



COMPANY ANALYSIS

IKEA COMPANY

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- NAME : NOR SHAHIRAH BINTI ESABUDIN
- STUDENT ID : 2020980573
- LECTURER : DR. FARAH LINA AZIZAN

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EXECUTIVE SUMMARY

IKEA is a Swedish corporation that manufactures and distributes ready-to-assemble furniture, kitchen appliances, and home furnishings, as well as other goods and services. IKEA also owns the IKEA Restaurant, which is located in the store and serves good and diverse meals to customers. It is similar to a one-stop shop where customers may browse for IKEA products while also enjoying delectable and attractively cooked cuisine available at the restaurants. In this study, I was given the opportunity to conduct research on a firm that created the same product that I wanted to design. Despite the fact that this company offers a wide range of products, I'd want to focus on their dish drying rack. The product that I want to create is a 2 in 1 Smart Dish Rack, which is a dish drying rack as well as a dish organizer rack.

Aside from that, I conducted an analysis of IKEA Dish Drainer to discover its strengths, weaknesses, possibilities, and threats. The dish drying rack has four flaws, according to a SWOT analysis. These flaws inspire me to devise an innovative solution to the problem. I proposed transforming a standard dish drying rack into a 2 in 1 Smart Dish Rack, which is a combination of a dish drying rack and a dish organizer rack. This dish drying rack idea was presented to answer an issue that has arisen. As the dishes were heaped on the rack, it took some time for them to dry. Second, the dish drying rack is constructed of plastic, which is bad for the environment. Third, the dishes were exposed to dust and insects due to the uncovered dish drying rack. Finally, the dish drying rack has a limited capacity for cookware. This could be a problem, especially if you have a large family who cooks in huge portions and then needs additional place to store their cookware after cleanup. If this idea succeeds, it will be a fantastic product in the future.

1.0 INTRODUCTION

1.1 Background of Study

According to the Department of Statistics Malaysia, the country's population was expected to be 32.7 million people in the year 2020. (Department of Statistics Malaysia, 2020). From such figure, it can be calculated that 8,183,900 households were recorded in 2020. The fact that IKEA is among the company that manufactures prefabricated furniture and homeware made to order, made me believe that they would be an extremely relevant collaboration partner for a project that focused on the design of a dish drying rack. Furthermore, kitchen appliances are a huge source of interest for me. Increasing the quantity of food prepared at home inevitably results in more dishes to clean. However, if you don't have a dishwasher or simply prefer to clean your plates and pots by hand, you'll need a dish rack (since it's unlikely that you'll want to dry and put away all of your dishes at the same time). Generally, the traditional dish drying rack is an open-bottomed piece of kitchen shelving that is put above the sink and has shelves made of steel wire or dowels to allow water from cleaned dishes to drip into the sink and air dry. It is usually used immediately following the cleaning process to dry off the cookware set. A dish organizer rack, on the other hand, is typically used to store dishes that have been allowed to dry. It is important to organize and neatly arrange all of our items in the dish organizer rack so that everything is in one place and easily accessible. It is a two-step process in which we first place the dishes in the dish drying rack to dry them and then place them in the dish organizer rack for the purpose of keeping them organized. These products can assist us in keeping our cookware free from dust and in a well-organized manner. In order for my project to be successful, it must be focused on something in which I have a true interest in innovating. This is due to the fact that I use the product on a daily basis and believe that innovation is important in order to make our daily duties of managing the dishes much more efficient.

1.2 Purpose of Study

The goal of this case study is to identify, improve, and maximize the use of dish rack in our daily lives by studying the company's product, difficulties, and recommended solutions to those problems. This enables me to study the possibility of entering sectors for new improvement and advancement products in order to assess whether the product has market potential or not. This innovation is significant since it allows users to completely utilize the dish rack. The concept offered is to create a 2 in 1 Smart Dish Rack that can be used to dry dishes as well as manage cookware.

1.3 **Problem Statement**

The market of kitchen appliances nowadays is large and most of the design of the product are almost the same. Usually, they will be a slightly different for example in term of quality and improvement in the use of the rack. Specifically, households will buy two different racks for their cookware which is one for drying up the cookware and the other one for organizing the cookware. The first problem that I found is when using dish drying rack, dishes dry too slowly due to the dishes were stacked in the drying rack. Second, the drying rack is made by plastics which is not good for environment especially when we want to dispose it. Third, the dish drying rack is not covered so that it is exposed to dust and insect like lizard and fly. Lastly, the dish drying rack can't hold big cookware such as pot, basin and other large items due to limited space.

