



dretec

COMPANY ANALYSIS DRETEC

TECHNOLOGY ENTREPRENEURSHIP (ENT600): CASE STUDY

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EXECUTIVE SUMMARY

Pepper mills were created by Peugeot of France in 1842. Dretec's digital kitchen scale has a normal sizing such as other kitchen scales. This product is designed to make it easier for a chef to crush spices. Because of its tiny shape, work may be completed quickly and effortlessly. A digital scale is a measuring instrument that measures and detects an object's weight. In this study, I would like to innovate this company product which is combining an LED light pepper mill and a digital kitchen scale. Dretec Co Ltd. (Dream Technology Company) is a company established by Goro Chikura, a Japanese people. It was founded on June 2, 1997, and is located in Japan. The company's major activity is focused on industry and sub-industry. LED light pepper mill is one of the subcategories for kitchen appliances that will be relaunched as a new product.

A digital electronic business strategy is important since it is a long-term goal for a company to use the appropriate digital technologies. LED light pepper mills are the main product. I made an innovation by combining it with a mini digital kitchen scale. In addition, a strategic business strategy can help the company's sales. The company's main business is in industry and sub-industry, which deals with industrial and machinery products and it is more into a home appliance.

The strength of the Smart LED Light Mill has accurately measured the pepper and others within a few seconds. The price of the product is affordable since it is a long-term product. It may be used for an extended amount of time, just like a blender. For women who need to mill rice for their baby meals, a sugar mill container can be used to mill the rice. Dretec company can grab the opportunity to improve the product in the future by adding the new button onto Dretec LED Light Mill where the function for the degree of fineness of the pepper, sugar, or others. The user can choose whether to mill a thing finely or roughly. They might also need to take a risk by entering the Asia market. To make it more interesting, the company should another container that is suitable to mill meat.

In a conclusion, The corporation should stick to its plan to ensure that its followers are happy with the product and can take it into their routines and keep it for a longer period. In terms of the product, it has to be improved so that it is more efficient and has more advanced features that will entice people to gain it.

1.0 INTRODUCTION

1.1 Background Of The Study

Light Paper Mill are created by Peugeot of France in 1842 (Brief History, n.d). A mortar and pestle component was used in the previous editions of pepper mills. The main function of the pepper mill made it easier to break the peppers effortlessly. The pepper mill was made from steel, and the unique grooves within the shell were pretty sturdy. People might be interested in using it. However, Dretec LED Light Pepper Mill product which is shown in Figures 1.1.1 is made using the subcategory of Acrylonitrile-Butadiene-Styrene (ABS) Stainless SUS201 and subcategory of Acrylonitrile-Butadiene-Styrene (ABS), (Wong, 2020). The weight of the product is as light as 313g only. That means it is easy to use and can bring it anywhere such as going on travel. Other specifications of the product are shown in Figure 1.1.2. This product is designed to make it easier for a chef to crush spices to enhance the flavor of their cuisine. Because of its tiny shape, work may be completed quickly and effortlessly. Crushing spices by hand took a lot of time and effort for the traditional chef. As a result, it is critical to use technology in the present.



Figures 1.1.1 LED light pepper mill

PRODUCT INFO	SPECIFICATION	CHARACTERISTICS	INSTRUCTION MANUAL
ITEM SIZE	W204×L138×H255mm		
ITEM WEIGHT	Around 313g (without batteries)		
MATERIALS	ABS Stainless SUS201 and ABS		
COUNTRY OF DESIGN & DEVELOPMENT	Japan		
COUNTRY OF MANUFACTURING	China		
INPUT VOLTAGE	DC 9.0V		
CONSUMPTION CURRENT	Around 0.4A		
ROTATING TORQUE	100±10 cN m		
RPM	Around 110 rpm		

Figures 1.1.2 LED light pepper mill's info

A digital scale is a measuring instrument that measures and detects an object's weight. A digital scale, as compared to a traditional balance scale, is a high-quality scale that provides a more accurate weight reading. A digital kitchen scale, often known as a digital gram scale, is used by a chef to measure the weight or quantity of an item in pounds, grams, ounces, or milliliters. However, this study focuses more on measuring pepper and sugar. Dretec's digital kitchen scale has a normal sizing such as other kitchen scales but it is different for this new product because it is only a mini digital kitchen scale that will be attached to the LED light pepper mill. So, that is how a smart LED light mill will look like.



