



COMPANY ANALYSIS

LG ELECTRONICS (M) SDN BHD

TECHNOLOGY ENTREPRENEURSHIP (ENT600): CASE STUDY

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EXERCUTIVE SUMMARY

This case study's purpose is to identify and assess LG Electronics (M) Sdn Bhd's product to enhance its quality by examining its strengths, flaws, opportunities, and threats. LG Electronics has introduced a slew of new goods in the twenty-first century, including cutting-edge technology in the form of mobile phones and digital televisions, and maintaining its position as a global leader.

The product will be analyzed using the SWOT technique. Then, from the SWOT I come out with the problems that have been identified and do the findings and discussion on that problem. All the solutions for the problems will be listed with the advantages and the disadvantages of the products. I also provide the problem-solving for the major problem and its method on how it is produced. If this project is successful it will gain attention to the world and the company will be outstanding in the eye of the world.

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Smartphone has become a must-have item in today generation as it is important in our daily life. A smartphone is a cell phone that can do more than just make and receive phone calls and text messages. Smartphones are computer-like in that they can browse the Internet and run software programs. Touch screens are used on smartphones to allow users to interact with them. As smartphones get popular, all the companies that produce smartphones come with new and advanced features of smartphones every year. People are so competitive to have the latest and new version of the phone, especially the younger generation.

Besides that, the world has been infected with coronavirus and many public places are closed because of the lockdown. Students can not go to school and must do online learning. So, parents have to provide their children with gadgets like a smartphone as a platform for online learning. Because of that, people waste energy on charging the phone and the phone might shut down because of low battery during their classes. Also, people tend to charge their smartphones overnight. In research from Rastogi (2012), the average cell phone uses 3.68 watts from the outlet while charging and 2.24 watts when fully charged, according to Lawrence Berkeley National Laboratory data. Let's imagine the worst-case scenario: you're over-juicing a fully charged battery for the entire night. If you leave your phone plugged in for eight hours, it will consume around 0.018 kilowatt-hours of electricity.

This study is to make innovation on solar energy apply to a smartphone. You may reduce demand for fossil fuels, minimize greenhouse gas emissions, and reduce your carbon footprint by adopting solar. Even one home that installs a solar energy system has a demonstrable environmental impact. So that if solar energy is applied to a smartphone it will have many advantages and uses in our environment.

1.2 PURPOSE OF THE STUDY

The goal of this case study is to identify and assess LG Electronics (M) Sdn Bhd's product to enhance its quality by examining its strengths, flaws, opportunities, and threats. This enables me to assess the likelihood of gaining access to industries for new advancement items to establish whether the product has market potential.

1.3 PROBLEM STATEMENT

Smartphones use a lot of electricity and are not good for the environment. Almost all people in this world use a smartphone and the battery need to be charged every day. Besides, if there are any blackouts and no electricity people can not use their smartphones if they have low battery power. Due to such circumstances, this study will try to use solar energy on smartphone batteries to save energy and also can be used when an emergency happened.

2.0 COMPANY INFORMATION

2.1 BACKGROUND OF THE COMPANY

LG Electronics is a core company of South Korea which is headquartered in Seoul. It was founded by In-Hwoi Koo back in 1958 as a division of the LG Corporation that engages in five business units which are the manufacturing of display devices, home appliances, multimedia goods, electronic parts, and developing software. In the early days, the company had contributed as the country's first electronic producer for radios and televisions. Over the several decades, the company has been in close competition with Samsung Electronics over the production of home appliances. Moreover the increased competition with Chinese rivals in consumer products, LG Electronics aims to raise sales by setting up another division specialized in research and development and supply to automakers such as Hyundai. Today, the company stands as the third-largest conglomerate business in South Korea, employing nearly forty thousand people worldwide. As of 2019, the global revenue of LG Electronics amounted to 56.5 trillion South Korean won, about 55.76 billion USD.

