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COMPANY ANALYSIS

SC JOHNSON

TECHNOLOGY ENTREPRENEURSHIP (ENT600) CASE STUDY

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Lastly, as a result of my effort I also exposed to the basic of being entrepreneurship and guide me to be successful entrepreneur in the future. I would like to apologize if there are any mistake that happen with or without my concern along the process of completing the report and hoping my effort will give benefits in the future.

Thank you.

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EXECUTIVE SUMMARY

The report was the theoretical part of the subject entrepreneurship of our Applied Chemistry (Hons) Program. The entire goal was to acquaint the students with the technical manipulation of company management. This report had been written to learn about the aspects that influence to the success of a new product.

In the first phase of the report, there is a general information of the company that was obtained through the primary and secondary source as well.

In the next phase of the report, the objective of the study is to learn about the background, organizational structure, products and services that provided by the company. Besides, all the strategies about the business such as marketing and operational strategy also have been learned in this report. I also analysed the strength, weaknesses, opportunities and threats of the products by using SWOT analysis. Moreover, the problems of the products that have been listed have been come with the solutions. Last but not least, new product is being explained and it can be as an alternative to the problems that have been stated.

1.0 INTRODUCTION

1.1 Background of the Study

Ants are among of the most common insects found in urban areas. They live both indoors and outside, wherever there is water and food. McKinney (2002) stated that ants assist in the care of certain insect species. They have been labelled "the foremost hunters," and they are excellent scavengers. Ants are social insects which we can found their nests or colonies indoors and out. A nest is home to one or more queen ants who lay eggs and are cared for by worker ants. Worker ants are sterile or non-reproductive female ants that look after the queen and her brood (eggs, larvae, and pupae) as well as forage for food. Foraging ants may infiltrate homes from colonies outside. However, when the ants wandering around the house it will become distressing. And they can also transmit harmful bacteria. For instance, carpenter ants (*Camponotus spp.*) will inflict damage to our home by burrowing into wood structural components (Lupo, 2021).

1.2 Problem Statement

An ant infestation, in most situations, may not cause physical harm to your house or land. However, if you have a carpenter ant infestation, you might need to be concerned about the structural effects. Eating wood seems to have little nutritional value to carpenter ants. Carpenter ants, on the other hand, will wreck the wood in order to build the nest that will hold the carpenter ant colony. Carpenter ants strike in defence as their nests are invaded. Because of their huge scale, their bites can be painful and even tear the skin. Carpenter ants may also release a defensive chemical called formic acid into the bite wound, which increases the agony. Other than that, there are risks associated with an ant infestation such as food contamination, through bites and stings and allergic reaction.

1.3 Purpose of The Study

Although ant repellent products are already on the market, the aim of this study is to create a new design for the existing product. Nowadays, the existing ant repellent products are mostly in spray and powder form. Therefore, I decided to design the ant repellent in form of gel with peppermint scented due to its natural insect repellent. Since ants rely on chemical signals to migrate to food and their nest, removing their trail with this smell would disrupt the chemical trail and stop the ants from returning.

2.0 COMPANY INFORMATION

2.1 Company Background

SC Johnson that based in the United States of America is a leading manufacturer of household cleaning products and products for home storage, air care, pest control and shoe care as well as professional products. SC Johnson which since 1998 has referred to itself as “A Family Company at Work for a Better World. SC Johnson has built a reliable legacy by showing for decades that it is a family business that operates ability to satisfy the demands of customers while preserving the environment for future generations. SC Johnson brands include GLADE, KIWI, OFF!, PLEDGE, RAID, SCRUBBING BUBBLES, SHOUT, WINDEX and ZIPLOC in the U.S. and beyond, with brands marketed outside the U.S. including AUTAN, TANA, BAMA, BAYGON, BRISE, KABIKILLER, KLEAR, MR MUSCLE and RIDSECT. The 132-year-old company, which generates \$10 billion in sales, is a family company that led by the Johnson family of Racine, Wisconsin. This company is operating all over the world. Their products are sold in virtually every country and have been recognized as a great workplace in many of the countries they have been operated. Over the years, this company has been referred to as SC Johnson & Son, Johnson’s Wax, Johnson Wax, SC Johnson Wax and, since the 1990s, SC Johnson, a family company.