Figures 1.1.3 Digital Kitchen Scale

PRODUCT INFO SPECIFICATION CHARACTERISTICS	
ITEM SIZE	W120×D30×H180mm
ITEM WEIGHT	274g
MATERIALS	MAIN BODY: ABS , Chrome-plated
Country of origin	China
PACKAGE	Gijt box
PACKAGE SIZE	W150×D34×H240mm
PACKAGE WEIGHT	350g
OUTER CARTON SIZE	52×39×19cm

Figures 1.1.4 Digital Kitchen Scale’s information

1.2 Problem Statement

Nowadays, technology in cooking is important in life. It can reduce the problems associated with a traditional issue such as manually crushing pepper. Technology in the cooking machines is effective in lowering the time taken on preparing food. During this COVID-19 pandemic season, the Malaysian government has implemented Movement Control Order (MCO) that restricts civilian movement. Careers mothers are especially out of time to cook since they need to focus on many things due to the order of work from home (WFH). So that, the company must expand their minds to improve their product that can benefit people. Existing pepper mill products in this company do not have the function of measuring the quantity of pepper required. This will cause wastage because consumers can not estimate the quantity needed in a dish. In addition, it has only one function which is to grind pepper only. In my opinion, this does not provide much benefit to the buyer. In this study, I would like to innovate this company product which is combining an LED light pepper mill and a digital kitchen scale.

1.3 Purpose Of The Study

The purpose of this case study is to examine, identify, and analyze the company-based product. By doing so, I may find an idea and obtain greater knowledge in order make an innovation toward the company's existing product. Besides, it is a great time to take advantage of marketplaces with new advanced products. This study is also important to determine whether the new product is suitable to launch.

2.0 COMPANY INFORMATION

2.1 Company Background

Dretec Co Ltd. (Dream Technology Company) is a company established by Goro Chikura, a Japanese people. It was founded on June 2, 1997, and is also located in Japan. The company's actual location is 2-3-9, Ryutsudanchi Koshigaya, 343-0824, Japan. The company's major activity is focused on industry and sub-industry, which means it deals with industrial and machinery products. Meanwhile, the company's main sectors of operation include manufacturing and trading. Besides, the company market eight different categories of product. It is also divided into a few subcategories for each category. Kitchen appliances are a category that has seven subcategories. One of the subcategories for kitchen appliances is a mixer or blender. LED light pepper mill is one of the mixer or blender products that will be renovated and relaunched as a new product. Every company has its history. Dretec company's development journey is as follows:

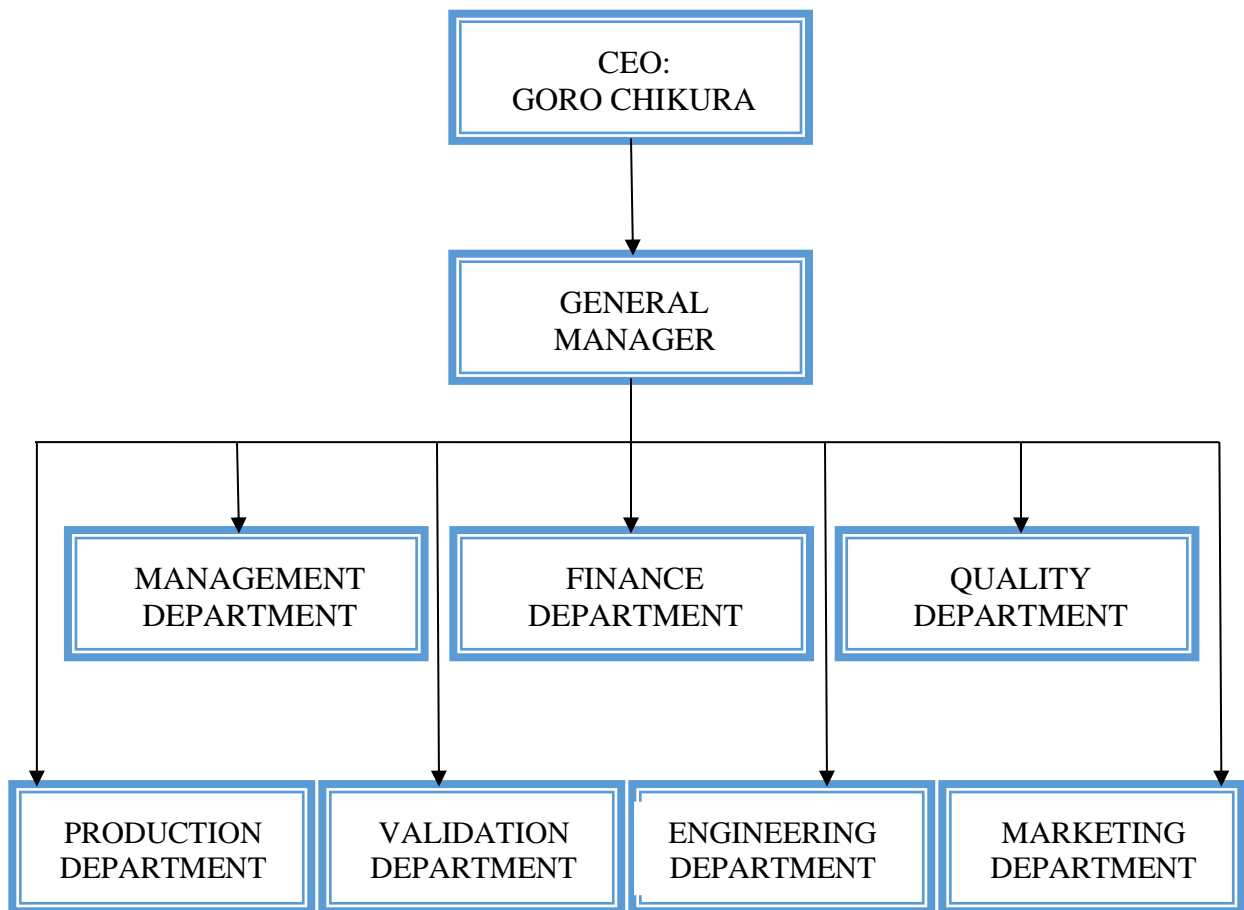
Table 2.1.1 Dretec company's development journey

June 1997	Established Doritech Co., Ltd.
February 1998	Timer sales start.
August 2002	Sales of cooking scales started (Kitchen miscellaneous goods business).
April 2003	Thermo-hygrometer sales start (Lifestyle business).
April 2005	Weight scale sales start (Healthcare business).
January 2006	Electric kettle sales start (Kitchen appliances business).
September 2007	Opened Osaka Branch (Yodogawa-Ku, Osaka).
May 2008	Learning timer sales start (Stationery business).
December 2010	Obtained ISO9001 certification.
May 2011	Product management center (Koshigaya) opened.
September 2011	Medical device manufacturing registration completed and Obtained a license to manufacture and sell Type 2 medical devices.
November 2011	Product Management Center (Koshigaya) Headquarters function transfer.
March 2012	Established Dongguan Metropolitan Electronics Co., Ltd.
August 2012	Tokyo branch (Ueno, Taito-Ku) opened.
March 2013	Blood pressure monitor sales start (Medical business).
November 2019	Established Guangzhou Metropolitan Trading Co., Ltd. and Licensed product "milky" sales start (License business) and Headquarters building (Kawaguchi City, Saitama Prefecture) completed, headquarter relocated.

2.2 Organizational Structure





Figures 2.2.1 DRETEC's CEO



2.3 Products/Services

The improvement or change needed from existing product:

Table 2.3.1 Dretec's existing product

PRODUCT NAME	PRODUCT	DESCRIPTION
<p>LED Light Pepper Mill</p>		<ul style="list-style-type: none"> i. Include the different blades (for different uses) ii. make a different container for different blade iii. increase the diameter of the main handle
<p>Digital Kitchen Scale</p>		<ul style="list-style-type: none"> i. minimizes the size ii. make it lightweight and portable iii. can detect weights as low as 1g

The following is an overview of the above-mentioned product combination (new product):

Table 2.3.3 Dretec's new product

<p>Smart LED Light Mill</p>		<ul style="list-style-type: none"> i. have two different container ii. accurately measure the pepper, sugar, or others. iii. multipurpose
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2.4 Technology

Technology is a term that refers to methods that are the results of scientific knowledge being applied to practical goals (Definition, n.d). The technology of this new product is focused on the kitchen scale and the miller itself. For the digital kitchen scale, the basic approach for determining very exact readings in digital scales is Strain Gauge technology (How digital, 2018). Transducer beams that are precisely constructed to bend in proportion to the maximum load imposed on the weighing platform are used in Strain Gauge technology. Next, the miller basically will be cylindrical where the gravity forces the pepper to drop through the grinder processes. As a result, ground pepper drops out the bottom of the mill and is ready to be served.