2.0 COMPANY INFORMATION

2.1 Background

IKEA is a multinational conglomerate headquartered in the Netherlands that designs and sells ready-to-assemble furniture, kitchen appliances, and home accessories, among other goods and services. Ingvar Kamprad, a 17-year-old from Sweden, founded the company in 1943. Since 2008, IKEA has been the world's largest furniture retailer. The group's brand is an acronym made up of the founder's initials, as well as the initials of Elmtaryd, the family farm where he was born, and the nearby village Agunnaryd (his hometown in Smland, southern Sweden).

The group is well-known for its modernist designs for various appliances and furniture, and its interior design work is frequently associated with an eco-friendly simplicity. Furthermore, the company is well-known for its focus on cost control, operational details, and continuous

product development, which has allowed IKEA to reduce its prices by an average of two to three percent. The IKEA Group is owned by INGKA Holding B.V., which is based in the Netherlands and is in charge of the centres, retails, customer fulfilment, and all other services related to IKEA products. At the same time, Inter IKEA Systems B.V., based in the Netherlands, is the owner and manager of the IKEA brand, which is owned by Inter IKEA Holding B.V. Inter IKEA Holding is also in charge of IKEA product design, manufacturing, and distribution. IKEA Group is a franchisee who pays Inter IKEA Systems 3% in royalties. For accounting and tax purposes, the IKEA Group and the Inter IKEA Group claim to be unrelated parties. They are, however, both controlled by the Kamprad family and close family associates. Members of the European Parliament have claimed that this corporate structure was designed to avoid paying more than €1 billion in taxes between 2009 and 2014. It is run by a number of foundations based in the Netherlands and Liechtenstein.

IKEA has 422 stores in 50 countries as of March 2021, and in fiscal year 2018, €38.8 billion (US\$44.6 billion) in IKEA goods were sold. All IKEA stores are franchised by Inter IKEA Systems B.V., with the majority of them operated by the IKEA Group and the remainder by other independent owners. IKEA's website contains approximately 12,000 products, and there were over 2.1 billion visitors to IKEA's websites between September 2015 and August 2016. The group accounts for about 1% of global commercial-product wood consumption, making it one of the largest users of wood in the retail sector. IKEA's vision is to "create a better everyday life for many people." Their company's mission is to "provide a diverse range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them." Furthermore, their vision extends beyond home furnishings. They want to make every day better for everyone who is affected by our company.

IKEA, the world's largest home furnishings retailer, is conducting a feasibility study and market viability study in East Malaysia, among other places. Arnoud Bakker, IKEA South-East Asia's head of leasing, stated that the company is always exploring all markets before deciding to open a physical store. As a result, he stated that IKEA is concentrating on improving and expanding its business through its assets in Mutiara Damansara (Selangor), Cheras (Kuala Lumpur or KL), Tebrau (Johor), and Batu Kawan (Penang). IKEA first opened a store in Malaysia in 1996, at the 1Utama Shopping Centre in Petaling Jaya, Selangor. In 2003, the Swedish furniture conglomerate opened Malaysia's first blue-box store in Mutiara Damansara. According to Bakker, all IKEA stores in Malaysia are in the top 50 out of more than 400 IKEA stores worldwide in terms of visitation. IKEA stores are run by franchisees who work for the company that owns the IKEA concept and is the world's largest franchisor, Inter IKEA Systems BV. Ikano Handel Sdn Bhd, the brand's franchisee in South-East Asia and Mexico, currently operates seven stores in the region, three in Malaysia, two in Singapore and Thailand, as well as several pick-up and collection points.

2.2 Organizational Structure



Figure 2.2.1: IKEA Corporate Structure



Figure 2.2.2: IKEA Organizational Structure

2.3 Products

2.3.1 Product and Services

More than 12,000 items are available in the IKEA's more than 20 product and service categories. From home appliances to design to furniture to food, and many other things as well. With a wide range of products available at reasonable prices, IKEA has become a popular shopping destination for individuals of all income brackets. A few samples of the goods and services we provide:

Type of Product/	Name of Product / Services	Description
Services		
1. Furniture		 Spacious study desk Available for other colors Can easily move
	Micke Desk	
2. Kitchen & Appliances	Dish Drainer	 Can be hang anywhere Has water tray Available for other colors

