



Panasonic

COMPANY ANALYSIS PANASONIC CORPORATION

TECHNOLOGY ENTREPRENEURSHIP (ENT600) : CASE STUDY

FACULTY & PROGRAMME : FACULTY OF SCIENCE & MATHEMATICAL SCIENCES
: BACHELOR OF SCIENCE (Hons.) MANAGEMENT
MATHEMATICS

SEMESTER : 5

PROJECT TITLE : AIR-COND PURIFIERS

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EXECUTIVE SUMMARY

Panasonic is a major Japanese brand company for electric products manufactured by Panasonic Corporation. Panasonic offers a wide range of products and services including electronic components, telecommunications equipment, automotive systems, industrial equipment, and also non-electric products such as home renovation and construction. In this study, I was given an opportunity to do analysis on this company that manufactured the same product that I interested to develop. Even though this company have many types of product, I would like to focusing on their air conditioning system. The new innovation I want to improve the existing product of the Panasonic air conditioner is called as Air-Cond Purifiers which is combine an air purifier and an air conditioner into one device. Furthermore, I have done the analysis on the Panasonic Corporation in order to determine their strength, weaknesses, opportunities and threats of their an air conditioner. There are three problems I found which are an air conditioner not blowing cold air, an air conditioner is gives the bad impact for our health and easy spreads an unpleasant odour. These disadvantages gives me an ideas to produce new product to overcome these problems. I propose to combine an air purifier and an air conditioner into one device. As a result, it will become a multifunction device that can provide cool airflow as well as an air purifier that can clean the air and prevent an unpleasant odours. It also convenient, save electricity, save money and space by eliminating the need to buy a large air purifier for home or office. I am very sure this product can go further as new innovations for air conditioning system in our industries. It will ensure that the Panasonic Corporation will be one step ahead than other competitors.

1. INTRODUCTION

1.1 Background of the Study

Not only in the Malaysia but throughout around the world now is experiencing climate change of the weather. Sometimes the weather that day was rainy, hot or cold at the certain places. Especially for Malaysia is the country that have four seasons. Malaysia has recently had a lot of hot weather. So, the people here are often chooses to install an air conditioner at their house. If we do a research, we can look that air conditioners are installed in practically every home. This is due to the fact that having air conditioner may help to reduce the heated temperature in the house. There are almost thousands of top air conditioner (AC) companies in and around the world and choosing the best AC are depends on consumers what the brands they likes. Panasonic is one of the brands of home cooler that consumer always choose. Panasonic also produce the variation of products besides air conditioner.

The flow of this paper consists of the study is to make an innovation and bring out the common issue in the product and at the same time analyse the product in all difference way so that I can make some improvement and innovation into it. The innovation are related to the air conditioning system of one of the products in the Panasonic company.

1.2 Purpose of the Case Study

The purpose of the case study is to identify and analyse the Panasonic Corporation products and focusing on their air conditioning system. Various aspect of study under the subject matter has been considered. This includes the business, marketing and operation strategies of the company. The SWOT analysis for product (strength, weakness, opportunity and threat) will be analyse. This is to highlight and raise several problems or issue of the product facing by the company locally or internationally. Therefore, the best implementation of innovations can be added to the given problem. This enables me to examine the chance for accessing industries for new innovation products in order to establish whether the product has market potential.

1.3 Problem Statement

When it comes to air conditioning systems, there are a variety of brands that consumer utilise for their home solutions. The market of an air conditioning nowadays is quite large

and its function are almost the same. Specifically, an air conditioning system is an electrical device that is purposely installed for the removal of heat and moisture from the interior of an occupied space (*Understanding an air conditioning system, 2020*). Air conditioning is often referred to as air conditioner (AC). The problem arising when an AC is not function very well like AC is not produce a cold temperature. As we all know, an AC must be serviced every few months. Besides that, an air purifier also one of an air conditioning system. The common issues that an air purifier always develop are it is not working well, no proper airflow and many more.

2. COMPANY INFORMATION

2.1 Background Company

Panasonic is a major Japanese brand company for electric products manufactured by Panasonic Corporation. It was founded by Konosuke Matsushita in 1918 as a light bulb sockets manufacturer. Panasonic Corporation, formerly known as Matsushita Electric Industrial Co. Ltd., and headquartered in Kadoma, Osaka, Japan. Matsushita, founded the company to manufacture an electric plug that he had invented in the 1920s. Guided by his great business management and philosophy, the company grew to become the largest Japanese producer of electronics. In 2007, Panasonic is one of the Worldwide Top 20 Semiconductor Sales Leader and was ranked the 59th company in the world by Forbes Global 500 (Panasonic, 2019). The company changed its corporate name from Matsushita Electric Industrial Co. Ltd. to Panasonic Corporation on January 10, 2008. The Panasonic brand name was used for the first time in 1955 for audio speakers and lamps. Before, the company has sold products under several other brand names such as “National” and “Technics” during its history. Panasonic’s first global tagline which is “Panasonic ideas for life” was launched in May 2003. The brand slogan had changed to “A Better Life, A Better World” in September 2013 for a better illustration of the company vision. Panasonic offers a wide range of products and services including electronic components, telecommunications equipment, automotive systems, industrial equipment, and also non-electric products such as home renovation and construction. Nowadays, Panasonic’s operations are organised into seven domain companies such as Appliances, Automotive, Life Solutions, Connected Solutions, Industrial Solutions, and two overseas branches superintend the businesses in the Asia and United States.