2.5 Business, marketing, operational strategy

2.5.1 Business strategy

A digital electronic business strategy is important since it is a long-term goal for a company to use the appropriate digital technologies to manage a company's electronic appliances. In addition, a strategic business strategy can help the company's sales. Market activities such as advertisements, campaigns, and discount promotions will be carried out to encourage existing customers to return and purchase more. Therefore, for the strategy via online platforms such as social media, a market test will be picked for future wider preparation. For example, if the concept receives a positive response, the company's Shoppe management will extend its online buy and delivery service.

2.5.2 Marketing strategy

LED light pepper mills are the main product. I made an innovation by combining it with a mini digital kitchen scale. The reason people used pepper mill is to make a finishing toward a dish while the digital scale will help to prevent wasting. Besides, the combination of both products is suitable for travel.

2.5.2.1 PRODUCT

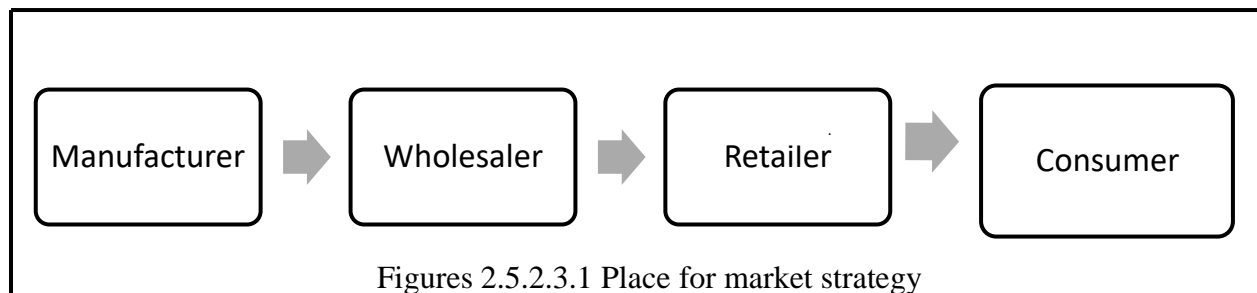
- i. Quality- Use high-quality materials which are a subcategory of Acrylonitrile-Butadiene-Styrene (ABS) Stainless SUS201 and Acrylonitrile-Butadiene-Styrene (ABS). ABS plastic is a "hard, solid, and stiff" material with simple raw ingredients, good performance, an affordable price, and a wide range of applications.

- ii. Design- The design is exactly like the existing pepper mill. Added with a mini digital scale on each container either for pepper mill or sugar mill. For pepper mill, the maximum scale reading is 100 grams while for sugar mill is 250 grams. The combination of the product will increase the product demand. This product promises the best outcome that may benefit the user.
- iii. Packaging- The product will be packed in a box since it will make the product look unique while it can attract customers' interest. In the means time, packing it in a box also make it suitable as a present. Indirectly customers can reduce cost if they have the intention to give the product as a present because they do not need to buy another box since it is already provided.

2.5.2.2 PRICE

- The price of the product is about RM 150, it is affordable and worth it because this product is a long-term product.

2.5.2.3 PLACE



2.5.2.4 PROMOTION

- This can be done in many ways such as advertising through media social, making a promotion or personals selling to family members.

2.5.3 Operational strategy

Dretec is one of the famous companies in Japan. The company's main business is in industry and sub-industry, which means it deals with industrial and machinery products and it is more into a home appliance. The company product is also sold through online platforms such as websites and Shoppe. The company target to create a product that can benefit chefs or bakers in completing their dishes.

3.0 PRODUCT ANALYSIS

3.1 SWOT

SWOT analysis (strengths, weaknesses, opportunities, and threats) is a process for evaluating a company's competitiveness and developing strategic plans. A SWOT analysis evaluates important factors, as well as current and potential future opportunities. This process is important since it helps to clearly show our next move to face our fear.

