DEVELOPING NEW PRODUCT USING MINIMUM VIABLE PRODUCT

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Abstract: The goal of this research is to make a new product, get a result of the sales, get feedback on the new product, and look at the product acceptability. The methodology used is a qualitative method. The research was done as a field research which developing a new product and tests it to the market using Minimum Viable Product from Lean Startup. Customer interview shows that customers need more itabag colors. From internal and external analysis using SWOT show, there is a strength in Colle customer service and an opportunity for new fabric printing technology. The MVP is a catalog, published online and tested for 2 weeks and get 11 purchases as the result. After the test period, 5 customers were interviewed, they need a wider choice of color, pattern, illustration, and want their own images for itabag. This result then implemented on MVP improvement. This research will only include the first test due to the time limitation. If possible, for the future researcher, more test of the product will be better.

Keywords: anime, colle, pop culture, new product development, minimum viable product

INTRODUCTION

Anime and Manga are popular culture and entertainment from Japan. Anime word is a shorter form of animation in the English language, and manga is Japanese comics. Japan grow their Anime and Manga market globally and was accepted nicely in many countries. Started from TV Broadcast and Books, Japan grows their product of anime and manga to merchandise, and these products sold globally through offline and online channels.

In Indonesia, started from people interest of anime and Manga, people start to create fan-art which is drawing their favorite character in their own style. This attracts more event organizer to make some anime and Japanese event in Indonesia, some of them are Gelar Jepang UI, Jak-Japan Matsuri, Ennichisai, and Anime Festival Asia Indonesia (AFAID) which the biggest anime event in Indonesia which come in 2012 and on 2016 reach 61,953 attendances.

Looking at this opportunity, Colle starts a brand which sells pre-made base-bags for itabag mainly in the Indonesian market and serves some international market. Started in January 2017, Colle has sold about 200 bags through the online and offline channel in 11 months. Colle produces their bag by outsourcing a bag workshop and deliver them to customers after some quality control check. Colle distributes their product through the website, social media, and online marketplace platforms. These channels provide Colle most buyer. Colle uses anime event and convention as an offline channel. This allows Colle to meet our customer directly, intro-
Developing New Product Using Minimum Viable Product

duce Colle product to new market, and promote Colle social media and channel. Colle product ranged from a backpack, messenger bag, tote bag, and other bag models. This also includes pouches and other bag accessories. The normal bags priced around Rp30,000.00 to Rp250,000.00.

Colle's grow is steady at first, but the sales are declining. Until now, Colle never does research for the product they develop, all based only on experiment and feelings. Now, Colle's latest product called Fresh Series perform poorly on the market. Most of Colle's product has short customer engagement time until the first purchase, but this product takes longer time than other products. The data of the time used of customer’s first purchase can be seen in Table 1.

<table>
<thead>
<tr>
<th>Series</th>
<th>First Published</th>
<th>First Purchase</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Season Series A</td>
<td>07-01-17</td>
<td>10-01-17</td>
<td>3</td>
</tr>
<tr>
<td>Season Series B</td>
<td>11-03-17</td>
<td>18-03-17</td>
<td>7</td>
</tr>
<tr>
<td>Neko Series</td>
<td>18-04-17</td>
<td>27-04-17</td>
<td>9</td>
</tr>
<tr>
<td>Animal Series</td>
<td>23-06-17</td>
<td>24-06-17</td>
<td>1</td>
</tr>
<tr>
<td>Monochrome Series</td>
<td>03-08-17</td>
<td>07-08-17</td>
<td>4</td>
</tr>
<tr>
<td>Earth Series</td>
<td>11-09-17</td>
<td>19-09-17</td>
<td>8</td>
</tr>
<tr>
<td>Fruit Series</td>
<td>04-11-17</td>
<td>13-12-17</td>
<td>39</td>
</tr>
</tbody>
</table>

Looking at the problem, deeper marketing mix analysis used to get the problem which needs to be solved. This newest product, give three choices of uncommon color which never been used by Colle before, the material also different from what Colle always use. The size is smaller than other bags that Colle sell but the price is lowest than other product of Colle. This product placed and given promotion treatment same as other product of Colle. So, the price, promotion, or place is not the problem of this new product and conclude the product itself is the problem. That’s why Colle need to find a product which can be accepted on the market by testing some product that can solve their problem. This lead to three research questions for this research:

- What kind of product is acceptable to customers?
- How does the customer response to the first test product?
- Which product gained more sales in the market on the first test?

To answer those questions, the objective of this research is to make a new product for Colle which gets acceptance from consumers. So, this research will test the acceptability of the newly developed product. To measure this acceptability, Colle needs to get more feedback from customers about the product, that’s why the new product must be tested to the customers.

Business Issue Exploration

This research is using exploratory research which emphasis is on the understanding of thoughts and experiences from participant rather than gathering measurably precise information like numbers (Regoniel, 2015). The conceptual framework of this research can be seen in Figure 1.

The method used in this research is a qualitative method, which looking for more understanding to find the solution. Qualitative research tends to involve open ended sentences with no direct numerical value. Survey or Interview respondents are usually provided prompts from which they can write out their thoughts. The sample target of this research is the customer of Colle, and since the customer of Colle are spread around Indonesia area, and mostly doesn’t have much time to do the interview, so the best method to get the data needed is using qualitative interview using a phone.

