan 2021 📍 Kampar

- A full-time foundation student
- Obtained CGPA of 3.3872 at the time completion of study

UNIVERSITI TUNKU ABDUL RAHMAN (UTAR), Bachelor of Administrative (HON) Entrepreneurship

May 2021 – Present 📍 KAMPAR

- A full-time degree student
- Obtained CGPA of 3.4348 until present (Y3S1)


Extra-curricular activities

Co-Curriculum , Secondary School- SMK CHAN WA

Jun 2018 – Jun 2019 📍 Seremban

- A " Chairperson of Kadet Remaja Sekolah (KRS)" from the year 2018 to the year 2019
- A " Vice Chairperson of the Chinese Language Society" from the year 2018 to the year 2019
- A "Prefect" from the year 2017 to the year 2019

APPENDIX U2: SIRIM Registration

	<h3 style="margin: 0;">APPLICATION FORM</h3> <p style="font-size: small; margin: 0;">To enable an accurate quotation, the following information is necessary. All information received is treated in strict confidence</p>	<p style="font-size: small; margin: 0;">Ex/FOR/01-1</p> <div style="border: 1px solid black; padding: 5px; background-color: #e0e0e0;"> <p style="margin: 0;">SIRIM QAS INTERNATIONAL SDN. BHD. (Company No. 410334-X) SIRIM Complex 1, Persiaran Dato Menteri Section 2, P.O. Box 7035 40700 Shah Alam</p> </div>
Applicant		
COMPANY NAME:	CONTACT NAME:	
Address:	Position:	
	Telephone No:	
	Fax No:	
*GST Registration No:	E Mail:	
Web address:		
Location to be certified (Location 1)		
COMPANY NAME:	CONTACT NAME:	
Address:	Position:	
	Telephone No:	
	Fax No:	
*GST Registration No:	E Mail:	
Web address:		
Location to be certified (Location 2)		
COMPANY NAME:	CONTACT NAME:	
Address:	Position:	
	Telephone No:	
	Fax No:	
*GST Registration No:	E Mail:	
Web address:		
<p>Please complete the following annexes:</p> <ul style="list-style-type: none"> - Limitation of Scope (Annex A) - Documentation Checklist (Annex B) 		
OTHER INFORMATION		
ISO 9001 certified? (please attach certificate)	YES / NO	
Is this a transfer from another certification body?	YES / NO	
Does your Company work shifts?	YES / NO	
How long have you been operating your Quality System?		
Date Pre-assessment required (if applicable)		
Target Assessment date		
<p>PLEASE RETURN TO: ELECTRICAL&ELECTRONICS CERTIFICATION AND INSPECTION SECTION, SIRIM QAS International SDN. BHD.</p> <p>We hereby declared that the information provided in this application is valid. We undertake to comply with the provision of the IECEx certification agreement, a copy of which has been made available to us. We agree to pay all fees / cost connected to the certification process</p> <p>Method of payment: Cheque <input type="checkbox"/> Cash <input type="checkbox"/> Credit Card <input type="checkbox"/> Telegraphic Transfer <input type="checkbox"/></p> <p>Signature of authorised representative: Name: Position: Date:</p> <p>_____</p> <p>Note: *GST Registration Number applicable for Malaysia registered company only.</p>		
SIRIM QAS International Sdn. Bhd. Issue : 3 Rev: 0	IECEx Scheme	Page 1 of 3

Annex A

Limitation of Scope Certification of Ex Service Facility

[] for Ex inspection and maintenance
[] for Repair, Overhaul and Reclamation of Ex Equipment

1.1 Types of protection

	All without limitation		“o” : oil immersion
	“d” : flameproof enclosure		“p” : pressurization
	“e” : increased safety		“q” : powder filling
	“i” : intrinsic safety		“t” : protection by enclosure
	“m” : encapsulation		“op” Optical radiation
	“n” : type of protection ‘n’		Gas detection

1.2 Product types

	All without limitation		Communication Equipment
	Rotating Machines		Heating Equipment
	Switchgear		Trace Heating
	Instrumentation		Power Transformer
	Luminaires		Process Control Equipment

1.3 Groups

	All without limitation		Group II
	Group I		Group III

1.4 Voltages

	Up to 50 V (Extra Low Voltage)		50 - 1000 V (Low Voltage)
	> 1000 V (High Voltage)		

1.5 Other Limitations

1.6 Inspection type

	Visual		Closed
	Detail		

Ex/FOR/01-1

Annex B

Documentation Checklist for Certification of Ex Service Facility


- for Ex inspection and maintenance
 for Repair, Overhaul and Reclamation of Ex Equipment

Description	Remarks/Reference No.
1. Ex Service Facility application details <ul style="list-style-type: none"> i. Name, Country, Contact details (company profiles) ii. Short history, and description of Service Facility iii. Legal status (RoC) 	
2. Letter or ExCB application form from applicant Service Facility to ExCB requesting certification under IECEX Service Facility Program.	
3. Declaration of relevant competence/capability as follows: <ul style="list-style-type: none"> a) competence of responsible persons and operatives b) listing of Ex types of protection and Scope of work to be covered by IECEX Service Facility Certification c) Identification of testing and measurement capabilities 	
4. Documentation, such as Quality Management System (QMS) manual, showing compliance with requirements <ul style="list-style-type: none"> a) compliance of quality systems to *<input type="checkbox"/> OD 314-4 <input type="checkbox"/> OD314-5 b) compliance of Service Facility to technical requirements of *<input type="checkbox"/> IEC 60079-17 <input type="checkbox"/> IEC 60079-19 	
5. Organization charts of the candidate Service Facility. Particular attention should be given to those authorized to release completed work	
6. Service Facility procedure for maintaining competence of responsible persons and operatives	