2.2 Organizational Structure

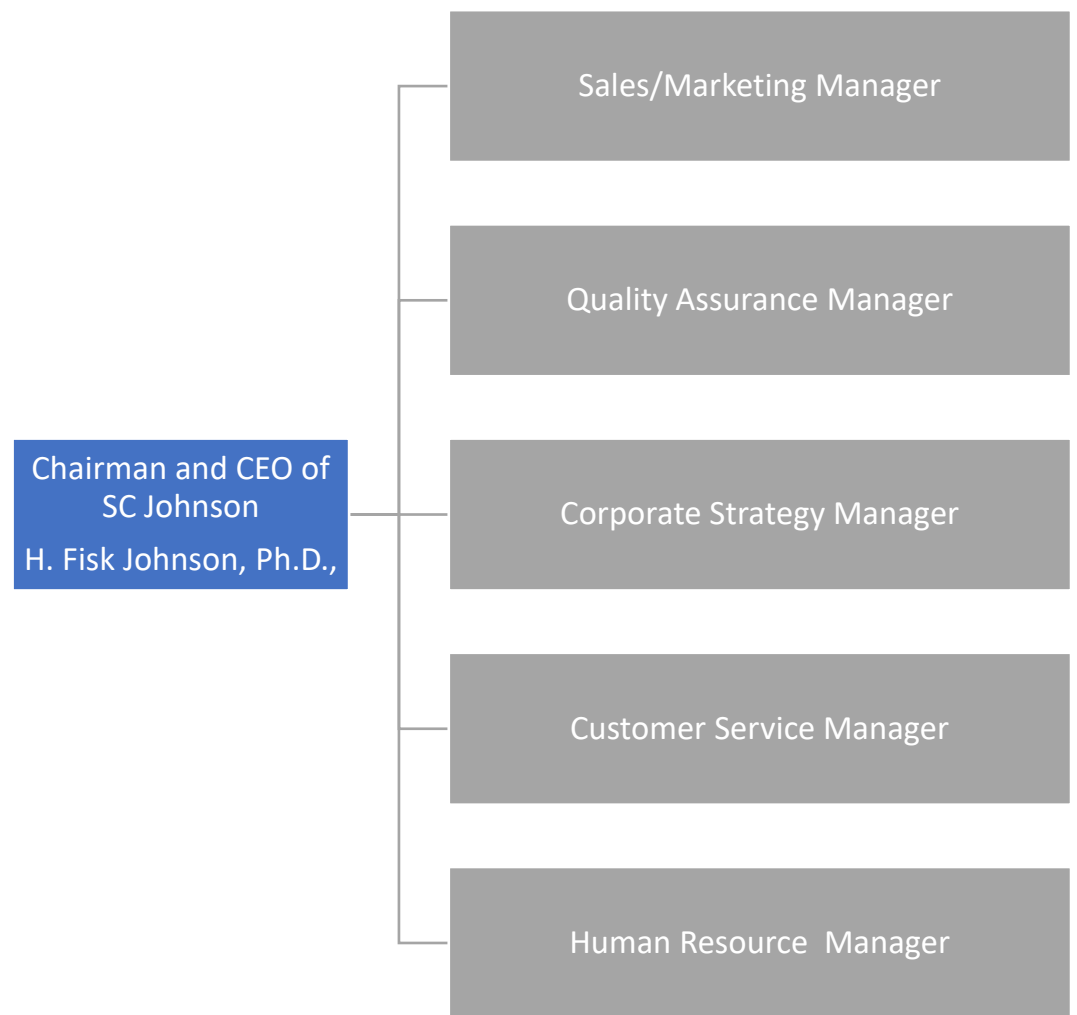






Figure 1 Organizational Structure of SC Johnson

2.3 Products/Services

Product/Brand	Classification of Product	Description
Baygon  <p>Baygon® Cockroach Control Baygon® Cockroach Control</p>	Pest Control	Cockroach Control
FamilyGuard  <p>FamilyGuard Disinfectant Aerosol Fragrance Free FamilyGuard Disinfectant Aerosol Fresh Floral FamilyGuard Disinfectant Aerosol Mountain Air</p>	Home Cleaning	Disinfectant Aerosols
Glade  <p>Glade® Surface Disinfectant and Air Sanitizer Clean & Fresh</p>  <p>Glade® Scented Gel Lavender Glade® Scented Gel Floral Perfection Glade® Scented Gel Jasmine</p> <p>GLADE® SENSATIONS™</p>  <p>Glade Sensations® Bathroom Lavender Glade Sensations® Bathroom Lemon Glade Sensations® Car Love You Glade Sensations® Car Jasmine</p>	Air care	Surface Disinfectant and Air Sanitizer Clean & Fresh Aerosol
		Scented Gel
		Glade Sensations

Product/Brand	Classification of Product	Description
MrMuscle BATH  Mr Muscle® Bathroom Cleaner  Mr Muscle® Bathroom Cleaner Floral  Mr Muscle® Bathroom Cleaner Regular DRAIN  Mr Muscle® Drain De-clogger FLOOR  Mr Muscle® Marble & Terrazzo Floor Cleaner  Mr Muscle® Multi-Purpose Cleaner I Love You  Mr Muscle® Multi-Purpose Cleaner Lavender  Mr Muscle® Multi-Purpose Cleaner Lemon GLASS  Mr Muscle® Glass & Multi-Surface Cleaner  Mr Muscle® Kiwi Kleen® Glass Cleaner Lavender Value Pack  Mr Muscle® Kiwi Kleen® Glass Cleaner Super Active TOILET  Mr Muscle® Bloo Cleaner  Mr Muscle® Fresh Discs Refill Citrus  Mr Muscle® Fresh Discs Refill Fresh Floral	Home Cleaning	Bathroom Cleaning
		Drain Cleaning
		Floor Cleaning