2.2 Organizational Structure

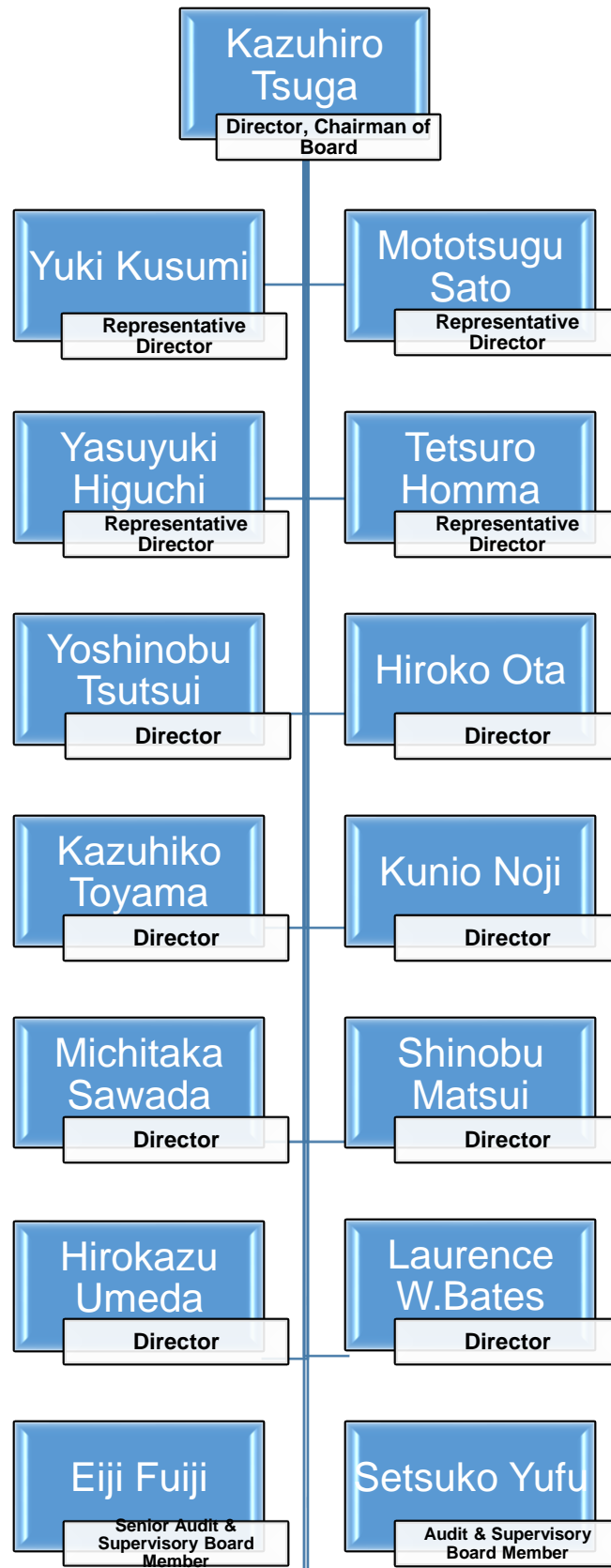




Figure 2.1: Organizational chart of Panasonic Corporation




(Source: Panasonic, 2019)



2.3 Product/Services

Panasonic produce variety of products which can be classify into 8 type of product. In every type, they consist more than 40 products. Here are some examples of every type of products.



Table 2.1: Type of products provided by Panasonic company

Type of Product	Name of Product	Description
<p>1. TV & AV</p> <ul style="list-style-type: none"> ▪ Television ▪ Audio ▪ Blu-ray & DVD Player ▪ Headphone 	 <p>Epic OLED Movie Performance with Elegant Design TH-65HZ1000K</p>	<p>65" / 4K ULTRA HD OLED / Ultra Bright Panel / Hexa Chroma Drive PRO / HDR 10+ / Dolby Vision™ / Dolby Atmos® / Cinema Surround Pro / Smart Features - Netflix, YouTube, Alexa, Mirroring</p>
	 <p>SC-UA90GSX-K</p>	<p>Woofers that throb. Dynamic audio that stirs the emotions. And a stylish silhouette that accents any room. The UA90's unparalleled quality and powerful performance let you connect with those you love.</p>
<p>2. AIR SOLUTIONS</p> <ul style="list-style-type: none"> ▪ Air Conditioner ▪ Air Purifier ▪ Ceiling Fan ▪ Ventilating Fan ▪ Stand & Table Fan 		<p>Wall-Mounted Premium Inverter Aero Series: Inverter, iAutoX, AEROWINGS, nanoe-G, R32 Refrigerant, 5-Star Rating.</p>