2.2 ORGANIZATIONAL STRUCTURE

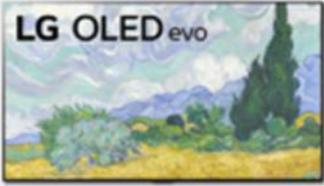
	 Young Soo Kwon DIRECTOR VICE CHAIRMAN, LG CORP.	 Beom Jong Ha DIRECTOR EXECUTIVE VICE PRESIDENT, FINANCE & ACCOUNTING TEAM, LG CORP.	 Jong Soo Han Director / KICPA Current Professor, Ewha School of Business
KWANG MO KOO CHAIRMAN OF THE BOARD Chairman and CEO, LG Corp.	 Sung Wook Cho Director / Attorney Current Partner, Yoon&Yang LLC	 SANG HUN KIM DIRECTOR / ATTORNEY Current Chairman, National Theater Company of Korea	 SOO YOUNG LEE DIRECTOR Current Executive Officer, Eco Management Korea Holdings Inc.

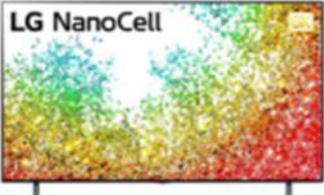
Figure 2.1: LG Organizational Structure

2.3 PRODUCT/SERVICE

LG is well known in electronics industry. Televisions, home theatre systems, refrigerators, washing machines, computer monitors, wearable gadgets, solar modules, smart appliances, and, formerly, smartphones are among LG Electronics' goods. LG Factory Service Technicians deliver excellent In-Home Repair Service for LG Appliances and TVs across the United States at no additional cost. LG Factory Service is a part of LG Electronics, Inc., the world's leading manufacturer of appliances and electronics. There are some of the examples of the product in the table 2.1 below:

Table 2.1: Type of LG products

Type of products	Name of product	Description
1. LG TV / Audio	LG OLED TVS 	<ul style="list-style-type: none"> • OLED Evo • Gallery Design • Eye Comfort display • α9 Gen4 AI Processor 4K: AI Picture Pro, AI Sound Pro • AI ThinQ : Home Dashboard, Hands-free Voice Control • True Cinema Experience : Dolby Vision™ IQ , Dolby Atmos®
	LG NANOCELL TVS	<ul style="list-style-type: none"> • Pure Colors in Real 8K • NanoCell Technology

	 <p>LG NanoCell</p>	<ul style="list-style-type: none"> • Deep Black with Full Array Dimming • LG α9 Gen 4 Intelligent Processor 8K • Dolby Vision Dolby Atmos
	<p>LG Soundbar SP7Y</p> 	<ul style="list-style-type: none"> • Meridian • TV Sound Mode Share & Soundbar Mode Control • High-Resolution Audio • DTS Virtual:X • New Sound Modes • AI Sound Pro
	<p>LG SJ2 Soundbar</p> 	<ul style="list-style-type: none"> • Compact Style Design • Subwoofer • Bluetooth Connectivity • Bluetooth Stand-by • Control with your TV Remote
<p>2. Appliances</p>	<p>Multi-Door Refrigerators</p>	<ul style="list-style-type: none"> • Inverter Linear Compressor • Instaview • Slim Fit • LINEAR Cooling™ • DoorCooling

		<ul style="list-style-type: none"> • Multi Air Flow
	<p>Twin Load Washers</p> 	<ul style="list-style-type: none"> • Slim Inverter DD • Perfect solution for daily loads • Delicate Wash • Smart Diagnosis™
	<p>7kg Ductless Dryer with Sensor Dry</p> 	<ul style="list-style-type: none"> • Sensor Dry • Rack Dry • Lint Filter • Ductless • Two-Way Tumbling • Stainless Steel Drum
	<p>LG PuriCare™ Tankless Water Purifier with 3-stage filtration & Tankless Hot & Ambient Water</p>	<ul style="list-style-type: none"> • Tankless Hot & Ambient Water • Total Service Care 1,2,3 • Slim Design • Ergonomic Touch Display

