UNIVERSITI TEKNOLOGI MARA

COMPANY ANALYSIS

SIRIJAYA INDUSTRIES SDN BHD

TECHNOLOGY ENTREPRENEURSHIP (ENT600): CASE STUDY

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TABLE OF CONTENT

		PAGE
TITLE PAGE		i
LIST OF FIGURES		Ii
LIST OF TABLE		iii
EXECUTIVE SUMMARY		iv
1. INTRODUCTION		
1.1	Background of The Study	1
1.2	Problem Statement	1
1.3	Purpose of The Study	1
2. COMPANY INFORMATION		
2.1	Background	3
2.2	Organizational Structure	5
2.3	Products / Services	5
2.4	Business, Marketing, Operational Strategy	7
3. COMPANY ANALYSIS		
3.1	SWOT	10
4. FINDINGS AND DISCUSSION		
4.1	Findings	13
4.2	Discussion	14
5. RECOMMENDATION AND IMPROVEMENT		16
6. CONCLUSION		17
7. REFERENCES		18
8. APPENDICES		19

EXECUTIVE SUMMARY

Sirijaya Industries Sdn Bhd is a Malaysian firm that specialises in the production of plastic lamp holders and starters for fluorescent light fixtures. The emphasis of this company review is on the LED light provided by Sirijaya Industries, which will be investigated, defined, and analysed, as well as their current problems and solutions.

The first problem regarding their product is a premature system failure. Most LED driver circuits use electrolytic capacitors to absorb voltage surges that may be present on the AC line. As for the next problem is their product overheating. Many obvious design factors, such as insufficient heat sinking and excessive LED strength, can cause LED overheating. The third problem is low color rendering index of the products. It effect of an illuminant on the color appearance of objects by conscious or subconscious comparison with their color appearance under a reference illuminant.

Aside from that, there a few solutions to that problems primarily are do innovation, Research & Development with a new alternative such as using non-woven fabric material. This is due to the non-woven fabric that are eco-friendly, biodegradable, lightweight and convenient to use as plant nursery bag. The next solutions are existing cooling mode of the lighting system. There are several ways to cool LED lighting devices now, and they can be split into two categories: package-level cooling and lighting-level cooling. Finally, using phosphor transfer, transform the coloured light to white light. PC-WLEDs (phosphorus-converted white light-emitting diodes) are highly energy-efficient light sources for artificial lighting. Sirijaya Industries can also employ more quality control personnel to ensure that only decent products with no defects are marketed to consumers. All of these solutions are thought to help Sirijaya Industries in producing high-quality products for their customers, allowing them to continue to expand, develop, and achieve more in the future.

1. INTRODUCTION

1.1 Background of the Study

Lighting has an effect on both personal and professional life. At the same time, it is a critical contributor to energy consumption. Despite the fact that there are numerous technological solutions for making lighting ‘smart,' today's lighting systems are often kept simple and are not tailored to the user's actions. High-speed network services, such as high-definition television (HDTV), video on demand (VOD), and the like, can be realised at a minimum transfer rate of 100 Mbps for home use. Owing to a lack of transmission protocol, no optical fibre wireless devices are currently available on the market. Aside from the high cost, bringing fibre to the home ventures to fruition necessitates a significant amount of effort. For digital home services, a range of technologies are currently available, including LED, CCD, and CMOS sensor technology, as well as solar energy technology. Smart lighting is a form of lighting that is designed to save energy while also providing convenience and protection. This may include high-efficiency lighting and automatic controls that change based on factors like occupancy and daylight availability. Households and consumers can monitor cooling, heating, lighting, and appliances remotely, reducing excessive light and energy consumption. This capability saves resources while also providing warmth and convenience. Lighting's potential success would necessitate the participation of a range of stakeholders and stakeholder groups from beyond the conventional lighting industry. Smart lighting also includes the use of natural light from the sun to minimise the use of artificial lighting, as well as the basic idea of people turning off lights when they leave a room. Lights can be used to keep people out of places they shouldn't be.

1.2 Purpose of Study

The aim of this case study is to look at, define, and analyse the company's product, as well as their challenges and proposed solutions. This allows me to examine the window of opportunity for exploiting consumers for new advancement products in order to determine whether or not the new product can be commercialised.

1.3 Problem Statement

Because of the high cost of energy, especially electricity, efficiency can be one of the most effective ways to save energy around the world. Around 20% of the world's total electrical

2.2 Organizational Structure

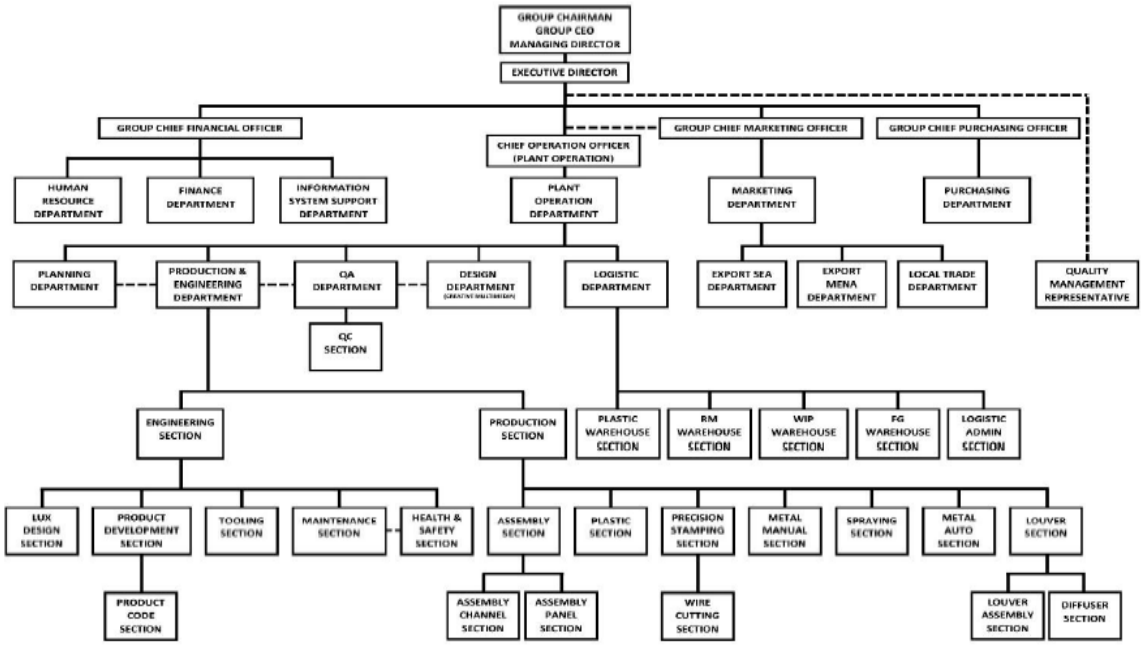

Figure 2.4 the Organizational Structure of Sirijaya Industries Sdn Bhd

2.3 Products / Services

Table 2.1 Product/ Service Provided by Sirijaya Industries Sdn Bhd

TYPE OF PRODDUCT / SERVICE	APPLICATIONS	FEATURES
 **Connected downlight**	Residential, Commercial.	• Die casting design to provide low temperature of chip and long lifespan. • Recessed trim for incredible aesthetics. • On/off / dim and tuneable white functions.