*Select appropriate reference or standard

Add attachment if necessary

Appendix U3: EPF Registration

	KUMPULAN WANG SIMPANAN PEKERJA PERMOHONAN PENDAFTARAN MAJIKAN EMPLOYER REGISTRATION APPLICATION FORM	KWSP 1 (MAJIKAN) PERCUMA									
(A) JENIS PENDAFTARAN MAJIKAN / TYPE OF EMPLOYER REGISTRATION											
<p>SILA TANDAKAN SALAH SATU KOTAK SAHAJA / PLEASE TICK ANY ONE OF THE BOXES BELOW</p> <p>1. KERAJAAN GOVERNMENT <input type="checkbox"/></p> <p>2. BERDAFTAR DENGAN SURUHANJAYA SYARIKAT MALAYSIA SEBAGAI: <small>REGISTERED WITH COMPANIES COMMISSION OF MALAYSIA:</small></p> <p>SYARIKAT COMPANY <input type="checkbox"/></p> <p>PERNIAGAAN BUSINESS <input type="checkbox"/></p> <p>PERKONGSIAN LIABILITI TERHAD LIMITED LIABILITY PARTNERSHIP <input type="checkbox"/></p> <p>3. BERDAFTAR SELAIN DENGAN SURUHANJAYA SYARIKAT MALAYSIA <small>REGISTERED NOT UNDER COMPANIES COMMISSION OF MALAYSIA</small> <input type="checkbox"/></p> <p>4. MAJIKAN KEPADA ORANG GAJI DOMESTIK <small>REGISTRATION AS AN EMPLOYER FOR DOMESTIC SERVANTS</small> <input type="checkbox"/></p> <p>NOTA : BAGI PENDAFTARAN MAJIKAN KEPADA ORANG GAJI DOMESTIK, SILA LENGKAPKAN RUANGAN (F), (G) DAN (H) SAHAJA. NOTE : PLEASE COMPLETE SECTION (F), (G) AND (H) ONLY IF REGISTERING AS AN EMPLOYER FOR DOMESTIC SERVANT</p>											
(B) MAKLUMAT MAJIKAN / DETAILS OF EMPLOYER											
<p>NAMA PENUH SYARIKAT / PERNIAGAAN / PERSATUAN <small>FULL NAME OF COMPANY / BUSINESS / ASSOCIATION</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>											
<p>NOMBOR PENDAFTARAN PERNIAGAAN / SYARIKAT / PERSATUAN / PERKONGSIAN LIABILITI TERHAD <small>REGISTRATION NUMBER OF BUSINESS / COMPANY / ASSOCIATION / LIMITED LIABILITY PARTNERSHIP</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>											
<p>TARIKH PENUBUHAN <small>DATE OF INCORPORATION / BUSINESS REGISTRATION</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> </tr> </table>			-	-	-	-	-	-			
-	-	-	-	-	-						
<p>TARIKH MULA MENGAMBIL PEKERJA <small>DATE ON WHICH FIRST EMPLOYEE IS EMPLOYED</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> <td style="width: 20px;">-</td> </tr> </table>			-	-	-	-	-	-			
-	-	-	-	-	-						
<p>ENTITI PERNIAGAAN <small>BUSINESS ENTITY</small></p> <table style="width: 100%;"> <tr> <td style="width: 33%;"><input type="checkbox"/> KERAJAAN <small>GOVERNMENT</small></td> <td style="width: 33%;"><input type="checkbox"/> SYARIKAT SENDIRIAN BERHAD <small>PRIVATE LIMITED COMPANY</small></td> <td style="width: 33%;"><input type="checkbox"/> SYARIKAT BERHAD <small>LIMITED COMPANY</small></td> </tr> <tr> <td><input type="checkbox"/> PERKONGSIAN <small>PARTNERSHIP</small></td> <td><input type="checkbox"/> PEMILIK TUNGGAL <small>SOLE PROPRIETORSHIP</small></td> <td><input type="checkbox"/> PERKONGSIAN LIABILITI TERHAD <small>LIMITED LIABILITY PARTNERSHIP</small></td> </tr> <tr> <td><input type="checkbox"/> LAIN-LAIN <small>OTHERS</small></td> <td colspan="2"></td> </tr> </table>			<input type="checkbox"/> KERAJAAN <small>GOVERNMENT</small>	<input type="checkbox"/> SYARIKAT SENDIRIAN BERHAD <small>PRIVATE LIMITED COMPANY</small>	<input type="checkbox"/> SYARIKAT BERHAD <small>LIMITED COMPANY</small>	<input type="checkbox"/> PERKONGSIAN <small>PARTNERSHIP</small>	<input type="checkbox"/> PEMILIK TUNGGAL <small>SOLE PROPRIETORSHIP</small>	<input type="checkbox"/> PERKONGSIAN LIABILITI TERHAD <small>LIMITED LIABILITY PARTNERSHIP</small>	<input type="checkbox"/> LAIN-LAIN <small>OTHERS</small>		
<input type="checkbox"/> KERAJAAN <small>GOVERNMENT</small>	<input type="checkbox"/> SYARIKAT SENDIRIAN BERHAD <small>PRIVATE LIMITED COMPANY</small>	<input type="checkbox"/> SYARIKAT BERHAD <small>LIMITED COMPANY</small>									
<input type="checkbox"/> PERKONGSIAN <small>PARTNERSHIP</small>	<input type="checkbox"/> PEMILIK TUNGGAL <small>SOLE PROPRIETORSHIP</small>	<input type="checkbox"/> PERKONGSIAN LIABILITI TERHAD <small>LIMITED LIABILITY PARTNERSHIP</small>									
<input type="checkbox"/> LAIN-LAIN <small>OTHERS</small>											
<p>JENIS PERNIAGAAN <small>NATURE OF BUSINESS</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>											
<p>BILANGAN PEKERJA <small>NUMBER OF EMPLOYEES</small></p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>											
UNTUK KEGUNAAN KWSP SAHAJA / FOR EPF USE ONLY											
<p>NOMBOR MAJIKAN <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table></p> <p>BULAN TANGGUNGAN MENCARUM <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table></p> <p>KOD STANDARD INDUSTRI <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table></p> <div style="border: 1px solid black; width: 100%; height: 100px; margin-top: 10px; text-align: center; vertical-align: middle;"> COP TARIKH TERIMA </div>											
<p style="font-size: small;">Sila hubungi Pusat Pengurusan Perhubungan KWSP 03 – 8922 6000 untuk sebarang pertanyaan berkaitan permohonan ini. Please contact Call Management Centre 03 – 8922 6000 for any query on this application.</p>											

NAMA PENUH MAJIKAN (HURUF BESAR) FULL NAME OF EMPLOYER (CAPITAL LETTERS)	
(C) MAKLUMAT PERNIAGAAN / DETAILS OF BUSINESS	
ALAMAT PERNIAGAAN BUSINESS ADDRESS	
POSKOD POSTCODE	NEGERI STATE
ALAMAT BERDAFTAR (SEKIRANYA BERBEZA DENGAN PERNIAGAAN) REGISTERED ADDRESS	
POSKOD POSTCODE	NEGERI STATE
ALAMAT SURAT MENYURAT MAILING ADDRESS	
POSKOD POSTCODE	NEGERI STATE
E-MEL EMAIL	
NAMA PEGAWAI NAME OF OFFICER	
NO. MyKad / POLIS / TENTERA / PASPORT / SIJIL WARGANEGARA MYKAD / POLICE / MILITARY / PASSPORT / CITIZENSHIP CERT NO.	
JAWATAN DESIGNATION	
NO. TELEFON 1 TELEPHONE NO. 1	NO. TELEFON 2 TELEPHONE NO. 2
NO. TELEFON BIMBIT MOBILE TELEPHONE NO.	NO. FAKSIMILI FAX NO.
(D) MAKLUMAT PEMILIK / PENGARAH SYARIKAT / RAKAN KONGSI / PEMEGANG JAWATAN UTAMA BUSINESS OWNER DETAILS	
NAMA PEMILIK SYARIKAT OWNER'S NAME	
JAWATAN DESIGNATION	
NO. MyKad/PASPORT MyKad/PASSPORT NO.	
WARGANEGARA CITIZENSHIP	
(E) NAMA DAN ALAMAT TEMPAT PERNIAGAAN LAIN ATAU CAWANGAN OTHER BUSINESS OR BRANCH NAME AND PLACE OF BUSINESS	
NAMA NAME	ALAMAT ADDRESS
NOTA: JIKA RUANGAN TIDAK MENCUKUPI, SILA GUNAKAN KERTAS LAIN DAN SERTAKAN LAMPIRAN BERSAMA PERMOHONAN INI NOTE: IF THE ROWS PROVIDED ARE NOT SUFFICIENT, PLEASE FILL IN A SEPARATE PAPER AND ATTACH WITH THIS FORM.	

Sila hubungi Pusat Pengurusan Perhubungan KWSP 03 – 8922 6000 untuk sebarang pertanyaan berkaitan permohonan ini.
Please contact Call Management Centre 03 – 8922 6000 for any query on this application.