		Glass Cleaning
		Toilet Cleaning
OFF! 	Pest Control	Mosquito Repellent
Pledge  Dust & Allergen Multisurface Cleaner  Gentle Wood Floor Cleaner <small>AVAILABLE PRODUCTS >></small>	Home Cleaning	Furniture Aerosol

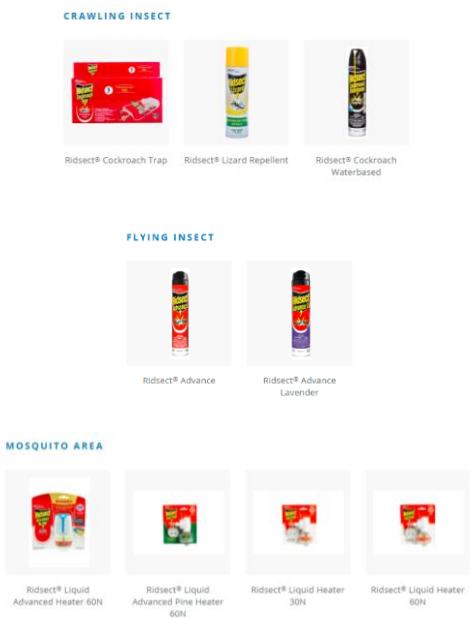


Product/Brand	Classification of Product	Description
Ridsect  <p>CRAWLING INSECT</p> <p>Ridsect® Cockroach Trap Ridsect® Lizard Repellent Ridsect® Cockroach Waterbased</p> <p>FLYING INSECT</p> <p>Ridsect® Advance Ridsect® Advance Lavender</p> <p>MOSQUITO AREA</p> <p>Ridsect® Liquid Advanced Heater 60N Ridsect® Liquid Advanced Pine Heater 60N Ridsect® Liquid Heater 30N Ridsect® Liquid Heater 60N</p>	Pest Control	Crawling Insect
		Flying Insect
		Mosquito Area
Ziplock 	Home Storage	Keeping Food Fresh
KIWI 	Shoe Care	Grease-Cream for Footwear

Table 1 Products and brands SC Johnson

2.4 Technology

SC Johnson is consistently known for having advanced technology systems, data storage, and software that support their businesses and their organisation evolve. It is not only the IT department at SC Johnson; there's also Business Process and Technology, or BPT. Other than that, in 2001, S.C. Johnson launched an innovative chemical classification process called Greenlist™ that rates raw materials based on their impact on the environment and human health. Greenlist™ grades are recorded alongside efficiency and cost details in the company's chemical formulary, allowing chemists to use ingredients that are environmentally and health-friendly. Materials can be conveniently compared using the grades. Greenlist™ currently has specific ranking parameters for 19 different content types.