		
3. Air Conditioners	<p>0HP Dual Inverter Classic Air Conditioner</p> 	<ul style="list-style-type: none"> • Faster Cooling • Energy Saving • Less Noise • DUAL Inverter Compressor™
4. Computers Products	<p>21:9 UltraWide Monitors</p> 	<ul style="list-style-type: none"> • 34" Curved 21:9 UltraWide® • 3440 x 1440 QHD Resolution • Nano IPS Display • DCI-P3 98% (Typ.) Color Gamut • VESA DisplayHDR™ 400
	<p>PB62G</p> 	<ul style="list-style-type: none"> • RESOLUTION • BRIGHTNESS (ANSI-LUMEN) • CONTRAST RATIO • LAMP LIFE (HOURS)

2.4 BUSINESS, MARKETING, OPERATIONAL STRATEGY

2.4.1. BUSINESS STRATEGY

LG uses difference as the main principle in their business strategy to provide items and services that are distinctive to the market. They must invest in research and development, (R & D) to assist the creation of new generation devices to meet the growing demands of customers. Their unique selling proposition, USP is built on a wide range of TFT-LCD screens that offer a slim and stylish appearance. Furthermore, their goal includes enhancing customer alignment so that they can better respond to their customer's demands in a fast and effective manner.

LG's vision is to become the market-leading company with broad market recognition. The company will succeed through the constant development of capability based on ethical management. LG Electronics 'Jeong-do Management' embodies their high ethical standards and doing business transparently and honestly. It is a unique way for LG to conduct business and, at its core is a commitment to fair competition in the market. The principle of management is embodied in their declarative code of ethics and practice guidelines, thereby forming the foundation of the thinking and behavior of everyone associated with the company.



Figure 2.2: Business Strategy in LG Corporation

LG intends to spread the management philosophies of 'creating value for customers' and 'respect-based management' allowing for more responsible and open management. LG

continues to develop as the global leading company through seeking greater public benefits founded in cooperation, mutual trust, and respect for the free market company.

Meeting strategic objectives might provide an advantage over the competition. It can also result in rapid innovation and new product development, design and technological innovation, increased product sales, market share, and corporate value. Fast growth is the result of implementing strategies designed to swiftly expand market size and earnings, with an eye toward monetary growth.

2.4.2 MARKETING STRATEGY

By promoting the company through numerous channels of communication, the promotional strategy helps in the creation of widespread brand awareness. Next, because the corporation believes in selling things directly to clients, advertising plays an important part here. The corporation has marketed through a variety of mediums, including television commercials, magazines, newspapers, and the internet. Finally, they provide fantastic offers through this medium, resulting in increased market sales. In 2010, the firm announced that it will ramp up its marketing efforts and introduce a few new goods.

LG Target Audience

LG's target audience focus under the heading of household appliances and electronics, it caters to customers aged 30 to 50. Next, it is segmented into upper and middle-income groups. On the other hand, it caters to clients of all socioeconomic levels. Besides, the market is separated into two psychographic segments: lifestyle and personality. Since the company's geographic segment, it covers tier 1 and tier 2 cities.

LG Competitor Analysis on Social Media Advertising Strategy



Figure 2.3: Lee Zii Jia as LG Company ambassador.

Figure 2.3 shows that Lee Zii Jia is an LG Company ambassador. LG Electronics (LG), an award-winning home appliance company, has engaged star badminton player Lee Zii Jia as a brand ambassador for its unique LG PuriCare™ brand. The collaboration with Lee Zii Jia demonstrates LG's dedication to supporting a health-centric lifestyle for Malaysians, as well as its ongoing efforts to create revolutionary products that are Clean, Quick, and Precise, and that benefit the community. Under the tagline, Life's On, Live Better™, the LG PuriCare™ brand intends to collaborate with Lee Zii Jia to educate and raise awareness among Malaysians about the importance of health and hygiene in today's world, made possible by its cutting-edge air and water solutions: the Tankless Water Purifier, Air Purifier, and its newly enhanced Wearable Air Purifier.