V16122016

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NAMA PENUH MAJIKAN (HURUF BESAR) _____
 FULL NAME OF EMPLOYER (CAPITAL LETTERS)

(F) MAKLUMAT MAJIKAN ORANG GAJI DOMESTIK / DETAILS OF EMPLOYER OF DOMESTIC SERVANT

NAMA MAJIKAN EMPLOYER'S NAME											
NO. MyKad/PASPORT MyKad/PASSPORT NO.											
ALAMAT KEDIAMAN/ PERNIAGAAN RESIDENTIAL / BUSINESS ADDRESS											
POSKOD POSTCODE				NEGERI STATE							
NO. TELEFON RUMAH HOME TELEPHONE NO.						NO. TELEFON PEJABAT OFFICE TELEPHONE NO.					
NO. TELEFON BIMBIT MOBILE TELEPHONE NO.						NO. FAKSIMILI FAX NO.					
SAYA SUDAH DIDAFTRAKAN SEBAGAI SEORANG MAJIKAN NO. RUJUKAN MAJIKAN KWSP SAYA IALAH I AM REGISTERED AS AN EMPLOYER AND MY REGISTRATION NUMBER IS						BILANGAN ORANG GAJI DOMESTIK NO OF DOMESTIC SERVANTS					

(G) MAKLUMAT ORANG GAJI DOMESTIK / DETAILS OF DOMESTIC SERVANT

NOTA : JIKA RUANGAN TIDAK MENCUKUPI, SILA GUNAKAN KERTAS LAIN DAN SERTAKAN BERSAMA PERMOHONAN INI
 NOTE : IF THE SPACE PROVIDED IS NOT SUFFICIENT, PLEASE FILL IN A SEPARATE PAPER AND ATTACH WITH THIS FORM

NAMA ORANG GAJI DOMESTIK NAME OF DOMESTIC SERVANT											
NO. MyKad/PASPORT MyKad/PASSPORT NO.											
TANDATANGAN ORANG GAJI DOMESTIK SIGNATURE OF DOMESTIC SERVANT						TARIKH DATE					

(H) PENGESAHAN MAJIKAN / DECLARATION OF EMPLOYER

NOTA : RUANGAN INI PERLU DILENGKAPKAN BAGI SEMUA JENIS PENDAFTARAN MAJIKAN.
 NOTE : THIS SECTION MUST BE COMPLETED FOR ALL REGISTRATION TYPES OF EMPLOYERS

1. SAYA MENGESAHKAN BAHAWA SEMUA MAKLUMAT DAN DOKUMEN YANG DIBERIKAN ADALAH SAH DAN BENAR
 I, THE UNDER SIGNED DO HEREBY DECLARE THAT ALL THE INFORMATION GIVEN IN THIS APPLICATION AND SUPPORTING DOCUMENTS ARE CORRECT AND TRUE

_____	_____	_____	_____
TANDATANGAN MAJIKAN / WAKIL MAJIKAN SIGNATURE OF EMPLOYER / REPRESENTATIVE OF EMPLOYER	JAWATAN DESIGNATION	COP RASMI ORGANISASI OFFICIAL STAMP OF BUSINESS	TARIKH DATE

Sila hubungi Pusat Pengurusan Perhubungan KWSP 03 – 8922 6000 untuk sebarang pertanyaan berkaitan permohonan ini.
 Please contact Call Management Centre 03 – 8922 6000 for any enquiry on this application.

V16122016

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APPENDIX U4: SOCSO Registration



**BORANG PENDAFTARAN ID PORTAL PERKESO
SOCSO PORTAL ID REGISTRATION FORM**

JENIS PERMOHONAN / APPLICATION TYPE

Sila Tandakan (/) Pendaftaran Baru Kemaskini Pendaftaran
Please Tick (/) New Registration Registration Update

A. BUTIRAN MAJIKAN / EMPLOYER DETAILS

A1. No. Pendaftaran No. Pendaftaran (No. SSM/MyCoID, Badan Profesional, Pertubuhan, Persatuan, Koperasi); atau No. Pengenalan Diri Majikan (yang tidak berdaftar dengan SSM dan agensi lain); atau No. PTJ Kerajaan Persekutuan atau Kerajaan Negeri

A2. Kod No. Majikan (jika ada) Employer Code No. (if any)

A3. Kategori Majikan Utama Cawangan Employer Categories Main Branch

A4. Nama Majikan Employer Name

A5. Alamat Majikan
Employer Address

Bandar/City

Poskod/Postcode Negeri/State

B. BUTIRAN PEMOHON / WAKIL / APPLICANT'S / REPRESENTATIVE DETAILS

B1. Nama Penuh Full Name

B2. Pengenalan Diri (No. KPPN / No. Pasport) Identity (New Identity Card No. / Passport No.)

B3. No. Telefon Bimbit / Pejabat Handphone / Office Telephone No.

B4. E-mel E-mail

C. PERAKUAN MAJIKAN / EMPLOYER'S DECLARATION

Saya mengesahkan bahawa semua butiran yang diberikan adalah sah dan benar.
I, declare that all the information given are true and valid.

Tandatangan & Nama Majikan / Wakil
Signature & Name of Employer / Representative

Jawatan
Designation

Cap Rasmi Majikan
Official Stamp of Employer

Tankh
Date

UNTUK KEGUNAAN PERKESO / FOR SOCSO USE

<p><small>Tandatangan Dan Cap Anggota</small> <small>Signature and Staff Stamp</small></p>	<p><small>Cap Terima</small> <small>Received Stamp</small></p>
--	--

*Sebarang pertanyaan mengenai permohonan ini, sila hubungi Pusat Khidmat Pelanggan PERKESO di nombor 1300 22 8000.
Any enquiries pertaining to this application, please contact SOCSO Customer Service Centre at 1300 22 8000.*

APPENDIX U5: EIS Registration



BORANG SIP 2
BORANG PENDAFTARAN PEKERJA
PERATURAN-PERATURAN SISTEM INSURANS PEKERJAAN (PENDAFTARAN DAN CARUMAN) 2017
(Peraturan 4)

NO KOD MAJIKAN / MyCoID

BORANG SIP 2- PENDAFTARAN PEKERJA

A. BUTIRAN PEKERJA

Jenis Kad Pengenalan	No Kad Pengenalan	Nama Pekerja (seperti dalam Kad Pengenalan)	Jantina (U/P)	Bangsa	Tarikh Mula Kerja	Pekerjaan	Sila tandakan (/) pekerja yang bergaji melebihi RM4,000.00 sebulan
(1)	(2)	(4)	(5)	(6)	(7)	(8)	(9)
	(3) Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		
	Tarikh Lahir				Hari Bulan Tahun		

B. PENGESAHAN MAJIKAN / WAKIL MAJIKAN

Saya mengesahkan bahawa tiada seorang pun pekerja perusahaan ini sebagaimana yang dinyatakan dalam seksyen 16 Akta telah tertinggal daripada senarai di atas.

Tandatangan: _____

Tarikh:

Nama Majikan>Nama Wakil Majikan:

Nama Perusahaan:

No. KPPN:

Jawatan:

No. Telefon Pejabat/No. Telefon Bimbit:

No. Faks:

E-mel:

Tandatangan tidak diperlukan sekiranya borang ini dihantar melalui medium elektronik tertakluk kepada pengesahan oleh PERKESO