Table 2.3.1: IKEA Products & Services

3. Beds & Mattresses		 Available for other colors Set of 5- bedroom furniture Durable wood and high-quality plastics
	Gursken Bedroom Furniture set of 5	
4. Storage & Organization	SMASTAD/PLATSA Storage Combination	 Available for other colors Spacious organizer Can be used as make-up table, wardrobe and others.
5. Textiles	Saltstar Fitted Sheet	 High quality cloth Doesn't wrinkle easily Has rubber to support the sheet from slipping

6. Decoration		 15 cm potted plant Available for other design of plant Does not trap dust
	Potted plant	 Can be style up to our taste Has varieties of design
7. Bathroom Products	Corner Shelf	 Can be hang at the corner of bedroom Spacious Doesn't rust as it is made from aluminum

2.3.2 Other services

> Warranty

IKEA backed their product with a warranty. The warranty period begins the moment you make your purchase. The buyer can acquire a replacement and make a claim from one of the local stores if anything goes wrong with their purchase. They only have to provide a copy of the purchase receipt to prove their ownership. The length of a product's guarantee varies depending on the type of goods.

> Delivery

Customers can now order IKEA items to be delivered to their homes. As an illustration, consider items like furniture, bedding, and mattresses. The product was available for purchase in-store or online. In addition, during this pandemic, IKEA meals and beverages are available for delivery via Bungkuslt and Foodpanda at all shops.



Figure 2.3.2.1: Delivery via Foodpanda

Restaurants

Restaurant, Bistros, Swedish Food Markets and Cafe in IKEA allows the purchase of foods via takeaway, order & collect and dine-in in the store.

IKEA Food Order & Collect	Image: State Stat
	2 S.S. 8
	Some of foods that being served:
Restaurant	Image: Constraint of the second se

Figure 2.3.2.2: IKEA Restaurants

> Outlet

IKEA have 445 stores that were located at many countries which enables customer to buy the product. The area served are such Europe, Middle East, North Africa, East Asia, South Asia, Southeast Asia, Oceania and North America.



Figure 2.3.2.3: IKEA Outlets

2.4 Technology

The latest invention from the retail giant is a fresh twist on an old problem that has many shoppers stumped when it comes to finding the right furnishings for their homes. Aside from that, IKEA offers an augmented reality (AR) component to their mobile application, which is the pure-play online retailer MADE.com, where it can superimpose a 3D modelled piece of their furniture into the viewfinder of customers' smartphones' cameras. IKEA was so impressed with Geomagical Lab's technology that they purchased the company.

Because many IKEA stores are currently closed due to the pandemic coronavirus, Geomagical Labs technology allows buyers to refine their home ideas while the stores are closed, and then order furniture that is delivered without touching it. They have developed a new technique that uses AI to analyze a sequence of panoramic images from the customer's phone to generate a 3D virtual copy of a room. Customers can use the 3D models to see the room in photographic detail, modify arrangements, and try out other models.

Aside from that, the firm has chosen a user-centric approach to the use of its customers' data, in keeping with the IKEA customer data promise, which is founded on respect for individuals and their privacy. As a result, any images used in conjunction with the new room design capabilities can be saved, reduced to only data components, or completely removed.

2.5.1 Business Strategy

1) Offering the reasonable prices

Cost-efficiency is a solid foundation for IKEA's competitive edge. The worldwide furniture distributor is able to offer low prices much appreciated to a combination of economies of scale and technology integration into different commerce forms.

2) Increasing variety of products.

A wide range of products is also included in IKEA's list of competitive advantages. The IKEA portfolio comprises 9,500 products and the company renews its product line by launching around 2,500 new products every year. The company is additionally expanding its nearness in nourishment and catering businesses.

3) International market expansion strategy.

The renovation and furnishing line have traditionally engaged aggressively in the development of new markets. IKEA gathers 422 stores in 50 markets around the world. 19 modern IKEA stores opened in 2018 alone. Additionally, IKEA has 22 Pickup and Arrange Focuses in 11 countries, 41 shopping malls in 15 countries and 38 transportation locations in 18 countries.

4) Leverage strategic alliances.

Experience and skill in forming strategic alliances can be defined as one of IKEA's most important competitive benefits. The list of the foremost effective collaborations incorporate organization with Apple to investigate the conceivable outcomes of Expanded Reality As a device for home-furnishing, organization with LEGO for modern item advancement and association with Adidas in information sharing approximately client behavior.