Surfactants	Resins
Solvents	Organic Acids
Propellants	Dyes
Chelants	Colorants
Preservatives	Thickeners
Waxes	Packaging materials
Insecticides	Non-woven fabrics
Fragrances	Silicones
Inorganic acids	Sawdust and plant materials
Inorganic bases	

Table 2 Greenlist Material Categories

Four to seven standards are used to score each of the 19 chemical groups. Each chemical group has its own set of criteria, which are determined by the usage trend and the environmental media affected (i.e., air, water, soil). Ultimate biodegradability, acute human toxicity, marine toxicity, and European Union environmental designation are also criteria. S.C. Johnson has been publicly recognised for its commitment to include environmentally preferable materials in the formulation of its drugs. Furthermore, the firm has had close ties to EPA chemists, environmental biologists, and risk control personnel.

Categorical Criteria	Scoring Criteria Endpoints		
	Acceptable (Score = 1)	Better (Score = 2)	Best (Score = 3)
Aquatic Toxicity	<ul style="list-style-type: none"> LC50/EC50 ≤ 1 mg/L 1–2 species 	<ul style="list-style-type: none"> LC50/EC50 > 1 mg/L 1–2 species 	<ul style="list-style-type: none"> LC50/EC50 > 1 mg/L 3 or more species
Acute Human Toxicity	Rat Oral LD50 < 500 mg/L	Rat Oral LD50 500–2000 mg/L	Rat Oral LD50 > 2000 mg/L
Ultimate Biodegradability	≤ 60% within 28 days	> 60% within 28 days	<ul style="list-style-type: none"> Classification of “readily biodegradable” by OECD 301 test methods > 60% within a 10 day window
EU Environmental Classification	Any combination of EU environmental classifications (N; R50; R51; R52; R53)	<ul style="list-style-type: none"> No adverse EU environmental classification Classification as “Readily Biodegradable” by international test methods Aquatic toxicity > 1 mg/L 	<ul style="list-style-type: none"> No adverse EU environmental classification Classification as “Readily Biodegradable” by international test methods Aquatic toxicity > 100 mg/L
Source/Supplier	Source: < 25% preferred source Supplier: no environmental management standard in place	Source: 25–75% preferred source Supplier: an internal company environmental management standard in place	Source: >75% preferred source Supplier: internationally recognized environmental management standard in place (ie. ISO 14001 or Responsible Care)
Other Significant Concerns	<ul style="list-style-type: none"> EPA classification as a PBT/POP chemical³ Classification as an endocrine disruptor Classification as a known, probable, or possible human carcinogen according to IARC, EPA or NTP Classification as a reproductive toxin according to Proposition 65 Considered a “Chemical of Concern” with official or unofficial bans in one or more countries or by relevant trade associations 		

Figure 2 Greenlist Surfactant Criteria

2.5 Business, Marketing and Operational Strategy

2.5.1 Business Strategy

A business standard is a series of strategic steps and behaviours that a company utilizes in order to attract customers, succeed efficiently, increase performance, and achieve organisational goals. It specifies how the business will be carried out in order to produce the desired results. As for SC Johnson, one of their strategies is by maintaining their efforts in the current discussion regarding pesticides, transparency, and so-called natural goods. Numerous businesses assert that their products are superior because they are "pure" or produce "natural fragrances". Moreover, SC Johnson also make their strategy by becoming the first major consumer packaged goods company to list specific fragrance ingredients for products sold across Europe. Besides, as the world's largest manufacturer of pest control chemicals, the business used its 60 years of insect analysis expertise to develop instructional tools to help families develop decent mosquito bite prevention decisions.