Table 3.1.1 SWOT Analysis

STRENGTH	WEAKNESS
<ul style="list-style-type: none">i. Accurately measure the pepper and other.ii. Affordable Price.iii. Multipurpose.	<ul style="list-style-type: none">i. Design is not interestingii. Heavyiii. Not available in Malaysia
OPPORTUNITY	THREAT
<ul style="list-style-type: none">i. Add on a button for the degree of fineness of the pepper (fine or rough)ii. Create a better designiii. Create more containers (for meet mill)	<ul style="list-style-type: none">i. Narrow target marketii. Compete with market price)iii. People feel hard to use it (encourage people through video

Strength:

The Smart LED Light Mill accurately measures the pepper and others within a few seconds. It is because the digital kitchen scale that is attached to the miller can help users save time when making their dishes. It saves a baker time, for example, because they do not need to use a separate kitchen scale to measure the sugar quantity before milling it for the process of baking a cake. It becomes easier to determine whether the quantity is enough, and it also helps to avoid waste. The price of

the product is affordable since it is a long-term product. It may be used for an extended amount of time, just like a blender. The product is multipurpose because, aside from the core function for pepper and sugar, it may be used for other things. For women who need to mill rice for their baby meals, a sugar mill container can be used to mill the rice.

Weakness:

This product's design is out of style in this day and era. People may want to have something more elegant on their kitchen cabinets. If the company provides wonderful colors for this product, it might change buyer perception. Furthermore, this product weight may make individuals feel dissatisfied. It is because this product must be managed manually. So that people will refuse to use it if it is heavy. Moreover, the product is not marketed in the Asia market. This has caused the company's products to have to go overlooked.

Threat:

Dretec only had a few branches in Japan. That is the main reason why the company needs to widen the market by exporting their product abroad. However, this new combination product also needs to compete with the market prices since it is a new product and not all the consumers will get to know about it in a short time. The company needs to find an alternative to make users more understanding about the product, they might need to provide a video or a manual book.

Opportunity:

Dretec LED Light Mill should add on the new button where the function is for the degree of fineness of the pepper, sugar, or others. The user can choose whether to mill a thing finely or roughly. Besides, the company also needs to take a risk by entering the Asia market. They might gain more customers in the other country. To make it more interesting, the company should another container to make it more useful. As an example, they can make a miller container that is suitable to mill meat.

4.0 FINDINGS AND DISCUSSION

4.1 Findings

Dretec group has created a kitchen appliance which is named a smart LED light mill. These digital electronic products are made to ease a cooking or baking process that will benefit a chef.

4.1.1. Design is not interesting - This product's design is a little unattractive, and it may cause an accident when in use. This is due to the design's height and small diameter. This makes it difficult for users to obtain a firm and stable grip. A firm and stable grip is essential for making the instrument comfortable to handle.

4.1.2. Need to handle with care - This product is a combination of two different products. There are a few items in the set of this new product which consists of two containers attached with a mini digital kitchen scale each and the mill machine itself. The main reason why the product is needed to handle with care is because of the digital scale.

4.1.3. Not available in Malaysia - Dretec only had a few branches in Japan. This has caused the company's products have go overlooked. As a result, narrow market share occurs.

4.2 Discussion

4.2.1. Design is not interesting - The main update that needs to be done for the product design is to slightly increase the diameter of the main handle. This aims to make it easier for users to utilize that kitchen appliance safely. Everything that is done in the kitchen must prioritize safety first. This can avoid something bad such as a short circuit from happening.

4.2.2. Need to handle with care - This product needs to be well cared for because of the balance system of the scales themselves. the user needs to ensure that the product is not dropped, slammed, or thrown whether intentionally or not. Therefore, users should place the equipment in a safe place so that it cannot be reached by children as it may result in an error on the scales.

4.2.3. Not available in Malaysia - The company should widen the market to many other countries, including Malaysia and Indonesia. It's because western food, fast food, and pastries are becoming extremely popular in Asian countries. This new product is quite beneficial in this regard. That means, if this product receives a high response, its manufacturing will be increased.

5.0 RECOMMENDATION AND IMPROVEMENT

The corporation should stick to its plan to ensure that its followers are happy with the product and can take it into their routines and keep it for a longer period. In terms of the product, it has to be improved so that it is more efficient and has more advanced features that will entice people to gain it. Next, users should keep in mind that it operates best on a flat surface. When an object is weighed on a digital scale, its internal strain gauge deforms. The scale transforms the amount of deformation to an electronic signal, which is then sent via a digital conversion to display the weight on the scale's screen. In this regard, the organization must ensure that it provides an easy-to-understand manual book. Those instructions should also include information on how to properly care for the product, as digital kitchen scales are quite sensitive.