2.5.2 Marketing Strategy

2.5.2.1 Pricing

Reasonableness is a portion of the offering suggestion of the company. It is additionally critical to highlight the truth that it targets the mass showcase to capitalize on mass consumer culture. Based on the costs of its items, it utilizes a blend of penetration pricing techniques, cost authority, value-based pricing, and cost-plus estimating technique.

The best competitors of IKEA incorporate Groupe SEB, Ashley Furniture Businesses, Walmart, Bed Shower & Past, Amazon, Target, Dock 1 Imports, and Wayfair. Moreover, the Swedish aggregate too competes with nearby furniture creators and smaller ones. To preserve a competitive advantage, the company must make its items as reasonable as conceivable besides staying genuine to its special offering recommendation. The company at first built on an infiltration estimating technique to permit it to enter an advertisement and pick up showcase shares.

The company did not raise the costs of its items significantly. Instep, it created capabilities required to lower costs related to fabricating, operations, and client procurement. In addition, the company coordinates other estimating considerations that rotate around value-based estimating and cost-plus estimating techniques to assist its interesting offering recommendation. Since the company is presently the biggest furniture retailer within the world, it presently includes a cost authority advantage that permits it to decide costs within the advertisement.

2.5.2.2 Place

There are more than 440 IKEA retail stores across the globe. In Sweden alone, there are 52 retail stores while more than 270 stores operate in the entire Europe. There are 52 stores in the United States and 35 in China. The largest store is located in the Philippines. The company also plans to expand further in South America and Southeast Asia.

Reaching the mass market too implies deciding and utilizing the foremost successful and effective dispersion channels. All things considered, the situation or dispersion technique of IKEA on a very basic level centers on worldwide retail operations. This operation has empowered the company to reach worldwide clients. It is curious that its retail stores ordinarily involve huge floor zones to exhibit the aggregate of its item offerings. Moreover, in expansion, these stores are either found in exterior cities or within city centers to create them moderately open to the public. Retail operations require legitimate warehousing. Full-size stores have coordinated stockrooms. In any case, in cities with constrained arrival ranges such as Hong Kong, the company worked a few stores whereas keeping up a central stockroom in another area. IKEA executes an assortment of store plans and contemplations depending on the topography of a specific area. For illustration, in a few nations with constrained arrival regions and arranging limitations, retail stores serve as show exhibitions and give pick-up administrations in which clients would need to make in-store or online reservations.

2.5.2.3 Promotion by social media

IKEA employs an assortment of limited-time strategies to advance its brand. The most special and most fruitful among the apparatuses utilized by IKEA to advance its brand is the limited time catalogs. These catalogs of IKEA items are printed in several dialects and distinctive catalogs are served to different markets. Apart from interesting domestic outfitting thoughts, there are genuine life stories and a wide range of items showcased through the hundreds of pages of the catalog. The catalog is accessible both in print and online. Apart from that an amplified form of the catalog is accessible within the IKEA app. The IKEA websites, distributions, brochures, publicizing, and open connection campaigns are too utilized for the advancement of the brand. IKEA uses both traditional and digital channels to advertise and promote its brand. It has utilized social media to pull in and lock in clients. Isolated nation pages are utilized to lock in clients on Facebook. Pinterest, Twitter, Google, and other social media channels are moreover utilized by the brand to advance itself. From time to time, it employs well planned open-air campaigns for advancement. Presently, IKEA is utilizing augmented reality to assist customers to get a better involvement of how well IKEA items fit into their homes and lives.



Figure 2.5.2.3.1: Facebook page of IKEA



Figure 2.5.2.3.2: YouTube of IKEA



Figure 2.5.2.3.3: Instagram of IKEA

2.5.2.4 Promotion by Brand Promoters

When IKEA began growing to abroad markets, it investigated to discover the reason. The reason was that people's taste, fashion, and inclinations shifted from advertising to showcase and culture to culture. So, IKEA chose to bring changes to its products and marketing techniques procedures, and adjust them to the local markets. It considered neighborhood societies and their favored styles, sometimes recently presenting items in unused markets, after which its items began offering and developing well. From product designs to its catalogs all are created keeping nearby culture and tastes at the center.