2.5.2 Marketing Strategy

SC Johnson utilizes social networking as one of its communications tools by setting up several social media such as Facebook, Twitter, Youtube and blogging to show case charity work, or events that benefit families. By doing this kind of marketing, they will further build their image without needing to constantly push the product. SC Johnson also releasing three videos featuring Johnson explaining how the company acts with aims to make a better world for the next generation. This campaign videos have been appeared on digital platforms such as Facebook, Twitter, CNN, Instagram, Spotify, NPR and The Washington Post.

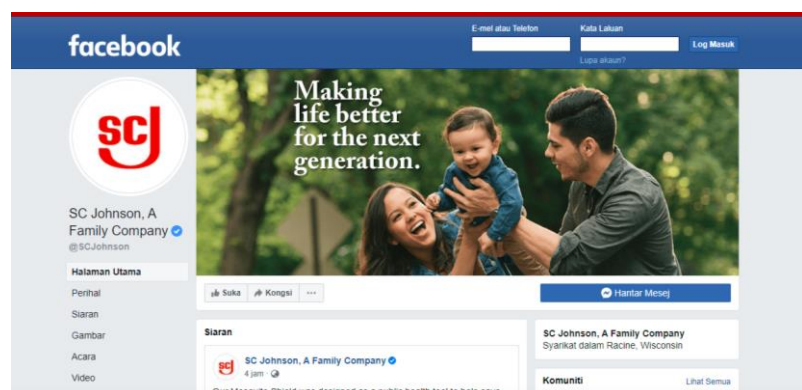


Figure 3 SC Johnson's Facebook



Figure 4 SC Johnson's Twitter

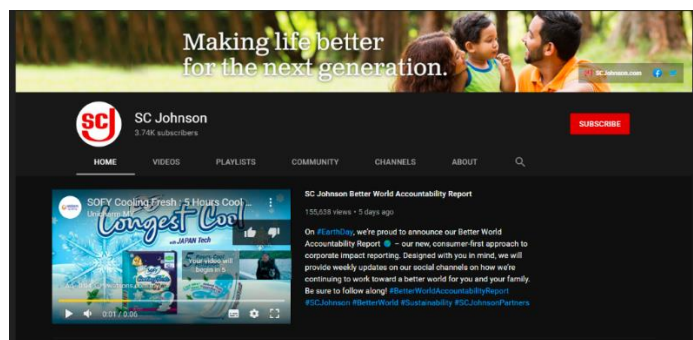


Figure 5 SC Johnson's Youtube

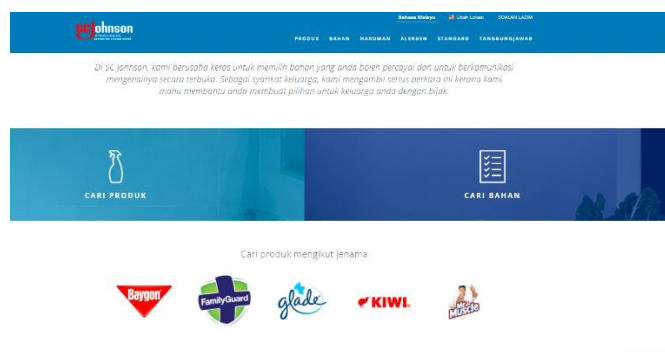


Figure 6 SC Johnson's Website

2.5.3 Operational Strategy

SC Johnson's zero landfill programme has now positioned the company to produce optimum success in terms of reducing the company's impact on the environment. SC Johnson processing facilities are expected to reuse, recycle, or remove products that would otherwise be disposed of in a landfill. Incineration and heat recovery can be an alternative for waste that cannot be reused, recycled, or removed. In 2016, the organisation made significant environmental progress and exceeded ambitious targets for reducing greenhouse gas pollution and industrial packaging waste, including 32.7 percent of energy use globally now from renewable sources, 51.7 percent greenhouse gas emissions reduction from SC Johnson manufacturing sites since 2000, indexed to production and 76 percent waste reduction at SC Johnson manufacturing sites since 2000, as a ratio to production.