Figure 2.4: LG's Facebook

Figure 2.4 shows the Facebook of LG's company.

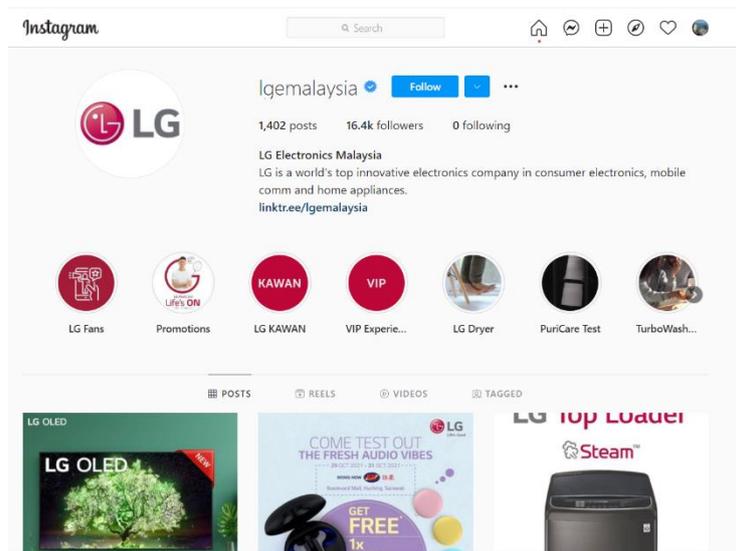


Figure 2.5: LG's Instagram

Figure 2.5 shows the Instagram of LG's company.

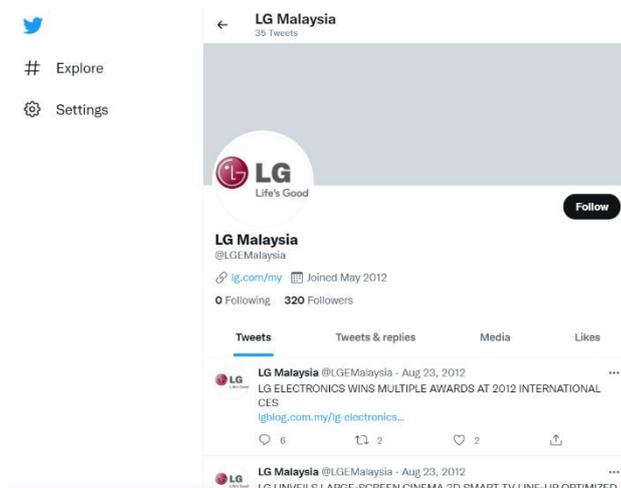


Figure 2.6: LG's Twitter

Figure 2.6 shows the Twitter of LG's company.

2.4.3 OPERATIONAL STRATEGY

Based on LG's operation strategy, they distributed their products through local retailers. However over time, with the development of e-commerce, they offered their products through their website and other e-commerce platforms such as Shopee and Lazada. In addition, the corporation has also partnered with the outlets of other companies. Some of the products can also be found in other stores' display cases. For example, LG phones are available at the mobile shops and LG TVs are available at Home Decor shops.

Moreover, LG's Malaysia has opened 34 stores nationwide and also planning to open more. The corporation has also extended its reach in rural regions by offering products at significantly lower prices to increase its sales volume and income. This shows the way they are distributing their products is to make sure that all of their products are available to buyers.

Besides, all of the decision-making in LG's operation is made by LG's CEO and also consists of executive board members. Meanwhile, the LG Electronics Corporate Audit Team and overseas divisional ethics bureaus are in charge of carrying out the committee's recommendations and monitoring the actual implementation of Management by Principle and related training.