<ul style="list-style-type: none"> ▪ Wall & Ceiling Fan ▪ Air Curtain ▪ Accessory 	<p align="center">3.0HP Premium Inverter R32 AERO Series Air Conditioner with nanoe-GCS-U28VKH-1 (3.0HP)</p>	
	<div style="text-align: center;">  <p>FV-17CLMXVBSH/HH</p> </div>	<p>17cm CEILING MOUNT SIROCCO – Energy Saving, Quiet Operation, Compact and Stylish, Suitable for Bedrooms, Bathrooms, Living Rooms & Offices</p>
<p>3. HOME APPLIANCES</p> <ul style="list-style-type: none"> ▪ Refrigerator / Fridge ▪ Washers & Dryer ▪ Vacuum Cleaner ▪ Iron & Garment Steamer ▪ Home Shower ▪ Water Purifiers & Alkaline Ionizer ▪ Panasonic Lighting ▪ Bidet & Water Pump 	<div style="text-align: center;">  <p>Made in Japan Multi-door Refrigerator NR-F503GT-T7</p> </div>	<p>Prime Fresh -3°C technology provides extra freshness of food and convenient cooking experience. Prime Fresh / nanoe™ X / ECONAVI / INVERTER / Double Moisture Control Filter / Fresh Freezing</p>
	<div style="text-align: center;">  <p>Electric Bidet Seat DL-EH10SE-W</p> </div>	<p>Water droplets is sprayed in high speed in alternation with air for more effective cleaning and massage on skin to provide you the best comfortable enjoyment.</p>

<p>4. KITCHEN APPLIANCES</p> <ul style="list-style-type: none"> ▪ Cubie, Microwave & Electric Oven ▪ Rice Cooker & Slow Cooker ▪ Blender & Hand Blender ▪ Juicer & Slower Juicer ▪ Thermo Pot ▪ Food Preparation ▪ Breakfast Appliance ▪ Built-In Appliance & Others 	 <p>1.8L Made In Japan IH Rice CookerSR-HB184KSK</p>	<p>1.8L IH Jar Rice Cooker. Short Grain & Long Grain (Regular, Quick, delicious, 1-2 person, Congee, Casserole), Brown Rice, Multi Grains, Soup, Cake, Steam, Keep Warm. 7-Layer Diamond Kamado Pan.</p>
	 <p>ECONAVI Induction Heating IH CooktopKY-C227EHSK</p>	<p>Enjoy fast, precise and controllable cooking. Safe, Energy Efficiency, Comfortable & Easy Cleaning. Cooking Menu: Deep Frying, Pan Frying, Congee.</p>
<p>5. BEAUTY & HEALTH CARE</p> <ul style="list-style-type: none"> ▪ Hair Care ▪ Hair Dryer ▪ Hair Styler, Straightener & Brush Iron ▪ Face Care ▪ Epilators & Lady's Shaver ▪ Mobile Beauty ▪ Men's Shaver ▪ Men's Trimmer ▪ Oral Care ▪ Scalp Head & Eyes Massager ▪ Hygiene Care 	 <p>nanoe™ and Double Mineral Ions Hair DryerEH-NA98RP655/K655</p>	<p>Moisture-rich nano hydrates hair and scalp, while nano & Double Mineral Ions prevent damage from brushing and protect from UV rays. Four special modes for hair, skin and scalp.</p>
		<p>Smooth skin comfortably in one stroke. Panasonic's wet/dry epilator features a 30% wider head, and double discs with 60 tweezers to enable</p>

	<p>Wet/Dry Epilator features 30% Wider Head and Double Discs with 60 Tweezers ES-EL8A-P421</p>	<p>highly efficient hair removal.</p>
<p>6. CAMERAS & CAMCORDER</p> <ul style="list-style-type: none"> ▪ LUMIX G Mirrorless (DSLM) Camera ▪ LUMIX G Lense ▪ LUMIX Digital Camera ▪ Camcorder ▪ Accessory ▪ LUMIX S Camera ▪ Lumix S Lense ▪ LUMIX Box-Style Cameras 	<div style="text-align: center;">  <p>DC-GH5M2GA</p> </div>	<p>LUMIX G mirrorless camera featuring 20.3MP MOS sensor, C4K 60p/50p 10-bit video recording and wireless live streaming capability.</p>
	<div style="text-align: center;">  <p>Geared for the Professional HC-PV100</p> </div>	<p>A Full-HD camcorder with built-in LED video light, 1/3.1-inch BSI sensor, 20x zoom lens, and a host of functions for professionals</p>
<p>7. PHONE, FAX & VIDEO INTERCOM</p> <ul style="list-style-type: none"> ▪ Home Network System ▪ Cordless Phone ▪ Single Line Phone ▪ Home Fax 	<div style="text-align: center;">  <p>VL-SWD501</p> </div>	<p>Stylish Wireless Video Intercom System</p> <ul style="list-style-type: none"> • 6 Wireless Monitors connectable • Touch Panel (5-inch wide screen) • SD card Recording