3.0 COMPANY ANALYSIS

3.1 SWOT

The SWOT analysis of the ant repellent gel as seen in the table below.

We look at the strengths and weaknesses from the perspective of the client, while we analyse the opportunities and threats depending on external influences.

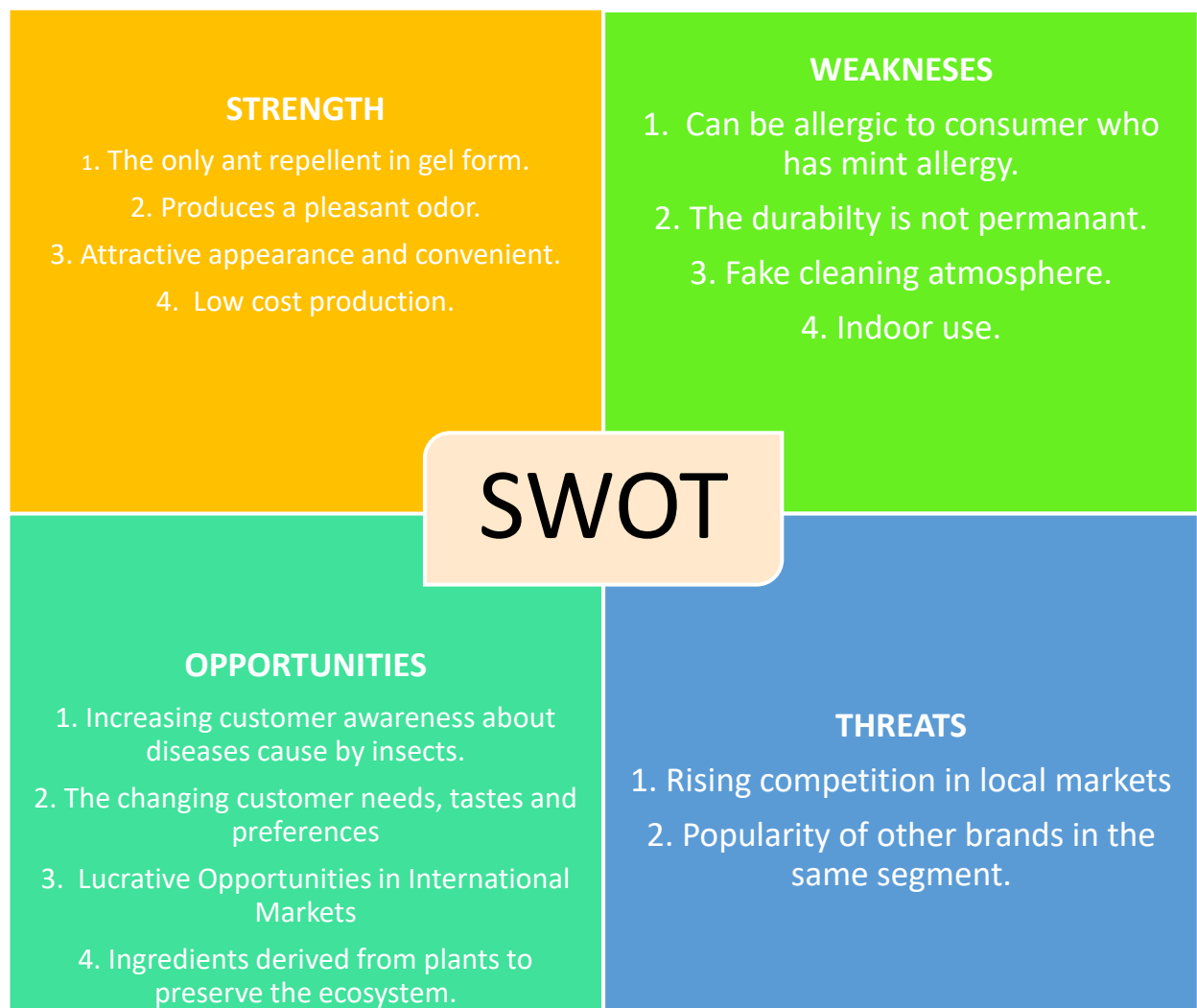


Table 3 Swot Analysis of Ant Repellent Gel

4.0 FINDINGS AND DISCUSSION

4.1 Findings

- A challenge in business is a scenario that causes a chasm between the expected and real results. Furthermore, a real issue does not always have an obvious solution. In business, problem-solving is described as developing procedures that eliminate or eradicate barriers that hinder you or others from achieving organisational and strategic business objectives. Entrepreneurs and their advisors, on the other hand, may gain a greater understanding of real market issues and discover answers that offer the greatest benefit and the least risk by using a systemic approach to problem solving. SC Johnson's produce insect repellent which are OFF! And Ridsect brands. These products available in many forms, from creams to lotions to oils, but are most often sold as aerosol products. After consumer using these repellent, several of health issues like breathing problems, headache, irritation in the eyes, bronchial irritation, cough, running nose, skin infections and asthma. This is because most of the insects repellent produce liquid vaporizers contain chemicals like pyrethrin and diethyl toluimide (DEET) which cause breathing difficulty, respiratory problems, dizziness, stomach irritation, nausea, vomiting, skin infections and so on. Other common disadvantages of DEET are the unpleasant odor. Most people use insect repellent aerosol at their home and after using the aerosol, it will give unpleasant smell and it will cause discomfort.

4.2 Discussion

There are solution that need to be discussed regarding to the problems that have been found. Since the SC Johnson product mostly in aerosol form, the alternative to overcome the issue is by creating a new insect repellent in other form which is in gel form. There are still no insect repellent made in the form of gels nowadays. So, we can make an innovation by doing ant repellent gel. Moreover, the ingredients that will be used is peppermint oil which has pleasant smell and have a lot benefits to consumer.

5.0 RECOMMENDATION AND IMPROVEMENT