PENDAFTARAN PERNIAGAAN		
"MAKLUMAT PEMILIK (Isikan nama seperti di dalam MYKAD/MYPR)		
NAMA PEMILIK	<input style="width: 100%;" type="text"/>	
NO. MYKAD/MYPR	<input style="width: 30%;" type="text"/> - <input style="width: 30%;" type="text"/> - <input style="width: 30%;" type="text"/>	NO. K/P <small>(Lama)</small>
TARIKH LAHIR	<input style="width: 15%;" type="text"/> - <input style="width: 15%;" type="text"/> - <input style="width: 15%;" type="text"/>	JANTINA L <input type="checkbox"/> P <input type="checkbox"/>
KERAKYATAN	WARGANEGARA <input type="checkbox"/> PENDUDUK TETAP <input type="checkbox"/> <small>(Nyatakan negara asal)</small>	<input style="width: 100%;" type="text"/>
BANGSA	MELAYU <input type="checkbox"/> CINA <input type="checkbox"/> INDIA <input type="checkbox"/> LAIN-LAIN <input type="checkbox"/> <small>(Nyatakan bangsa)</small>	<input style="width: 100%;" type="text"/>
ALAMAT KEDIAMAN	<input style="width: 100%;" type="text"/>	
BANDAR	<input style="width: 100%;" type="text"/>	
POSKOD	<input style="width: 30%;" type="text"/> NEGERI	<input style="width: 60%;" type="text"/>
NO. TELEFON	<input style="width: 100%;" type="text"/>	
NAMA PEMILIK	<input style="width: 100%;" type="text"/>	
NO. MYKAD/MYPR	<input style="width: 30%;" type="text"/> - <input style="width: 30%;" type="text"/> - <input style="width: 30%;" type="text"/>	NO. K/P <small>(Lama)</small>
TARIKH LAHIR	<input style="width: 15%;" type="text"/> - <input style="width: 15%;" type="text"/> - <input style="width: 15%;" type="text"/>	JANTINA L <input type="checkbox"/> P <input type="checkbox"/>
KERAKYATAN	WARGANEGARA <input type="checkbox"/> PENDUDUK TETAP <input type="checkbox"/> <small>(Nyatakan negara asal)</small>	<input style="width: 100%;" type="text"/>
BANGSA	MELAYU <input type="checkbox"/> CINA <input type="checkbox"/> INDIA <input type="checkbox"/> LAIN-LAIN <input type="checkbox"/> <small>(Nyatakan bangsa)</small>	<input style="width: 100%;" type="text"/>
ALAMAT KEDIAMAN	<input style="width: 100%;" type="text"/>	
BANDAR	<input style="width: 100%;" type="text"/>	
POSKOD	<input style="width: 30%;" type="text"/> NEGERI	<input style="width: 60%;" type="text"/>
NO. TELEFON	<input style="width: 100%;" type="text"/>	
PENGESAHAN PEMILIK TUNGGA/RAKAN KONGSI <small>(Diwajibkan setiap pemilik tunggal/rakan kongsi mengisytiharkan dan menandatangani/ibu jari kanan di atas borang ini)</small>		
<small>Saya/kami yang bertandatangan di bawah mengesahkan semua kenyataan yang dibuat dalam borang ini adalah benar dan mengaku bahawa saya/kami adalah pemilik tunggal/rakan kongsi bagi perniagaan ini.</small>		
IDIL	NAMA DAN NO. MYKAD/MYPR	TANDATANGAN/CAP IBU JARI KANAN
TARIKH PERMOHONAN	<input style="width: 100%;" type="text"/>	
UNTUK KEGUNAAN PEJABAT <small>Saya adalah Orang Yang Bertanggungjawab (OYB) menyifatkan butir pendaftaran perniagaan yang dinyatakan di atas.</small>		
	NAMA DAN NO. MYKAD/MYPR	TANDATANGAN/CAP IBU JARI KANAN

APPENDIX U7: Trademark Registration Form

Fee Code TMA2A TMA2B TMA2C
--

INTELLECTUAL PROPERTY CORPORATION OF MALAYSIA
TRADEMARKS ACT 2019
APPLICATION FOR REGISTRATION OF TRADEMARK

PAS Reference No. (if any):

Fee applicable for this request is for each class. Please indicate number of classes requested

Application for registration of trademark – by adopting from pre-approved list (Fee Code **TMA2A**)

Application for registration of trademark – without adopting from pre-approved list (Fee Code **TMA2B**)

Series of trademark (Fee Code **TMA2C**)

1	APPLICANT [If there is more than one applicant mark off this box and fill additional information]: <input type="checkbox"/>							
a	Applicant's Name: (If partnership, please provide names of the partners)							
b	Applicant type (Specify whether Person/individual, body corporate, partnership, LLP, association/body authority or others)							
c	Identity Card No. /Passport No. (for individual) or Company Registration No. (for company or businesses registered in Malaysia only)							
d	Address of applicant: <ul style="list-style-type: none"> • If the address is not within Malaysia, you must also complete section 2 below • If you want to have a different address for service, please also complete item 3 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> <tr> <td style="width: 50%;">Postcode:</td> <td style="width: 50%;">Town:</td> </tr> <tr> <td colspan="2">State/Country:</td> </tr> </table>			Postcode:	Town:	State/Country:	
Postcode:	Town:							
State/Country:								
e	Telephone No. (For Malaysian applicant only)							
f	Mode of Correspondence	<input type="checkbox"/> (Mark off this box if you would like us to correspond with you using our Electronic Filing System services. You must have a registered ID)						
g	Applicant's Reference No. (If any and no							

	registered agent is appointed)	
2	AGENT (If registered agent is authorized and appointed, Form TMR7 must be filed with this form)	
a	Name:	
b	Agent No. (if known):	
c	Agent Reference No.:	
3	ADDRESS FOR SERVICES OF THE APPLICANT (If registered agent is not appointed and applicant wishes to have another address, other than stated in Section 1(d), Form TMR7 must be filed with this form)	
	Postcode:	Town:
	State/Country:	
4	TYPE OF TRADEMARK	
	i. <input type="checkbox"/> Trademark	
	ii. <input type="checkbox"/> Collective Mark. Please file rule of collective mark (Fee code TMA3 – RM300 each class)	
	iii. <input type="checkbox"/> Certification Mark. Please file rule of certification mark (Fee code TMA3 – RM300 each class)	
5	NATURE OF TRADEMARK [Mark off one box only. You may mark more boxes if item no. xii is applicable]	
<input type="checkbox"/>	i Word	Please type the trademark here:
<input type="checkbox"/>	ii Device	Please attached or affixed the trademark in the box in Section 7
<input type="checkbox"/>	iii Combination of word and device	Please type the word trademark here and attached or affixed the trademark in the box in Section 7
<input type="checkbox"/>	iv Stylized word	Please type the word trademark here and attached or affixed the trademark in the box in Section 7

<input type="checkbox"/>	v Shape of goods or their packaging	<p>Please fill the description of the trademark in Section 6 and attached or affixed the trademark in the box in Section 7 (file format jpeg and PNG only)</p> <p>Please indicate the number of views in the box. <input type="text"/> The maximum number of images per trademark is 6</p>
<input type="checkbox"/>	vi Colour	Please provide pantone code here and attached or affixed the trademark in the box in Section 7 (file format jpeg and PNG only)
<input type="checkbox"/>	vii Sound	Please fill up the description of the trademark in Section 6 and provide MP3 of the sound (file format mp3 not exceeding 5MB)
<input type="checkbox"/>	viii Scent	Please fill up the description of the trademark in Section 6
<input type="checkbox"/>	ix Hologram	Please fill the description of the trademark in Section 6 and attached or affixed the trademark in the box in Section 7 (file format mp4 only not exceeding 20MB)
<input type="checkbox"/>	x Positioning	Please fill the description of the trademark in Section 6 and attached or affixed the trademark in the box in Section 7 (file format jpeg and PNG only)
<input type="checkbox"/>	xi Sequence of Motion	Please fill the description of the trademark in Section 6 and attached or affixed the trademark in the box in Section 7 (file format mp4 only not exceeding 20MB)
<input type="checkbox"/>	xii Any combination of the above (please mark also the nature of trademark to be combined)	Please provide necessary information as required above.
<div style="border: 1px solid black; padding: 5px; display: inline-block; margin-bottom: 5px;">6</div> DESCRIPTION OF THE TRADEMARK (Is required if the nature of trademark is shape of goods or their packaging, colour, sound, scent, hologram, positioning, sequence of motion) <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>		

7

THE TRADEMARK The representation of trademark must be firmly attached or affixed in the provided area below. Please mark off which is applicable.

- Representation of the trademark is in black & white (please attach a black and white representation of the mark)
- Representation of the trademark is in colour. If colour(s) is/are claimed. (please attach a representation of the mark in colour)

.....