2.5.3 Operational Strategy

IKEA's goal is to give an assorted determination of home decorations with great plan and capacity, sublime quality and sturdiness, and modest estimating that most individuals can afford to buy. The progressive idea of originator Ingvar Kamprad was to make usable furniture that was basic and reasonable to build, get it dismantled at shops, and display it on the display area floor with full informative labels, eliminating the requirement for salesman help. IKEA utilizes an alternate business approach than its rivals. IKEA's operations must deal with big numbers because its items are very repeatable and specialized. As they offer, the scope of things the association needs to produce is low to medium.

The performance objectives related to quality, speed, dependability, flexibility, and cost, all of which affect the adequacy of different systems, either straightforwardly or by implication.

These are the operational strategies from IKEA which are long-term and sustainable relationships with suppliers. A continuous flow of supply and stable prices, which help minimize inventory management expenses in the long term. Following that, there's do-it-yourself (DIY) assembly and flat packaging. IKEA assembly reduces packing, inventory ordering, and administration expenses. Then comes the Cost-per-Touch Inventory Strategy. IKEA has a cost-per-touch inventory approach, which encourages consumers to choose goods in-store and take them to the checkout themselves, rather than having employees fetch them for them. Furthermore, optimal material usage in product manufacturing. IKEA manufactures items with as few materials as possible, which results in cheaper transportation expenses as well as lower product handling and shipment costs. Finally, there are Min/Max Inventory Replenishment Options. The inventory management system responds to reorder points within the inventory, establishing precise reordering triggers for the minimum items available before reordering as well as the maximum amount of a certain product to be purchased.

3.1 SWOT Analysis

It is common practice to do a SWOT (strength, weakness, opportunities, and threats) assessment in order to determine a company's competitive position. In addition, SWOT analysis can assess both internal and external issues, as well as existing and future opportunity. Traditionally, SWOT analysis was used to assess companies, but it is now frequently employed by the government, investors, and a variety of other business people. It is necessary for IKEA to keep an eye on these four factors in order to better prepare and position themselves.

	POSITIVE	NEGATIVE
INTERNAL FACTORS	 STRENGTHS Reasonable price Variation in design and color Great advertising Strong brand image Suitable for small family 	 WEAKNESSES Dishes took time to dry Made from plastics Exposed to dust and insects Hold small capacity of cookware
EXTERNAL FACTORS	 OPPORTUNITIES Improve the quality of the product Adopt new technology to the dish drying rack 	 THREATS Competition from other well-known brand in term of prices and others Easy to imitate by others

Table 3.1: SWOT analysis

IKEA's target clientele will be middle-class people aged 20 to 34 by 2021. This age and income group is especially interested with finding appealing, contemporary, high-quality furniture at the lowest possible price, which is exactly what IKEA sells. Middle-class customers want high-quality furniture at a reasonable price. Furthermore, this group is willing to pay a little more for long-lasting furniture. Because of IKEA's low prices on beautiful furniture, the company has been able to develop and establish a global presence. IKEA caters to a younger clientele due to the contemporary styles of its furniture and the affordable prices they offer.

Besides that, IKEA Company has a strong brand image. Ikea may be overlooked by some in the home furnishings industry, but it is just one of many. On Forbes' list of the world's most valuable brands, it ranks No. 41 overall. Only Walmart (No. 24), Home Depot (No. 34), and H&M are higher on the list of stores (No. 36). The Reputation Institute places IKEA in ranking of 58 among the world's most reputable brands in its 2017 Global RepTrak 100 listing (Pamela N. Danziger, 2018).

The dish drying rack provided by IKEA is reasonably priced. It also includes a variety of product designs and colors, giving clients options for purchasing and decorating their homes based on their tastes and preferences. Good product advertising entices buyers, making them eager to purchase the dish drying rack that is being promoted on multiple platforms. Finally, an IKEA dish drying rack is ideal for a small family that has recently relocated or has limited space in their home.

3.3 Weakness

The IKEA dish drying rack's weakness is that the dishes normally take a long time to dry. This is because the dishes were heaped between them. This will be a major issue for the family that frequently used the dishes, but when they go to use them, they find that they are still moist. The dish drying rack, on the other hand, is constructed of plastic. Although plastics are light, inexpensive, and easy to transport, they pose a dilemma when it comes time to dispose of them. Next, because the dish drying rack lacks a cover, it exposes the clean dishes to the presence of dust and dirty creatures such as lizards and flies. Because the product is small in size, it can only contain a limited amount of cookware, causing the user to scatter the cookware around, making it harder for them to find the things when they need them.