3.0 COMPANY ANALYSIS

3.1 SWOT ANALYSIS

Table 3.1: SWOT Analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Great quality of product• Use advance technology• Great reliability, performance, features, styling and warranty.	<ul style="list-style-type: none">• Only can be use with electrical power• Use too much electricity• Use too much space
OPPORTUNITIES	THREATS
<ul style="list-style-type: none">• Produce new product features• Changing lifestyle• Competitors who are assisting in the adoption of new technology	<ul style="list-style-type: none">• Competitors produce more advance products• Costs of raw materials are rising

3.2 STRENGTHS

There are some of the company strengths that have been analyzed. First, great quality of the product. Its luxury brand would build on the LG brand's reputation for quality and innovation. It has always been noted for its straightforward design, ease of operation, and innovative and dependable technology.

Second, use advanced technology. LG has technology features such as a smart fridge that can be used to display messages, set food expiration dates, and showcase photos. Essentially it is a family noticeboard.

Last, great reliability, performance, features, styling, and warranty. LG has consistently built a reputation for dependability, quality, and innovation. The brand is now well-known for its great quality. The company's luxury brand would capitalize on LG's reputation for quality and innovation.

3.3 WEAKNESSES

Every company must have its weaknesses. There are a few weaknesses that have been identified. First, only can be used with electrical power. LG products mainly function using

electrical power. When there is no electrical power, the product can not be run. For example, the LG smartphone battery needs to be charged when the battery is low. If you go to the camping site or hiking there are no electric sources. When an emergency occurs and your smartphone is lacks of battery you can not use it.

Second, use too much electricity. Most LG product is using loads of electricity which is bad for the environment and make us pay for the high electric bill. Especially, washing machine and dryer use lot of energy to run.

Last, use too much space. LG is famous for its home appliances such as washing machines, dryers, and air purifiers. Most of it comes in a bigger size which is not suitable for a small house. Not everyone can afford a big house that can fit all the house appliances at once.

3.4 OPPORTUNITIES

LG is one of the potential companies and has a lot of opportunities. The first opportunity that has been identified is to produce new product features. LG has potential because it has much-advanced technology that can be applied for the innovation of a product. Then, new features like modern design and color can attract more customers, especially the young generation.

Then, the second opportunity is changing lifestyle. Growing urban populations, rising disposable income, a move toward technical items, and migration from rural to urban areas are all factors that will drive demand for household appliances and gadgets.

Lastly, competitors who are assisting in the adoption of new technology. Intense industry competition is assisting LG in making its products acceptable to society. As a result, LG can take advantage of this and grow its market share by evaluating competitors' moves.

3.5 THREATS

Two threats have been analyzed in this company. Firstly, competitors produce more advanced products. Famous electric company such as Philips, Panasonic, and Samsung come out with new product every year and LG have to compete with these company.

Lastly, costs of raw materials are rising. LG's margins are eroding as raw material prices and labor costs rise, making the company's operations less profitable.

4.0 FINDINGS AND DISCUSSION

4.1 FINDINGS

LG has been successful in meeting the present need for more advanced and user-friendly mobile phones. The company has created phones that are both unique and functional for customers. LG's PRADA phone is a ground-breaking innovation with a touch-operated handset interface. The phone sports a large WQVGA screen, which is a unique feature that has drawn a lot of attention.

4.1.1 Problem 1: Only can be use with electrical power

LG product will be running when it has electrical power sources. For LG smartphones, it use a battery inside the phone. The battery needs to be charged before you can use it. The battery only can be used for a limited amount of time. When you go for outdoor activities such as picnics, camping, and hiking and your battery is running low you do not have electrical power and can not use your smartphone for taking a picture, updating social media and the worse is emergency might happen.