6.0 CONCLUSION

Dretec is one of the pioneers in Japan that create this product while acting as a bridge between customers and designers, offering the best values for both sides. The support from loyal followers of Dretec's website and social media and the team are the ones who provide the core support for the business when it first started. This is all credited to the way the founders plan their business. Starting from how they develop an effective business model, the ideas of creating a unique value proposition, the website design, and the techniques used in marketing their brands to reach the right audience. Furthermore, it can be said that the founders themselves and their entrepreneurial characteristic is what made the business still sustainable today. It is likely to say that determination is what drives them to remain on the grounds without wavering. It is also considered as an important element to grow business and to achieve success. The success of Dretec today happens because they are determined to fulfill their dreams.

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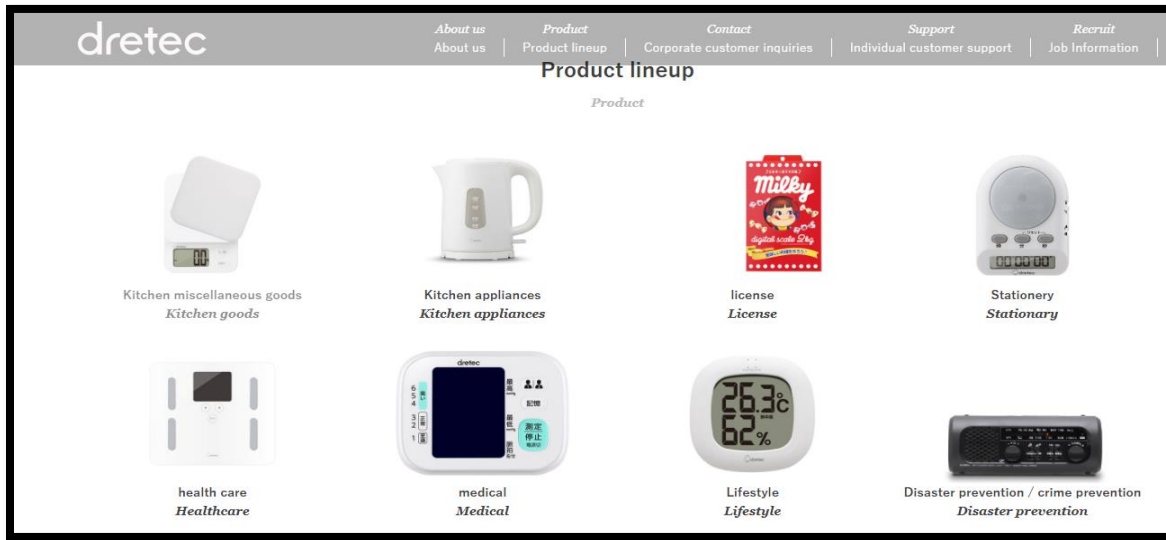
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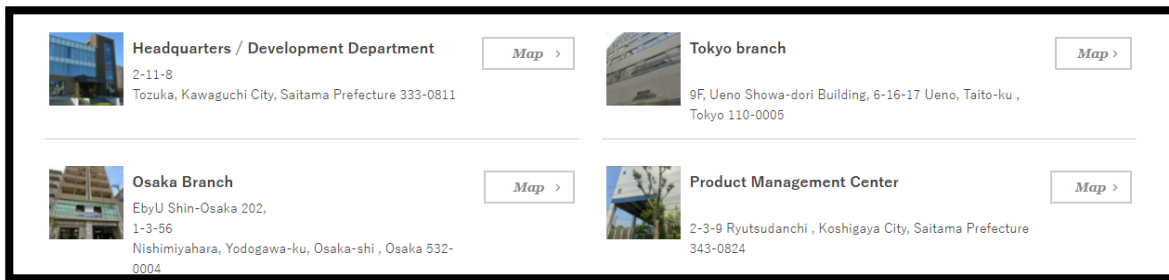
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8.0 APPENDICES

Figures 8.1 Dretec's product lineup



Figures 8.2 Dretec's branches



Figures 8.3 Dretec's website