<ul style="list-style-type: none"> ▪ Video Intercom System ▪ Wireless Door Camera 	<div style="text-align: center;">  <p>Cordless DECT Phone with Link-to-Cell Bluetooth Convergence Solution KX-TGH260MLB</p> </div>	<p>Digital Cordless Phone with Nuisance Call Block with Call Block Key and Enhanced Receiver Volume. Link-to-Cell Bluetooth Convergence Solution with 1 Handset</p>
<p>8. BATTERY & TORCHLIGHT</p> <ul style="list-style-type: none"> ▪ Battery ▪ Battery Appliance ▪ eneloop Solar Storage 	<div style="text-align: center;">  <p>BF-BG20FT-W</p> </div>	<p>Perfect for lighting up your campsite or for emergency home use, this standard flashlight features a 7.5 mm φ white LED light source for bright, long-lasting illumination.</p>

(Source: Panasonic Malaysia, 2021)

2.4 Business, Marketing, Operational Strategy

2.4.1 Business Strategy

A business strategy are known as the plan of action to achieve the vision and set objectives of an organization and guides the decision-making processes to improve the company's financial stability in a competing market (Heubel, 2021). Every company that established around the world will have their own vision and mission. Same goes to the Panasonic Corporation also have their own specific of the vision and mission. The vision of Panasonic company they want to be a top global company by pursuing the management objectives of realizing a ubiquitous networking society and coexisting with the global environment through cutting edge technologies. Hence, Panasonic company stated that their mission is they want to strive for the creation of new values, by pursuing user-friendliness and accomplishing high-tech mindset, driven by challenging spirits and

full speed of actions (*Panasonic Vision: A Top Global Visions & Missions of Fortune Global 100*, 2010).

Measures taken so far, 3-year Midterm Plan and long-term vision of the growth strategy are the three points of business strategy in the Panasonic Corporation. Tsuga (2013) mentioned in fiscal 2013, Panasonic had the significance losses for the two consecutive years and increased financial risk. As the president of Panasonic Corporation, Kazuhiro Tsuga had taken the four measures. Firstly, reorganizing 'corporate structure'. They considerably reduced the function of the head office and implemented the business division system. Each Business Division (BD) is in charge of global Research and Development (R&D), production and sales as well as maintaining a steady increase in cash and profit. They also introduced the 4 Divisional Company system at that time. Each divisional company is made up of several BDs. It can handles large scale business development that would be difficult for BDs to handle on a stand-alone basis, creation of new businesses and strengthening key devices and more. Secondly, guidelines for unprofitable businesses. They reviewed the direction of the major unprofitable businesses and have been proceeding with radical forms. They also formulated strategies for "transferring" (changing business directions or customers) and growth at the same time. Following on that, they started the mid-term management plan "CV2015" in April that year. Furthermore, for escape from financial crisis a group-wide are generate cash activities, which was an urgent issue. In the result of these measures, the financial position has been improving steadily (Tsuga, 2013).

Next, 3-year Midterm Plan which is mid-term plan "CV2015" until fiscal 2016 which started in April 2013. Tsuga (2013) said in fiscal 2014, they aim for "over 250 billion yen of operating profit and over 50 billion yen of net income attributable to Panasonic Corporation". The minimum level for restoring a dividend is 50 billion yen of net income. They are eliminate unprofitable businesses and complete the large scale restructuring without any delay in the next two years leading up to fiscal 2015. In the meantime, each BD aims to achieve "over 5% Operating Profit (OP) margin" and improve profitability continuously. Through these measures, they aim to achieve "over 350 billion yen of operating profit and over 5% OP margin" as well as "over 600 billion yen of 3-year accumulated free cash flow" in fiscal 2016. Regarding to "eliminate unprofitable businesses", they are focusing on 3 types which are TV or Panel, semiconductor and mobile phone. For the TV or Panel point, they are focus on major market and expand non-TV business. In semiconductor area, they transfer businesses, promote business alliances and asset reduction. While in mobile phone area, they

transfer to BtoB and improve R&D efficiency in BtoC. They also have restricted other businesses. In portable rechargeable battery business, an ICT area are dramatically expand their business for engine and storage. To expand the Panasonic's production in Japan, they established their sales forces to meet increasing demand of Electric Vehicle (EV). They also started to ship the first storage systems for mobile phones base stations in India (Tsuga, 2013).



Figure 2.2 Panasonic in future
(Source: Tsuga, 2013)

Last but not least, long-term vision of the growth strategy from the customers' viewpoint. On the chart above shows that Panasonic in future. With their 'DNA of consumer electronics', Panasonic company will pursue 'better life' for each individual customer in various spaces and fields, such as home, community, business, journey and car. Panasonic are having a strong relationship with their industrial partners closely related to each area to further contribute customers with their four Divisional Companies. They believe that 'better life' established with their industrial partners will be a driver to create the new electronics (Tsuga, 2013).