.....

.....

If the application is for a series trademark, please indicate number of series in the box provided. For series trademark, the maximum number is 6 only.

Note:

The size of the representation of the trademark or graphic representation of the sign shall be more than 2cm x 2cm and less than 20cm x 20cm.

8

OTHERS - Non-Roman character and non-national language or English

If the trademark contains or consists of a word or words in non-Roman character or in a language other than the national language or English, please provide the following information:

Particulars	
NON-NATIONAL LANGUAGE OR ENGLISH / NON-ROMAN CHARACTER	
a	Language of the word or words / Character or script of the trademark:
b	Translation of the trademark into national language or English:
c	Transliteration: (pronunciation of the character/script):
c	Please mark off this box if the word(s) contained in the trademark have no meaning and cannot be translated

9

DISCLAIMER (If you want to voluntarily disclaim any rights to any specified element(s) or word(s) of the trademark, please indicate here)

.....

.....

.....

10 PRIORITY CLAIMED (If more space is necessary, tick this box and use an additional sheet):

If the priority of more than one application is claimed, please indicate the priority details of all the earlier filings.

Country or Office	Priority Number	Date of priority to be claimed	Class	Goods/Services (Please tick one of the boxes where applicable)
				<input type="checkbox"/> All goods and/or services <input type="checkbox"/> Some of goods and/or services Please specify:
				<input type="checkbox"/> All goods and/or services <input type="checkbox"/> Some of goods and/or services Please specify:

11 GOODS AND SERVICES

Indicate the Nice Classification (latest edition) to which the goods or services belong to. You may consult the Nice Classification for the list of terms accepted by Malaysia.

If more space is necessary, mark off this box and use an additional sheet:

Please use "Times New Roman" or "Arial", 12 points. Use a semicolon (;) to separate goods and services.

Pre-approved list is available on www.myipo.gov.my

If the space provided is insufficient, continue on a separate sheet and firmly attached to this form.

Adopting from the pre-approved list	Class	Goods or Services
<input type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Yes <input type="checkbox"/> No		

12 DATE OF FIRST USE

State the date of first use in Malaysia, if this is known. (dd/mm/yyyy):

		/			/				
--	--	---	--	--	---	--	--	--	--

13 DECLARATION AND SIGNATURE
 By Person Filing the Form

The applicant claims to be the bona fide proprietor of the trademark and he is:

- (a) using or intends to use the trademark in the course of trade; or
 (b) authorized or intend to authorize another person to use the trademark in the course of trade.

And I, the undersigned, do hereby declare that the information furnished above is true to the best of my knowledge.

 By Agent (An agent signing this document on behalf of the applicant shall satisfy himself as to the truth of the declaration)

I, the undersigned, do hereby declare that:

- i I have been duly appointed and authorized to act as an agent on behalf of the person(s) filing this form.
 ii the information furnished above on behalf of the person(s) filing this form is true to the best of the applicant's knowledge.
 iii I have been authorized to inform that the applicant is the bona fide proprietor of the trademark whose registration is applied for that the application is made in good faith and that he is /they are entitled to be registered as the proprietor of the trademark.

I understand and accept that I cannot make any substantive changes to the trademark(s) applied for or add more goods or services once the application is submitted. I also accept that any application fees paid are non-refundable (even if the application is not acceptable).

Signature:

Name of signatory:

Official capacity of signatory:

(Examples: Authorized person, Director, Partner or Principal Officer of Applicant(s)/ Agent)

Date:

Attention:

It is an offence under section 103 of the Trademarks Act 2019 to make or cause to be made a false entry to the Trademarks Office and that person may be liable to a fine not exceeding RM50,000 or to a term of imprisonment not exceeding 5 years or to both.

14 CONFIDENTIALITY OF DOCUMENT (Please mark off the box if applicable)

- I want this document to be treated as confidential (Fee of RM 10 will be added to the application fee)

15

SCANNING SHEET

(Self-calculation for payment of scanning services)

No	Name of Document	No of Page(s)	Amount (RM2 for each page)
TOTAL PAGES AND AMOUNT TO PAY			

If the space provided is insufficient, continue on a separate sheet and firmly attached to this form

16

PAYMENT DETAILS [Note: This will depend on the method of payment accepted.]

- Cash
- Cheque (Cheque No.)
- FPX
- Local Order LO No.
- Credit Card
- Other, please specify:

INTELLECTUAL PROPERTY CORPORATION OF MALAYSIA

TRADE MARKS REGISTRY

TM 5

TRADE MARKS ACT 1976

TRADE MARKS REGULATIONS 1997

APPLICATION FOR REGISTRATION OF A MARK
[Subregulation 18(1)]

Applicant's* or Agent's* file reference:
* Delete whichever not applicable

1. Application is hereby made for the registration of a:

trade mark defensive trade mark certification trade mark

Note: Please tick the box appropriate to the kind of mark which registration is desired. In the case of a trade mark, please attach a copy of the oath, sworn statement or statutory declaration evidencing that the applicant is the true owner. In the case of a certification trade mark, please attach a copy of the rules governing its use. In the case of a defensive trade mark, please attach a copy of the statement of case verified by a statutory declaration.

[Please enclose five (5) copies of the Form with the application]

2. Representation of mark:

Note: If the space provided is insufficient, the representation may be made on a separate sheet and firmly attached to this Form. Please ensure that the representation is clear and comply fully with regulation 34 and the size of the trade mark shall not exceed 10 x 10 cm.

If the mark is coloured and is to be limited according to the colour, please tick this box:

If the application is for a series of trade marks under section 24, please specify the number of series in this box:

Note: Any application made for a series of trade marks exceeding two trade marks is subject to an additional fee of RM50.00 per trade mark.

3. Limitations, etc.:

(Insert below any conditions, disclaimers or other limitations to which the registration will be subjected to. If the mark contains or consists of a word or words in non-Roman characters or in a language other than English language or the national language, please provide a certified transliteration and translation as

<p>appropriate.)</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>4. Class: <input type="checkbox"/></p> <p>5. List of goods or services: <i>(Goods or services falling within more than one international class are subject to separate applications. Please use a separate sheet if necessary.)</i></p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>6. Full name and address of applicant:</p> <p>Name :</p> <p>Address :</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>NRIC No./Company Registration No./Passport No.: <i>(as a personal reference number)</i></p> <p><i>If the applicant is a partnership, please state the full names of all the partners.</i> <i>If the applicant resides abroad, please provide an address for service in Malaysia (Column 7).</i></p>
<p>7. Full name and address of agent (if any):</p> <p>Name :</p> <p>Address :</p> <p>.....</p> <p>.....</p> <p>.....</p> <p><i>Note: If this is the address for service, please file Form TM 1 together with this Form.</i></p>

8. Agent's Registration No. (if known):
9. Agent's own reference:
10. International Convention priority claim: <i>If priority date is claimed under International Convention or a bilateral arrangement, please give details below and attach the relevant documents.</i> Convention country in which the trade mark was first filed: Date: No. (if any):
11. Date of first use of the mark in Malaysia (if any):
12. Declaration: <i>I/We claim to be the bona fide proprietor of the mark whose registration is applied for and, where the mark has not been used in Malaysia, that the application is made in good faith and that I am/we are entitled to be registered as the proprietor of the mark.</i> <i>An agent signing this Form on behalf of the applicant shall satisfy himself as to the truth of the declaration.</i> Signature: Name of signatory (in block letter): Telephone No.: E-mail: Date:

Note: If the applicant is a partnership, please state the full names of all the partners.

APPENDIX U8: Cradle information



CHAPTER 1 : INCEPTION

Cradle is Malaysia's early-stage startup influencer, incorporated under the Ministry of Finance Malaysia in 2003 with a mandate to fund potential and high-calibre tech startups through the Cradle Investment Programme (CIP). At present, we are administered by the Ministry of Science, Technology and Innovation (MOSTI).