3.4 Opportunities

IKEA Company could improve the quality of the product by taking customers opinion and preferences into account. This actually could make IKEA Company understand want kind of dish drying rack that is need by every household.

IKEA Company also should improve and give innovation to their dish drying rack for example for example by installing smart system to the rack which help user to fully utilize the dish drying rack and make their works much easier.

3.5 Threats

The dangers that IKEA Company faces include dish drying rack competition from other well-known brands in terms of costs and others. For example, TESCO provided their dish drying rack, which is very similar to the IKEA dish drying rack. In terms of style and quality, the IKEA dish drying rack is simple to imitate by other companies because it lacks complicated innovation, which leads customers to switch to other goods that may provide lower pricing but the same quality as the IKEA dish drying rack.

4.1 Findings

IKEA Company is well-known for their ready-to-assemble furniture, kitchen appliances and home accessories. One of the kitchen appliances is dish drying rack. The dish drying rack that acts as an organizer for dishes still have several problems.

4.1.1 Problem 1: Dishes took much time to dry

According to my experience, if I air-dry my dishes indoors, it normally takes at least 30 minutes to completely dry them. The more dishes that were stacked, the longer it took to dry. Furthermore, microorganisms exist if our dishes are not fully dry. This is because fungi and germs might grow if the dishes are not adequately dried and stay damp. Bacteria, according to Aaron Novick (1955), can live at hotter and colder temperatures than humans, but they thrive in warm, moist, protein-rich environments with pH levels that are neutral or slightly acidic. It would be preferable if we avoided contacting it as much as possible. Otherwise, it may cause a variety of digestive and overall health problems. For example, if you eat or drink from a dirty plate or glass, you may get diarrhoea. As a result, it is critical that the dishes dry fully..

4.1.2 Problem 2: Use of plastic in making the rack

Plastic is typically used as one of the materials in the construction of the rack since it is ideal for and durable in the presence of water. Plastics are non-corrosive and lightweight. As a result, because it is constantly exposed to water, plastics are ideal for a dish drying rack. Plastics, on the other hand, will be an issue when it comes time to dispose of them. People nowadays aren't very bothered about recycling plastic, instead simply tossing it in the trash. Typically, rubbish was disposed of in a landfill, where it was deposited onto the surrounding area. Plastics, which are generally non-biodegradable, will take 400 years to dissolve in water and 800 years to decompose in soil before being totally decomposed. The

plastic material used to produce the plastic bottle is high-density polyethylene (HDPE), which is robust, resistant to cracking, and corrosion resistant. Despite the fact that HDPE has various advantages over other materials, such as being less expensive, it is still predominantly made of plastic, which is non-biodegradable. According to the World Economic Forum, by 2050, plastic garbage in the oceans would outnumber fish (Ashley Balzer, 2019).

4.1.3 Problem 3: Exposed to dust and insects

Even the "safest" cookware in the world can make you sick if not properly cleaned. Depending on the material, the cleaning and care requirements for cookware may range slightly. Even if we washed the dishes completely, there is still a danger that they would become infected. It depends on how we organize the dishes when we finish cleaning. If we place our dishes in a dish drying rack that does not have a cover, the dishes will be easily exposed to dust and insects. As a result, if we use cookware that has been contaminated with dust and insects, we may experience allergic reactions, diarrhea and even serious disease.

4.1.4 Problem 4: Hold small capacity of cookware

If we have a small household with a few members, the IKEA dish drying rack is ideal. It is, however, impractical for a family with a high number of households. Because of the high turnover, dishes don't sit in the dish drying rack for long. Cooking in huge quantities necessitates the use of a large amount of cookware. Large cookware, such as a basin, saucepan, or large jar, will take up room on the dish drying rack, making them difficult to handle.

4.2.1 Suggested solution for Problem 1: Install heating system to fasten the drying process

The installation of a heating system is the first answer to the problem of dishes that took too long to dry. It will speed up the drying process. A heating system is a device that uses thermal energy to maintain a pleasant temperature in a home, workplace, or other structure. A common component of a heating, ventilation, and air conditioning (HVAC) system. There are two types of heating systems: central heating systems and scattered heating systems. After installing the heating system, the dishes can be placed directly in the 2 in 1 Smart Dish Rack and left to dry. The rack can also be used for storage. There will also be a good ventilation system that allows air to move through the rack. A strong ventilation system is essential to avoid unpleasant odors from the dishes. Each layer of rack will also include a water tray. This water tray will collect any surplus water from the dishes. The water will then drain via a hole in the 2 in 1 Smart Dish Rack.