Based on the problems that have stated, insect repellent which I focused more to ant species was created to solve the problems. The form that I have choose for insect repellent is in gel form. This is because most of the insect repellent in aerosol forms. The materials used were derived from plants and combined with a low amount of chemicals. The fresh peppermint leaves were heated at low temperature. The vapour produced by heating the peppermint leaves is allowed to cool and condense into a liquid. This liquid contains about 45 percent menthol. Menthol is responsible for peppermint's medicinal and herbal properties. This peppermint oil will be combined with several chemical like imiprothrin and cypermethrin which function as synthetic pyrethroid insecticide. It is a component of several industrial and consumer insecticides for indoor use. It has low acute toxicity to humans through inhalation (but not dermal ingestion), but it functions as a neurotoxin in insects, causing paralysis. The final product will give a lot benefits to the consumer. Other than being ant repellent, it also can treating coughs and colds, reducing pain, improving mental function, and reducing stress. Moreover, this product will be convenient to the consumer since it is small and easy to bring anywhere.

6.0 CONCLUSION

In conclusion, SC Johnson did a great job on producing a lots of products which give many benefits to the consumer in terms of pest control, home cleaning, shoes care and so on. Nevertheless, SC Johnson needs rooms for improvement to maintain their company around the world. SC Johnson differs from other organisations in that it is a high purpose corporation, which means that it focuses on the bigger picture. Their strategy is to reduce pollution and remain a green business for the sake of the future. They are trailblazers in developing a more positive impact on our world through their current initiatives of the Greenlist process and the aspect of reducing waste globally. By choosing to use quality management system, the company will be able to meet its targets and set the standard for all businesses in terms of corporate responsibility when delivering high-quality goods. The innovation of ant repellent gel can be another new green project that have a lot of benefits to the consumer.

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8.0 APPENDICES



Figure 7 Ant Repellent Gel Prototype



Fisk Johnson



Sam Johnson



HF Johnson Jr.



Herbert Fisk Johnson Sr.



Samuel Curtis Johnson

Figure 8 SC Johnson's Family Generation



Figure 9 SC Johnson's Company



Figure 10 SC Johnson's Products