In 2015, we expanded our role from grant provider to investor by establishing our venture arm, Cradle Seed Ventures (CSV). We further extended our portfolio in early 2017 to include equity investment, offering both funding and investment assistance.



Currently, two grants are made available to the startup ecosystem namely CIP SPARK and CIP SPRINT

CIPSPARK ✨

- A funding programme designed to support technology start-ups in developing their ideas and MVP, as well as other pre-commercialisation activities
- Conditional grant of up to RM150,000

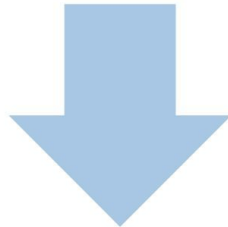
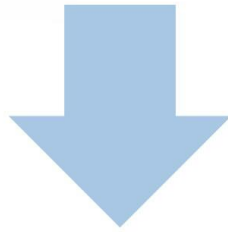
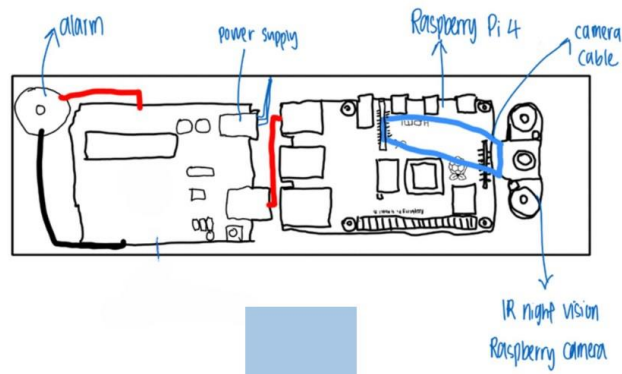
CIPSPRINTO ∞

- Aims to assist technology startups at an early stage in commercialising their innovative technology products and services for the market
- Conditional convertible commercialisation grant of up to RM600,000

APPENDIX U9: Pictures of Product Prototype



APPENDIX U10: Prototype Transformation



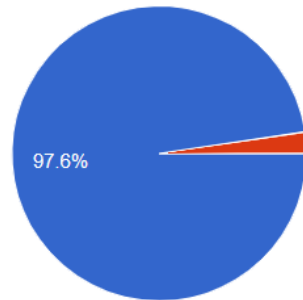
APPENDIX U11: Market Research Data

Personal Data Protection Notice

Acknowledgment of Notice

 Copy

508 responses



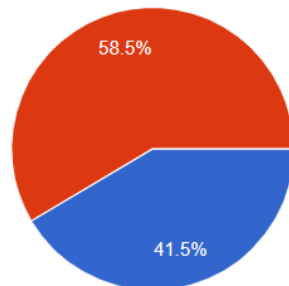
- I have been notified and I hereby understood, consented and agreed on UTAR above
- I disagree, my personal data will not be processed

Section A: Demographic Information

Gender

 Copy

504 responses

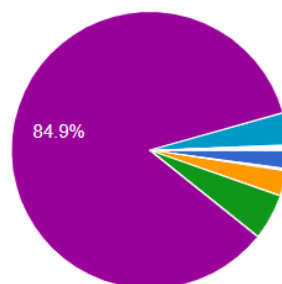


- Male
- Female

Educational Level

 Copy

504 responses

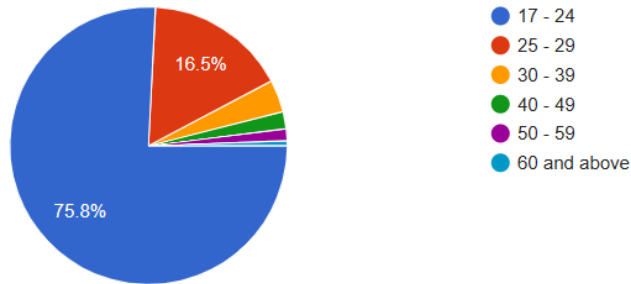


- Secondary School (SPM)
- STPM
- Diploma
- Foundation
- Bachelor's Degree
- Postgraduate Study
- Matriculation
- UEC
- Secondary School (UEC)

Age (Years Old)

504 responses

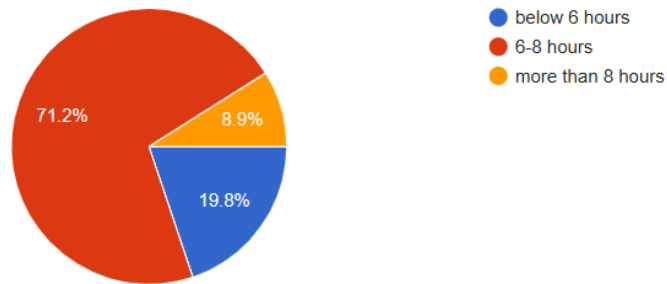
 Copy



How many hours of sleep do you typically get per night?

504 responses

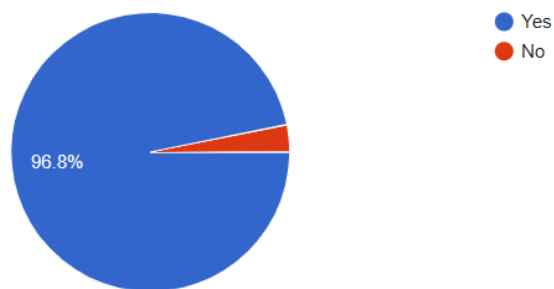
 Copy



Do you have a driving license?

504 responses

 Copy

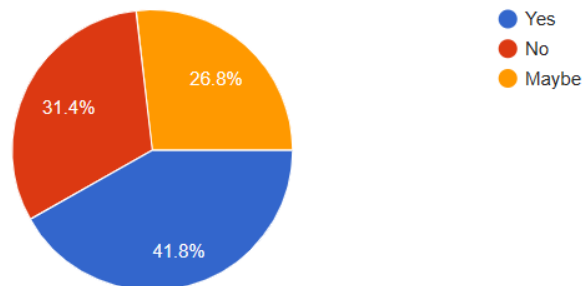


Awareness of Microsleep

Have you ever fallen asleep while performing any activities?

[Copy](#)

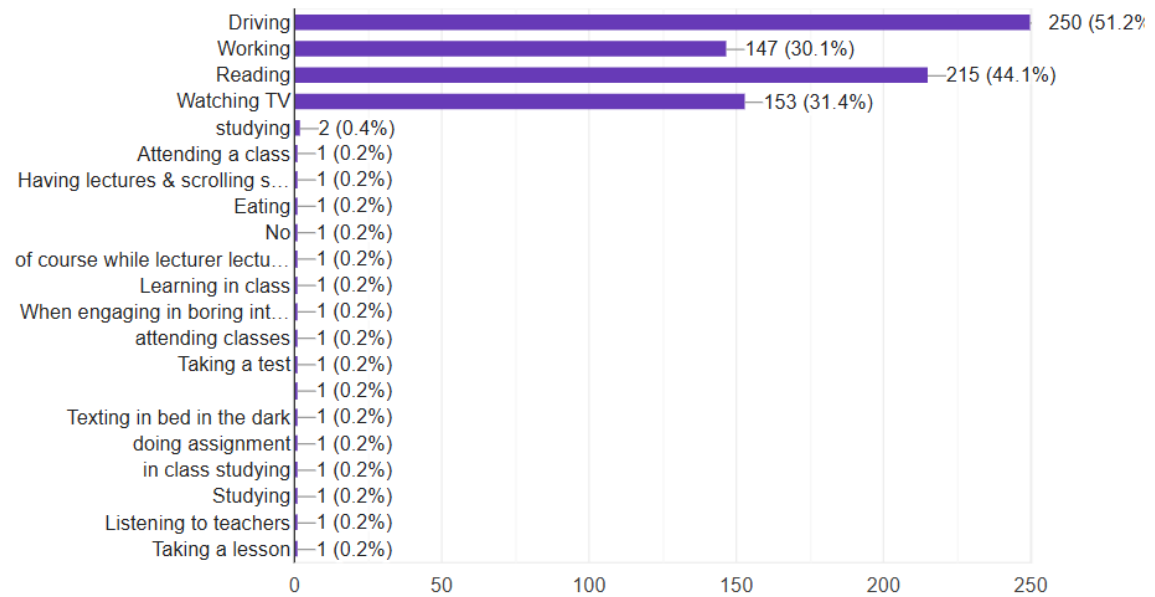
488 responses



In your opinion, which of the following activities are most susceptible to microsleep episodes?