Advantage: The dishes will dry quickly Disadvantage: It will increase the electricity bills

4.2.2 Suggested solution for Problem 2: The use of stainless steel like aluminum.

The second solution is to replace plastic with aluminum. This is due to the fact that recycling plastic is more complex, causes degradation, and has lower reuse rates than recycling aluminum, despite the fact that the metal has been touted as a greener option. The use of aluminum in the dish drying rack will increase the stability of the dish drying rack. Aluminum, as we all know, is a stainless steel. It is an excellent ingredient for building a dish drying rack because it can handle wet dishes. The aluminum will also be used to build hooks for hanging the sieve, spatula, and other items. It will help to organize the dish drying rack.

Advantage: The aluminum doesn't rust and the rack much more stable. Disadvantage: The price will be expensive.

4.2.3 Suggested solution for Problem 3: Install a rack with a cover

Installing a rack with a cover is the third option. Protecting the dishes with a cover will keep dust and insects away. Our cookware will remain clean as a result of this. As a result, if we cook with cookware that is free of dust and insects, we can avoid problems such as allergic reactions and diarrhea.

- Advantage: The dishes will be much secure as it doesn't expose to dust and insects.
- Disadvantage: Cleanup process will take time.

4.2.4 Suggested solution for Problem 4: Upgrade to a four-tier rack

The final option is to upgrade to a four-tiered storage rack. This is done in order to prevent users or households from stacking their cookware after they have finished their dishes. The addition of a second layer of rack will allow for the storage of additional cookware. Large cookware items such as pots, basins, and jars can also be placed on the dish drying rack. Furthermore, this 2 in 1 Smart Dish Rack will be equipped with wheels, which will make it easier for the user to move the dish rack throughout the house.

Advantage: Can put more cookware

Disadvantage: It will consume more space of the kitchen.

4.3 Major Problems

Every time we clean our dishes, surely, we want it to be fully dried. Based on my experience, if I air-drying my dishes indoor, usually it will take at least 30 minutes to dry them completely. The more dish was stacked, the more time it took to dry.

According to my personal experience, if I air-dry my dishes indoors, it normally takes at least 30 minutes for them to be entirely dry before they can be used. The greater the number of dishes stacked, the longer it took to dry. Dishes should be dried after use to prevent bacteria from proliferating. Most food-borne illnesses are caused by a large number of organisms, thus drying dishes is important. Some folks may think of putting the towel to use. A dish towel, on the other hand, can harbor a wide variety of microorganisms. How many times have we used the towel to wipe our hands, use it to dry the table, and then use it to dry the dishes? In addition, bacteria can occur if our dishes were not properly dried after they were washed. Fungi and germs can grow on the dishes if they are not dried correctly and are left damp for an extended period of time. According to Aaron Novick (1955), bacteria can survive in temperatures that are higher and lower than those experienced by humans, but they thrive in a warm, wet, protein-rich environment with a pH that is neutral or slightly acidic. It would be preferable if we did everything, we could to avoid coming into contact with it. In any other case, it may result in a variety of digestive and overall health problems. For example, if someone consumes food or drinks from a dirty plate or glass, they may experience diarrhea. As a result, it is essential that the dishes are allowed to dry completely.

4.4 Suggested solution for issue

The solution regarding the problem of the dishes that took time to dry is by the installation of heating system. It will fasten the drying process. A heating system is a device that uses thermal energy to keep a home, workplace, or other structure at a comfortable temperature. Frequently found as part of a heating, ventilation, and air conditioning (HVAC) system. A central heating system or a dispersed heating system are two different types of heating systems. A heating system is important as in such condition, bacteria can't live due to high temperature. This at the same time can kills the bacteria and dry the dishes completely. By installing the heating system, the dishes can be directly put into the 2 in 1 Smart Dish Rack and be left dry. The rack also functions as storage as well. There also will be a good ventilation system which allows the flow of air in the rack. A good ventilation system is important to avoid unwanted odor come from the dishes. There also will be a

water tray within each layer of rack. This water tray will withhold the excessive water from the dishes. The water then will flow out through a hole from the 2 in 1 Smart Dish Rack.

5.0 RECOMMENDATION AND IMPROVEMENT

Based on the SWOT analysis, product of IKEA which is their dish drying have few advantages and also a few disadvantages. If this innovation were successful, it would be a great product in the future.