2.4.2 Marketing Strategy

The Audio Visual (AV) and Home Appliances (HA) industries in Malaysia fluctuate like a roller-coaster in response to the constantly shifting business environment. Panasonic Malaysia (PM) is Panasonic's sole authorised sales and marketing firm in Malaysia, where the Panasonic brand has been a market leader for decades. However, the current increase in oil prices, as well as the economic crisis, have put pressure on the AV and HA business and created numerous uncertainties. Panasonic Malaysia was up against stiff competition from its industry rivals, in addition of a poor and lethargic economy. As

a result, Panasonic Malaysia must adapt its strategy in order to thrive in this competitive industry and achieve a larger market share. It would be difficult for Panasonic to compete with local, Korean, Japanese, Chinese, and other up-and-coming ASEAN manufacturers without creative services and marketing initiatives and tactics.

Panasonic began its adventure by producing National-branded bicycle lighting. It then began manufacturing electrical products and components such as electric irons and light fixtures. Panasonic began selling radios and related equipment, as well as bicycles, after World War II. The firm began manufacturing television sets in 1961 and is currently the world's fourth largest television maker. Panasonic's current portfolio includes electronic goods, semi-conductors, home appliances, and non-electronic services such as house remodelling. Panasonic's product portfolio is divided into these business units: Appliance Company (TVs, air conditioners, and refrigerators), Eco Solution Company (Industrial Lighting and Wiring, Energy Solutions), AVC Networks Company (Professional Cameras and Broadcasting recording devices), and Automotive & Industrial Systems Company (Automotive Spares, Infotainment Systems).

Besides that, Panasonic began its adventure in Japan and expanded its operations across Asia during World War II. It began producing televisions for the US market in 1961 and eventually extended to Europe. Panasonic began business in India in 1972. Panasonic now has over 580 subsidiary firms across the world. With the help of its 9 Domain Companies, such as Eco Solutions, AVC Networks, Systems & Communications, Energy, Industrial devices, Automotive systems, Appliances, Healthcare, and Manufacturing Solutions, the company's operations are organised broadly into three business fields: Consumer, Solutions, and Components & Devices. Automotive Systems provides audio equipment to numerous vehicle manufacturers as a subcontractor. In Ireland and the United Kingdom, Panasonic has a chain of stores that sell just Panasonic products. Panasonic products are available for purchase in official outlets, shopping malls, franchised shops, merchants, and online shopping sites, which have become the company's primary selling outlet.

Panasonic is a worldwide brand that believes in producing high-quality goods for a global audience. It has always had fairly straightforward pricing practises. Because the firm made its products for the typical family, it kept its pricing low. Because of its reasonable price methods, the corporation ensures that its products are accessible to people from all walks of life. As a result, the brand has adopted a fair Price Policy, with prices that are reasonable rather than fixed. The corporation has explored a variety of

cost-cutting measures in order to access as much of the market as feasible. The brand has maintained a low profit margin, which has resulted in better sales and profits for the corporation. Various special occasion discounts have also aided in cutting product prices and increasing revenues while attracting new customers.

Panasonic has long believed in large-scale campaigns to promote its many goods and services, and has hired a number of celebrities as brand ambassadors to help with advertising and brand awareness. The firm has also taken part in the "Greener Electronics" campaign, which promotes the manufacture of environmentally friendly goods. The Panasonic marketing mix's promotional approach focuses on 360-degree branding across all media. Panasonic has a number of sponsorship agreements in place to keep its brand visible in the international market, including sporting events, football teams, events and forums, and so on. This brings the Panasonic marketing mix to a close.

2.4.3 Operational Strategy

A business operational strategy is a decision-making process that determines an organization's long-term strategy to meet the mission statement's objectives. It entails the particular activities that management intends to take in order to attain a given goal in the company's operations. Operational strategies link the company's programmes, rules, guidelines and employees so that each branch may help the others achieve a similar goal. Panasonic Corporation has unveiled a three-pronged plan to grow its electrical components and housing materials business in Southeast Asia. Panasonic's Life Solutions Company will launch the goal in the new fiscal year to reach 100 billion yen in sales in the region by March 2022.

The first strategy is to increase product variety and enhance human resources to become a fully integrated manufacturer of electrical components. As well as having a strong sales network, Panasonic has been leading Japan's electric component sector. Panasonic intends to be a full electric component provider in Southeast Asia by applying Japanese techniques and knowledge, boosting sales through local partnerships, increasing product variety and developing human resources. This includes a "learning environment" for successful learning and reading, as well as a "pleasant sleeping place" that helps people wake up more refreshed.

Besides, the company wants to enter the kitchen and housing materials markets through local partners. Panasonic's Housing Systems Business Division will aggressively enter Southeast Asian home appliance markets, leveraging Japan's cutting-edge technology, skills and experiences. The organization is committed to helping develop living space in Southeast Asia by partnering with local businesses. The company will design and introduce packaged housing solutions, such as modular kitchens and bathrooms, to ensure quality and ease of installation. An IoT-enabled "Smart Box" parcel delivery box that can be operated remotely via a smartphone is tested in Thailand.

