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PULSE Traffic

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EXECUTIVE SUMMARY

Another steps to involve in this project is by developing the project prototype. PULSE Traffic as mentioned, is the innovation and enhancement made to the existing product by adding some Artificial Intelligence technique and motion sensor.

Design of the product basically are not based on the amendment made to the current design, but it is measured based on the functionality which is by adding features that involves with the circuit itself and how the camera perform detection (back end development) and how both of this system integrate their data online through cloud (IoT).

A survey was conducted to measure the problems currently faced by current solution and through the survey made, we managed to analyze some useful information to measure the effectiveness of our products to the road users. The technology and product description, marketing strategy and financial estimations are discussed and from the projection, FUSE Enterprise is having deficits of RM30,804.00. However, the following years promise a much stable income statement with increasing revenue and active marketing activity are to be expected to increase the sales of PULSE Traffic.

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1.0 INTRODUCTION

According to the Nielsen Global Survey of Automotive Demand, Malaysia boasts the 3rd highest level of car ownership globally and the highest incidence of multiple car ownership globally, where 93% of Malaysian households own and utilise at least 1 car. This is a drastic increase from 2014 where 54% of Malaysian households owned more than one car. The expected continuous rise in population growth, urbanisation and increases to the car population is also bound to cause more congestion especially in highly dense urban cities like KL where the majority choose to travel by car and in the case of medical emergencies, it is harder for the emergency vehicles to pass through the road as there are cars that did not make way for the emergency vehicles to pass through which will costing lives as emergency vehicles stuck and delays in the race against the clock to reach hospitals. The dense population in urban areas worsens the congestion and reducing the efficiency (Platform, 2019).

Adding to the above problems, available street lighting systems are controlled by timer switch or light sensor that automatically turns the street lights on during sunset or at low light intensity and off during sunrise, also there are some of the states and area in Malaysia that use LED Street Light for example Klang Valley area. According to 'paultan.org' local news on "Penang to have 100% LED street lighting by 2020", some of the readers or commenters mentioned that, even LED street light is energy-efficient and better for the environment compared from traditional street light, however the issue on the LED light too bright and hurting their eyes if switch on for too long and more, arises from the consumers and road users. Some even mention that it is just a waste of power, distract drivers and light pattern leaks into residential area (Tong, 2018).

Faulty traffic light and street light may involve several issues to the road users and usually triggered the road users' safety on the road. According to *The Star Online*, accidents happened due to the malfunctioning lights that have not been fixed even complaints have been made more than 10 complaints to the authority. Despite accidents happened, unnecessary traffic jam in the area also became the consequences of the problem. A solution to have a controller that can notify the management to fix these kinds of problem is indeed in need (Kili, 2014).