One solution that might be proposed to resolve the issues is to upgrade the standard dish drying rack to a more effective one. I'd like to offer a new product name: 2 in 1 Smart Dish Rack, which stands for two in one. The primary goal of this device is to replace the standard dish drying rack with a more effective drying rack that is more compact. Rather of being two separate items, this 2 in 1 Smart Dish Rack is a combination dish drying rack and dish organizer rack. This innovation could potentially be beneficial in a variety of ways, for example, it could save the customer money by eliminating the need to purchase two separate racks for the same purpose. This is due to the fact that purchasing this 2 in 1 Smart Dish Rack may be able to resolve the issues.





Figure 5.1: Description of the product

6.0 CONCLUSION

To summarize our research, the IKEA dish drying rack is a good product in terms of both design and quality. Improved functionality and features of the dish drying rack, on the other hand, could increase the value and perceptions of customers toward the IKEA company. The invention of the 2 in 1 Smart Dish Rack, for example, could be considered one of the inventions that could be implemented. However, despite the fact that the 2 in 1 Smart Dish Rack is rather pricey, the benefits of purchasing it should be emphasized. By conducting a SWOT analysis, I am able to gain a more comprehensive understanding of the development of strategies. When performing this case study, I notice the flaws in the IKEA dish drying rack and come up with a plan on how to improve the product and overcome the flaws that I have discovered. Customers' pleasure and trust in the IKEA Company will undoubtedly increase as a result of this development, without a doubt. In this age of modernization, the employment of technology should be viewed as one of several options for making our daily tasks easier. I am confident that if this product were to be manufactured, it would be a huge success for the IKEA Company.

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Figure 2.2.1: IKEA Corporate Structure



Figure 2.2.2: IKEA Organizational Structure

Table 2.3.1: IKEA Products & Services

Type of Product/	Name of Product / Services	Description
Services		
8. Furniture		 Spacious study desk Available for other colors Can easily move
	Micke Desk	
9. Kitchen & Appliances	Dish Drainer	 Can be hang anywhere Has water tray Available for other colors

10. Beds & Mattresses		 Available for other colors Set of 5- bedroom furniture Durable wood and high-quality plastics
	Gursken Bedroom Furniture set of 5	
11. Storage & Organization	SMASTAD/PLATSA Storage Combination	 Available for other colors Spacious organizer Can be used as make-up table, wardrobe and others.
12. Textiles	Saltstar Fitted Sheet	 High quality cloth Doesn't wrinkle easily Has rubber to support the sheet from slipping

13. Decoration		 15 cm potted plant Available for other design of plant Does not trap dust
	Potted plant Fotted plant Artificial plant	 Can be style up to our taste Has varieties of design
14. Bathroom Products	Corner Shelf	 Can be hang at the corner of bedroom Spacious Doesn't rust as it is made from aluminum



Figure 2.3.2.1: Delivery via Foodpanda

IKEA Food Order & Collect	Image: Control of the state
	Place your order today!
IKEA	Some of foods that being served:
Restaurant Image: Constraint of the second	

Figure 2.3.2.2: IKEA Restaurants



Figure 2.3.2.3: IKEA Outlets



Figure 2.5.2.3.1: Facebook page of IKEA



Figure 2.5.2.3.2: YouTube of IKEA



Figure 2.5.2.3.3: Instagram of IKEA

	POSITIVE	NEGATIVE
INTERNAL FACTORS	 STRENGTHS Reasonable price Variation in design and color Great advertising Strong brand image Suitable for small family 	 WEAKNESSES Dishes took time to dry Made from plastics Exposed to dust and insects Hold small capacity of cookware
EXTERNAL FACTORS	 OPPORTUNITIES Improve the quality of the product Adopt new technology to the dish drying rack 	 THREATS Competition from other well-known brand in term of prices and others Easy to imitate by others

Table 3.1: SWOT analysis



- A four-tier 2 in 1 Smart Dish Rack
- Covered from dust and insects
- Every layer is spacious
- Made from stainless aluminum

On top layer will be button to:

- > ON/OFF the heating system
- > ON/OFF the lamp
- > ON/OFF the ventilation system





- Heating system function to:
 - Drying process
 - Kills the bacteria

- Water tray:
 - Hold excessive water
 - Can be clean easily





Figure 5.1: Description of the product