Moreover, the company wants to grow prefabricated home and water purifier sectors. Southeast Asia's societal challenges include health, labour shortages and ageing. Panasonic has been developing solutions to these issues. Therefore, the business created air and water purifiers in health, including a Central Water Purifier. With labour shortages, the company will launch prefabricated apartments and homes throughout Southeast Asia, reducing building time and improving quality. These prefabricated dwellings were introduced in China last year to great reviews. Panasonic also proposes a robotic bed to increase geriatric autonomy and independence. Both products are already available in Japan. Panasonic, a leader in electric components and housing materials, continues to deliver solutions that enhance living space by integrating engineering, production, and sales expertise.

3. PRODUCT ANALYSIS

3.1 SWOT Analysis

SWOT Analysis is a very effective way of identifying Strengths and Weaknesses, and of examining the Opportunities and Threats of Panasonic's product, air conditioner.

Table 3.1: SWOT Analysis

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none">1. Bright well-known, recognizable advertising company2. Quality and reliability3. Reasonable price	<ol style="list-style-type: none">1. Needs a regular maintenance2. Use a lot of electricity3. Bad for health
OPPORTUNITIES	THREATS
<ol style="list-style-type: none">1. Attracting design and exclusive2. Needed to use at present according to the times as the world is now faced with global warming3. Long resistance in the industry	<ol style="list-style-type: none">1. Ozone layer depletion2. Competition from external parties3. Changing technological market

Strengths

The first strength of Air Conditioner (AC) brand Panasonic is the bright well-known, recognizable advertising company. In 1958, it is their first window type air conditioner was introduced. It is been over 60 years the Panasonic company are produced many types of AC. Panasonic Air Conditioning has grown not only well-known in Malaysia, but also recognised around the world to become a globally and celebrated brand. All of us can see that the advertisement of the Panasonic air conditioner can be found everywhere such as a television, radio, billboard and so on.

The second strength is the quality and reliability of the air conditioner itself. Panasonic air conditioner are manufactured to ensure years of reliable comfort. The consumer can rest easy with Panasonic because they gave 5-year warranty encompassing both residential and commercial applications. It shows that Panasonic produces long-lasting electronics of high

standards and gives the reliability to the consumer. For instance, Panasonic took first place for having the quietness of its AC, receiving a five-star rating compared to another brand, Fujitsu General and Mitsubishi Electric each received four star following with Kelvinator, LG and Samsung were three stars.

Last but not least, an air conditioner's strength is having the reasonable price. Panasonic, for example, has a selection of AC ranging from RM1,150 to RM3000. It shows that the price are quite cheap compared to another brands. The price can be said reasonable for the high quality of air conditioner. The consumer from the middle and top income of their salaries are suitable to purchasing an air conditioner for their homes. The consumer with lower income levels can also purchase but depends on their needs first.

Weaknesses

There will be weaknesses in a product if it does not meet specific business objectives. The Panasonic air conditioner is in the same boat. The first one weakness came up when using an air conditioner are needs a regular maintenance. When an AC is not do a maintenance, the airflow become decrease and noise is produced. It is because poorly maintenance air conditioners consume a lot of electricity and are inefficient. To make sure our AC functions optimally and to prolong service life, it is best to have our AC serviced at least once every six months (Panasonic, 2021).

Secondly, an air conditioner use a lot of electricity. It is because usually consumer will be keep an air conditioner open for a long time. This creates financial disadvantages for the people who have to pay the bills.

Furthermore, an air conditioner is bad for our health especially for Asthma disease due to cold chills when compared with the existing natural environment. This is because airflow from an AC are easily enters our lungs when we breathe. Due to the cool airflow, it will make the people who have asthma will be short of breath. So, an air conditioner is not suitable for the people who have the diseases.

Opportunities

Even though they have faced some weaknesses, the Panasonic Corporation has a few opportunities that can be grab by them. Attracting design and exclusive of an air conditioner are an opportunity that they should consider. Panasonic is always improving the design of its

air conditioner as well as their other products. It is an important to do an attracting design and exclusive look products because it can be attract the consumer to purchased it. Usually the consumer of Panasonic brand were most satisfied with the appearance and design of their air conditioner.

In addition, air conditioner are needed to use at present according to the times as the world is now faced with global warming. Nowadays the weather is quite hot in all around the world. So, the people will take a faster way with buy an air conditioner to cool themselves either at their home, office, shopping mall or anywhere else. It is an opportunity in the business because the consumer will buy the Panasonic air conditioner or another brands also.

Moreover, Panasonic brand are long resistance in the industry when compared to other products, because these products have long been in the market and it is convincing users. So, the loyal customers who are used to buying the products that Panasonic produce either air conditioner or another products will always repeat that.