[Copy](#)

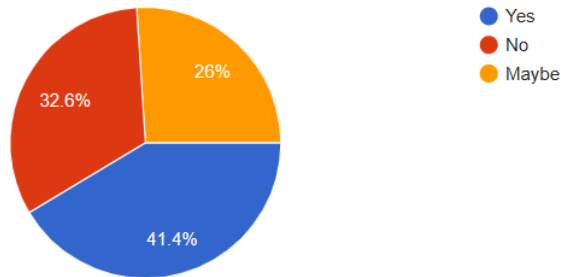
488 responses



Have you ever felt sleepy while driving?

 Copy

488 responses

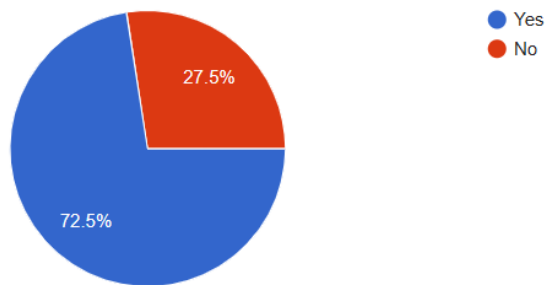


Survey on Necessity of Microsleep Preventor

Do you own a car?

 Copy

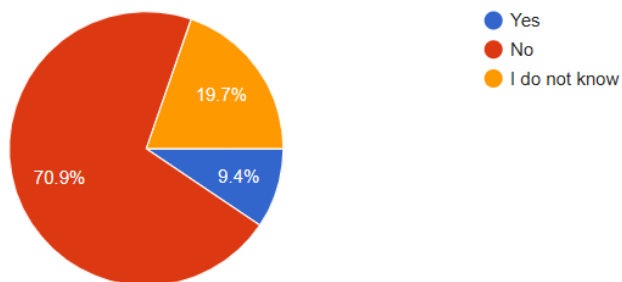
488 responses



Does the car you are driving have features that can help reduce the effects of microsleep? [e.g., Advanced Driver Assistance System (ADAS)]

 Copy

488 responses



What brand and model of car that you currently drive?

488 responses

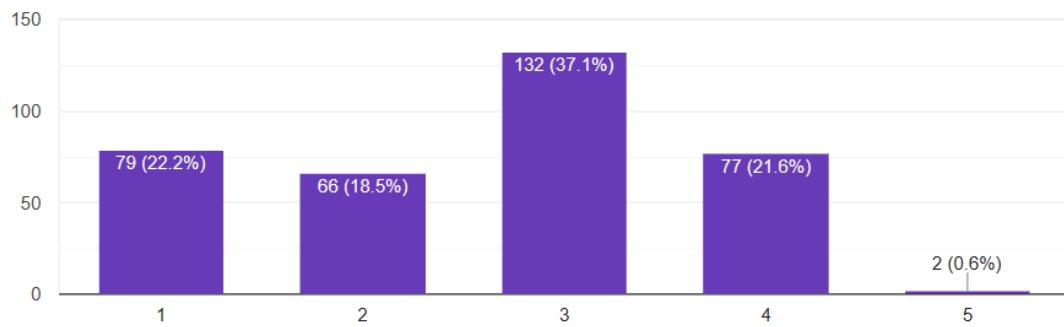


Survey on Necessity of Microsleep Preventor

How frequently do you think you experience microsleep while driving?

 Copy

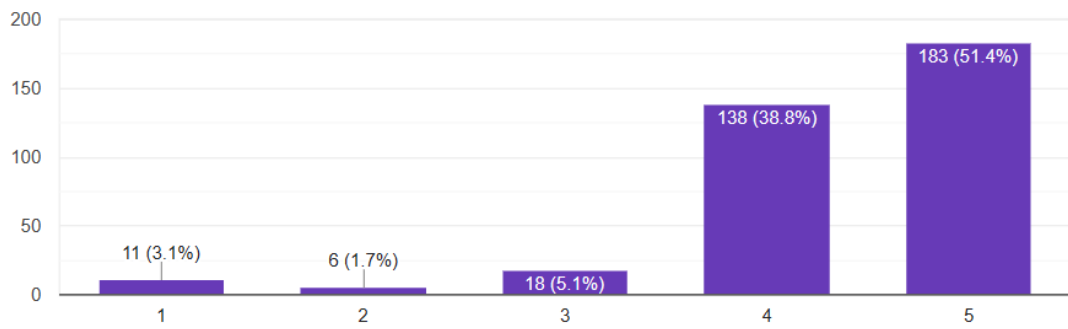
356 responses



How concerned are you about the potential dangers of microsleep while driving?

 Copy

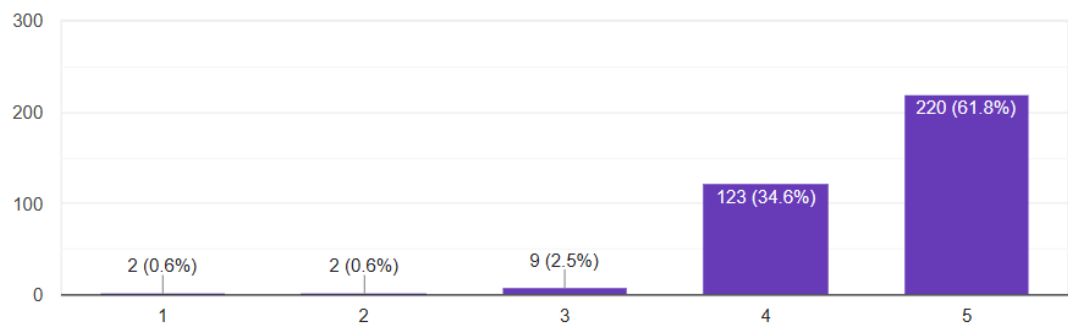
356 responses



Do you feel driving in the condition of microsleep will affect other road users?

 Copy

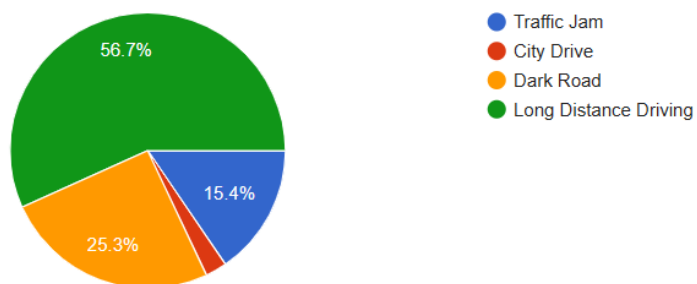
356 responses



Which conditions below will make you most probably fall into microsleep?