4.1.2 Problem 2: Use too much electricity

LG is well known for its electricity product. A product like washing machines and dishwashers used 25% of an average household's electrical use and 15% of total energy bills costs. Consumer devices, such as computers, TVs, gaming consoles, and smartphones, are significantly more reliant on us these days, so it's no wonder that they're in the second position, accounting for roughly 19 percent of total electricity use in the average household, or 9% of your energy bill. This leads to the waste of energy power and increases your carbon footprint which is bad for the environment.

4.1.3 Problem 3: Use too much space

LG home appliances such as washing machine, dryer and freezer is too big too in small house. It can be a problem for people to arrange all their items if this too big. They can be uncomfortable in narrow space. This will affect their lifestyle and the home interior.

4.2 DISCUSSION

4.2.1 Suggested solution for problem 1: Install solar battery plate on the back of smartphone

Create innovative smartphones which are built-in solar battery smartphones. The solar cell is built into its backplate. When the cell was exposed to sunlight, it created energy, which was then used to recharge the phone's battery. They can be utilized when there is no electricity available. It's then suitable for outdoor activities such as treks and camping excursions, as well as simply charging your mobile devices near a window rather than adding your electric cost.

Advantage	Disadvantage
<ul style="list-style-type: none">• Charging when no electricity available	<ul style="list-style-type: none">• Can cause battery to overheat

4.2.2 Suggested solution for problem 2: Use solar energy

To overcome this, the LG company can come out with a product that can use solar energy. Solar energy can save the use of too much electricity. For example, a product like a washing machine and dryer. They can make solar-powered washing machines and dryers. Photons from the sun are absorbed by solar panels, which then turn them into useful electricity. You may dry your clothing in the comfort of your own home using renewable energy thanks to the invention of the solar dryer. The solar washer can also help you clean your clothes without using a lot of fossil fuels.

Advantages	Disadvantages
<ul style="list-style-type: none">• Reduces Electricity Bills• Good for environment	<ul style="list-style-type: none">• Weather-Dependent• The initial cost of purchasing a solar system is fairly high

4.2.3 Suggested solution for problem 3: Create foldable items

To overcome this problem, the company can create foldable home appliances such as foldable washing machines. The washing machine can be folded when you not using it and can be kept in a narrow space of your room. When you want to use it you can unfold it and use it like usual. It can change your lifestyle and give your a comfortable place to live in.

Advantage	Disadvantage
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- Fit in narrow space

- Waste time to fold and unfold it

5.0 RECOMMENDATION AND IMPROVEMENT

Based on the SWOT analysis, LG's product has many strengths and also weaknesses. The major problem with LG products is they only can be used with electrical power. Therefore, LG can do innovation for its product to be used without electrical sources. If this product is successful, it can be very convenient for the user and be used for the future generation.

One solution that can be recommended to solve the problem is to install solar power in the product. I would like to propose this innovative product name as Solar Smartphone. This product aims to invade the solar plate at the back of the smartphone for it to get power from the sun. The smartphone still will use its battery to charge every day but this innovation will be adding a solar plate at the back of the smartphone for it to be charged without an electricity supply. Besides that, the smartphone will automatically be charged under the sun when you are outside. It will also show how much solar power you had.

5.1 Method producing solar smartphone



1. Solar plate use to get power by the sun



2. The normal LG smartphone will be added with solar plate



3. The solar plate at the back of smartphone



4. The back showing how much of solar power it had

6.0 CONCLUSION

In this study, I analyzed the problems of LG products which is only can be used with electrical power, use too much electricity, and use too much space. Based on the findings I discuss the solution of each problem which is installing a solar battery plate on the back of the smartphone, using solar energy, and creating foldable items.

In conclusion, this study can ease people's lifestyle and improve the product to become futuristic and useful for the future generation. With all the ideas on the innovation, the company will have the new era of their product and if it is successful the company will gain a lot of advantages from it.

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