Threats

However, there will be some threats in producing the products. Not to be missed also with the Panasonic air conditioner. One of the threat is cause an ozone layer depletion. The refrigerants contained in air conditioners and refrigerators can be extremely harmful the environment. Another products also can potent greenhouse gases. For example, when many people were decide to buy an air conditioner, it will further increase the occurrence of an ozone layer depletion in the future.

Hence, Panasonic will have the competition from external parties such as the Samsung, Sony, LG, Philips and Sharp. They have been giving stiff competition to the Panasonic for diversity promotion, product and price more affordable. Each one of them has its different strengths. Panasonic will be pushed aside by other huge multinational tech companies if they cannot stay up with innovation.

The last threat of Panasonic air conditioner are changing technological market. The technology market changes every week or even every day. We do not know whether after 10 years the majority of Panasonic products will be relevant or not. The segment is dominated by technology, and if one technology gets outdated, then the other needs to be caught fast do the same.

4. FINDINGS AND DISCUSSION

4.1 Findings

Panasonic Corporation is aim to contribute to further social development by globally offering convenient, safe and comfortable lifestyles in a broad range of areas. These findings are based on the air conditioning system by Panasonic. There are several problems found in this case study.

4.1.1 Problem 1: An air conditioner not blowing cold air

An air conditioner will not blow cold air because of a dirty air filter blocks the airflow of an AC. A dirty air filter can cause the condenser unit to freeze even more and it will make reduce the cooling power of our air conditioner. (*10 common air conditioning problems you should know about*, 2019). Because of that an air conditioner are needs a regular maintenance.

4.1.2 Problem 2: An air conditioner is gives the bad impact for our health

An air conditioner is bad for our health especially for Asthma disease due to cold chills when compared with the existing natural environment. This is because airflow from an AC are easily enters our lungs when we breathe. Due to the cool airflow, it will make the people who have asthma will be short of breath. According to Elkoochi (2016) usage of an air conditioner also gives an impact to our skin. The skin become more dry and mucous membranes. Thus, airborne dust and fungi cause allergic reactions. Additionally, indoor air pollution can sometimes be worse than outside air pollution. If allergens are present in the air, consumer of an AC may have nasal issues, headaches, itchy eyes, breathing difficulties, and dizziness (Elkoochi, 2016). So, an air conditioner is not suitable for the people who have the diseases.

4.1.3 Problem 3: Easy spreads an unpleasant odour

The usage of an air conditioner will easy spreads an unpleasant odour. This is because the airflow from an air conditioner is easily spread everywhere, in addition, in the small space or room. So, using an air conditioner makes it easier and faster for the odour to spread than using a fan.

4.2 Discussion

From the findings above, we want to choose one of the problems of the Panasonic air conditioner. The most major problem that are really need to be identified and search for the solutions is the Problem 2 which is an air conditioner is bad for our health. This problem can be solved with the solutions given.

Suggested solution for problem: 1. Combine an air purifier and an air conditioner into one device

To overcome this issue, the Panasonic company must think of an idea to create the new design of an air conditioner have an air purifier in one device. We can add an purifier inside an AC since purifiers offer several benefits. An air purifier is used to clean the air by removing or otherwise “inactivating” pollutants from the air. The two basic components of an air purifier are a fan and a filter surface, though the specific filtration technology can vary, from traditional HEPA filters to ionizers to brand-new PECO technology. In most air purifiers, air is passed through the unit, pollutants are trapped or removed on a filter and clean air is emitted back into the room. Thus, an air purifier are designed to reduce allergens in the air, such as dust mites, pet dander, pollen or mould spores. It is a good idea to combine an air purifier and an air conditioner into one device because we can get the cool air and clean it at the same time. A new an purifier inside the air conditioner also can use even though if an air conditioner is turned off.

Advantage: Combination of an air purifier and an air conditioner into one device can save the money and space by eliminating the need to buy a large air purifier for home or office.

Disadvantage: The price of a new air conditioner will be higher owing to the addition of additional raw materials.

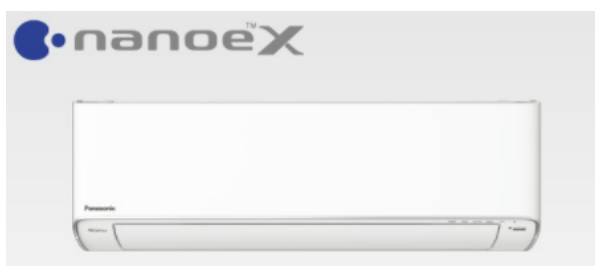


Figure 4.1: Existing Panasonic air conditioner



Figure 4.2: Existing Panasonic air purifier

(Source: Panasonic Malaysia, 2021)

Suggested solution for problem: 2. Use a fan instead of installing an air conditioner

In my opinion, to solve the problem regarding our health when use an air conditioner are the people can use a fan instead of installing an air conditioner. There are many types of fan the people can buy such as stand fan, ceiling fan, table fan and wall fan. People can select between buying a Panasonic fan brand or another brands because there are so many options.