 Copy

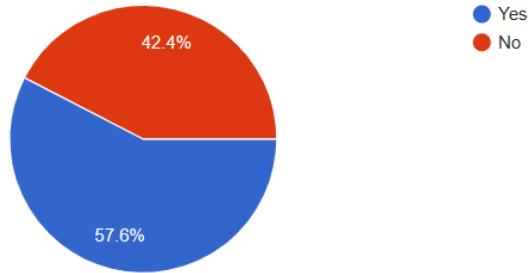
356 responses



Have you ever been involved in a near-miss or an accident due to microsleep?

 Copy

356 responses

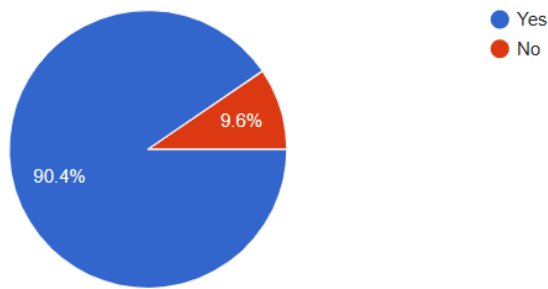


Survey on Necessity of Microsleep Preventor

If there is a Microsleep Preventer device, are you willing to buy it?

 Copy

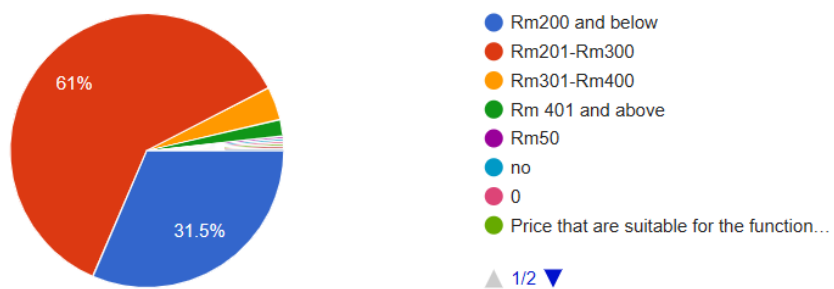
356 responses



How much do you willing to spend for having this device?

 Copy

356 responses



Do you have any suggestions on this product? (If yes, please state)

356 responses

- No
- no
-
- N/A
- No suggestion
- Nope
- Nil
- NA
- None

APPENDIX U12: Invoice

INVOICE



Bill To:

[Client's Name]
[Client's Address]

NO: INV-12345-1

Date:

From:

Road Guard Technologies Sdn Bhd
34, Persiaran Perindustrian Pengkalan 12, Lahat,
Ipoh, Perak
Tel: 011-55659552
Email: roadguardtechnologies@gmail.com

Description	Qty	Price	Total

Sub Total

Note: _____

Payment Information:

Bank:
No Bank:

Thank You!

APPENDIX U13: Business Card

Yong Chee Yun
Chief Executive Officer

 +6011-55659552

 roadguardtechnologies@gmail.com

 www.roadguardtechnologies.com

 34, Persiaran Perindustrian
Pengkalan 12, Lahat, Ipoh,
Perak


ROAD GUARD
TECHNOLOGIES
**Road Guard
Technologies Sdn Bhd**


ROAD GUARD
TECHNOLOGIES

www.roadguardtechnologies.com

APPENDIX U14: Production Machineries and Equipment

Production Machineries and Equipment	
Particulars	
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	
Stanley Phillips; Posidrive; Slotted Screwdriver Set, 10-Piece	
Packaging equipment	

Workbenches



Sunglasses for testing



T26D SUGON T26 Precision Lead-free Electric Soldering Station



Fire Extinguisher 9kg ABC Dry Powder



3 In 1 Foldable Floor Scrub Brush Broom
And Dustpan Set



AFIAH Plastic Chair



Heavy duty rack 200KGS/ per level



Heavy duty industrial container



Acer Nitro VG240YU 60.5 cm (23.8")
2560 x 1440 pixels Quad HD LED Black



Logitech MK220 Wireless Keyboard and
Mouse Combo







Raspberry Pi Micro-HDMI to standard
HDMI, 2m Black



Dell inspiration 15 laptop 12th Generation
Intel® Core™ i3-1215U



<p>Xiaomi Mi 360 Home security Camera CCTV 1080P</p>	
<p>Safety Shoes with Steel Cap and Steel Sole Low Cut with Anti-Fire Leather</p>	
<p>Deli Fingerprint Attendance Machine Time Recorder</p>	
<p>First Aid Kit Box 19 items Inc Paracetamol</p>	

Fabric Gloves (1 dozen)



FELTON Trash Bin 22 Gallon With Flip
Top Lid FDB 879 (85L)

MR.DIY
Always Low Prices



APPENDIX U15: Office Equipment

Office Equipment	
Particulars	
SHARP 1.0HP R32 Non-Inverter Air Conditioner SHP-AHA9ZCD	
Office table	
Office Chair	
Canon Pixma E470 printer	

Conference Table



File cabinets



ViewSonic PA503W WXGA DLP projector



Whiteboard



Diamond Cuckoo Hot & Cold Water Dispenser



Fire Extinguisher 9kg ABC Dry Powder







NEC AT-40 Single Line Telephone






Hotdeal Meki 120D 72" x 96" (6x8) Motorized Projector Screen







<p>Meeting Chair</p>	
<p>Logitech MK220 Wireless Keyboard and Mouse Combo</p>	
<p>Dell Inspiron 15 laptop 12th Generation Intel® Core™ i3-1215U</p>	
<p>Acer Nitro VG240YU 60.5 cm (23.8") 2560 x 1440 pixels Quad HD LED Black</p>	

<p>Xiaomi Mi 360 Home security Camera CCTV 1080P</p>	 A white, spherical home security camera with a black lens and a small 'mi' logo on the base.
<p>Pensonic 20L Microwave Oven PEN-PMW2005</p>	 A black, compact microwave oven with a digital display and control knobs on the right side.
<p>Sharp 50L Minibar Fridge SJM60MK</p>	 A black, compact minibar refrigerator with a single door and a handle on the right side.
<p>Wooden Rectangle Dining Table 120x70cm with 4 Chairs</p>	 A light-colored wooden dining table with four matching chairs, set against a plain background.

<p>COMIX 4 Section File Holder</p>	 <p>The image shows a black plastic 4-section file holder. It has a perforated design and a red 'BEST SELLER' badge with a thumbs-up icon. A yellow and red badge at the bottom right says 'ONLY AVAILABLE ONLINE'. The 'MR.DEX' logo is in the top left corner.</p>
<p>PCN Plastic Waste Paper Basket</p>	 <p>The image shows two plastic waste paper baskets. One is red and the other is blue. Both have a perforated design and a yellow and red 'ONLY AVAILABLE ONLINE' badge. The 'MR.DEX' logo is in the top left corner.</p>
<p>FELTON Trash Bin 22 Gallon With Flip Top Lid FDB 879 (85L)</p>	 <p>The image shows a black plastic trash bin with a flip-top lid. The 'MR.DEX' logo is in the top left corner.</p>

APPENDIX U16: Raw Materials

Components	
Raspberry Pi 4 Model B (4GB)	
5MP Night Vision Camera for Raspberry Pi (RPI-CAMERA-NV)	
Jumper Wire	

<p>DC3-24V SFM-20B Active Piezoelectric Buzzer</p>	 A small, black, cylindrical piezoelectric buzzer with two mounting tabs on its sides and two wires (one red, one black) extending from the top.
<p>Customized Rear mirror</p>	 A black, rectangular rearview mirror with a silver frame and a black mounting bracket.
<p>32GB- KINGSTON Micro SD Card Class 10 100MB/s</p>	 A black Kingston Micro SD card and its corresponding black adapter. The adapter has 'KINGSTON', 'microSD', and 'ADAPTER' printed on it.

APPENDIX U17: Demonstation of Prototype