Advantage: It is safer for our health to utilise merely a fan in the house rather than an air conditioner. Thus, it will allow us to save money rather of purchasing an air conditioner, which may cost a thousand ringgit.

Disadvantage: The people will be hot and sweaty on hot days because the fan not produce the cool air like air conditioner.

5. RECOMMENDATION AND IMPROVEMENT

Based on SWOT analysis, air conditioner as one of the products from Panasonic have many advantages also a few disadvantages. The major problems of their air conditioner are usage an air conditioner is bad for our health. By that, Panasonic company should be able to manufacture new design and features of an air conditioner to solve the problems. If they are successful to produce this product, it would be a one-of-a-kind product that can compete among the other companies.

One solution that can be suggested to solve the problems is the solution number 1 which is combine an air purifier and an air conditioner into one device. I would like to propose a new product name as Air-Cond Purifiers. The main objective of this product are to improve an existing air conditioner with add the air purifier functions into an AC. I suggest to make an innovations to an air conditioner with combine an air purifier and an air conditioner into one device. Morrison (2021) says the functions of an air conditioner are used to cool down indoor environments. The air conditioning process helps to regulate the temperature as well as the humidity levels inside our home. However, these filters are not dense enough to catch the microscopic particles that an air purifier can catch. So, I suggest to introduce an air purifier functions also add into an AC as one device. As the functions of the existing an air purifier is to remove airborne particles and contaminants that cause respiratory issues and illness. This includes common things in the air like pollen, dust, pet dander, bacteria, mould spores, smoke, viruses, and all kinds of odours. HEPA filters and Ionizer are the two main types of an air purifier. A HEPA filter in an air purifier circulates indoor air through a filtering system that catches and collects airborne pollutants. The process for how does an ionizer work is different as these devices emit negatively charged

ions out into the air that latch onto contaminants and caused them to fall to the ground or stick to surrounding surfaces (Morrison, 2021). Furthermore, I recommend that the consumer who suffer from allergies or asthma are suitable to use new design of the combination an air purifier and an air conditioner in one device because an air purifier can reduce their exposure to these triggers. These allergens are carried on particles floating in the air, often so tiny they become suspended for hours at a time. Traditional air filters capture these particles, while the Molecule air purifier is the only technology that can effectively destroy allergens (Grabianowski, n.d.). So, I hope the Panasonic will improvised my suggested new ideas to make become more reliable with more advance features that can attract people to buy it.

6. CONCLUSION

To conclude this study, I found that the problems regarding usage an air conditioner were gives the bad impact for our health. The ways to solve it Panasonic should implement my ideas to develop new product, Air-Cond Purifiers. My suggested solution is to combine an air purifier and an air conditioner into one device. As a result, it will become a multifunction device that can provide cool airflow as well as an air purifier that can clean the air and prevent an unpleasant odours. It also convenient, save electricity, save money and space by eliminating the need to buy a large air purifier for home or office. I am very sure this product can go further as new innovations for air conditioning system in our industries. It will ensure that the Panasonic Corporation will be one step ahead than other competitors.

REFERENCES

- 10 common air conditioning problems you should know about.* (2019, 20 May). White Mechanical, Inc: <https://whitemechanical.com/common-air-conditioning-problems/>
- Elkoochi, P. (2016, May 22). *What are the advantages & disadvantages of air conditioner on health?* LinkedIn: <https://www.linkedin.com/pulse/what-advantages-disadvantages-air-conditioner-health-years>
- Grabianowski, E. (n.d.). *Air purifier vs. humidifier: Which one do you need?* Molekule: <https://molekule.science/air-purifier-vs-humidifier-which-one-do-you-need/>
- Heubel, M. (2021). *What is strategy? Definiton, components & examples explained .* <https://consulterce.com/business-strategy/>
- Morrison, D. (2021, March 20). *Air purifier vs air conditioner: What's the difference?* Home Air Guides: <https://homeairguides.com/air-purifier-vs-air-conditioner/>
- Panasonic. (2019, January 11). *New World Encyclopedia.*, <https://www.newworldencyclopedia.org/p/index.php?title=Panasonic&oldid=1017145>
- Panasonic Malaysia* (2021, November). Panasonic.com. <https://www.panasonic.com/my/consumer/all-products.html>
- Panasonic vision: *A top global visions & missions of fortune global 100.* (2010, 14 January). SlideShare Scribd : https://www.slideshare.net/openinnovation/visions-missions-of-fortune-global-100/84-PanasonicVisionA_top_global_company_by#:~:text=Mission%3A%20To%20be%20valued%20by,of%20world%20reference%20for%20excellence.
- Tsuga, K. (2013, September 18). *Panasonic business strategy.* https://www.panasonic.com/global/corporate/ir/pdf/20130918_vision_note_e.pdf
- Understanding an air conditioning system.* (2020, September 10). Student Lesson : https://studentlesson.com/air-conditioning-system-definition-functions-components-types/#Types_of_the_air_conditioning_system