After the data collected, the first step is analyzing the internal and external environment using SWOT analysis. Internal Analysis is looking at
company’s strength and weakness. The company is not excelled in any theme except its entrepreneurial orientation. But the strength of the company can be found in the company reputation where the company has not get any public complaint and customer satisfaction which shown by the good feedback from the customer. There are some complaints get by the company, but with good service, they handle the problems nicely which lead to satisfied customer. The promotion like discount and bonuses play a good role in the company product marketing. And geographical coverage is good enough because the company already have some overseas customer such as in United States, Europe, or Singapore. Manufacturing is a weakness of the company because all the products are outsourced to some different workshops. Therefor it becomes its major weakness in production cost (which lead to low price

Figure 1 Conceptual Framework
Developing New Product Using Minimum Viable Product

efficiency), ability to dictate workforce and to supervise to produce on time. The company also still in creativity phase which all the work is done with a very small number of people which mean no dedicated employee work in the company. Looking at their cash flow is not in good condition, the company needs a number of employees especially to handle their financial problems. The distribution is in minor weakness because the distribution did mostly in the online channel. The offline channel only available when there is an anime event in the area and for now the good event only available in Jakarta area.

External Analysis is based on opportunity and threat from outside the company. Anime industry in Indonesia is rising, this can be seen by seen with an increase of the visitors on anime event and number of the event available. That gives the good market for distributing the product. The customer is also already educated in anime merchandise industry.

But here is some issue on Indonesian Customs. Lately, there are tighter checking on imported goods and the goods which not pass the check will be kept and subjected to tax which called redline check and this can include the imported itabag goods. Based on the new regulation Perdirjen No. PER-2/BC/2017 the maximum amount of import items is $100 a day. More than that amount, the person will be charged tax on the full price of the shipment. This issue can be both opportunity and threat for Colle. The competitor product from Japan or China has a chance of getting the higher price due to the tax and increase the need for Colle product which available locally. But the collectible of anime which is the main content of itabag and the main reason customer buy itabag to display those merchandise also have a chance to get the redline too. This will lower the need and wants of itabag. For customer itself when the shop divides the order to not pass the limit, it will give extra shipping time for them to get the items.

Also, weakening of purchasing power shown by Badan Pusat Statistik (BPS) which found that the purchasing power of the Indonesian people slowed in quarter III-2017. This is reflected in the level of household consumption in third quarter-2017 fell to 4.93 percent compared to the first quarter-2017 reached 4.95 percent(Riyandi, 2017). Technology wise, there is new technology in producing more advance fabric using printing method. This technology improvement is still high in price, but the possibility for making more customized items is higher. This new technology also can make improvement for Colle product.

After understanding the environment of the company, Data from customer interview need to be analyzed. The interview are done in an Anime Event in Jakarta with 8 customers who bought Colle products. The interview was done with a structured interview with short time range which is about 5-7 minutes due to their busy activities and asking about their preference for itabag, anime, and what can be improved for Colle products. The list of questions is listed in Table 2.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understanding the preferences of the customer</td>
<td>Why did you choose to buy this product? What are the important things for you when buying an itabag?</td>
</tr>
<tr>
<td>2 Understanding the needs of a customer</td>
<td>What type of merchandise do you collect? What anime merchandise do you collect? When did you use the itabags?</td>
</tr>
<tr>
<td>3 Understanding the brand image in customer mind</td>
<td>Why did you choose Colle? What other brands do you have beside Colle?</td>
</tr>
<tr>
<td>4 Getting feedback for improvement</td>
<td>What do you think can be improved by Colle?</td>
</tr>
</tbody>
</table>
After analyzing with codes and categories, the result can be summarized:

- Consumers seem dissatisfied with the color and pattern choice available.
- Customers interested to buy a bag with simple design but more attractive color.
- Customers choose the color based on their favorite character color.
- Almost all of them updates anime based on the season.
- They don’t have many preferences in bag model.
- They use the bags mostly only on an event and some of them while hanging out.
- On the event, most of them buy bags based on the character or the artist.
- Most of the customers never have itabag before.
- They don’t like to be kept waiting too long for the bag.

After getting some insight from the customers of what they want and need, there is need to be found out in which area Colle’s new product can enter. This area can be found using gap maps. This map, compare Colle with competitors, and after some analysis, there are some gaps found in the market. The gap map can be found in Figure 2.

Colle has the fastest shipping than other brands since the product is in ready stock and can be shipped immediately, the variety is not as much as other since the bags are pre-made and can’t be customized. Until now, Colle has seven bag models with two choices of color for each model. Citte, only has two bag models but they have more flexibility of bag color. The customer can choose from Citte pre-stocked materials or request their own color to be made. They also offer pre-order on a patterned bag, but this request take 2-4 weeks to be ready to ship. The local handmade is custom made with the highest choice of designs and materials. But this totally depends on the bag maker’s skill. The lead time is mostly about 1 month for the bags in the same batch order or more for a custom order. China import bag has a medium number of model variety because mostly the bag produced in high number and commonly follow the model of Japanese original bag. Until now, there are more than 10 models of itabag which can be found from Taobao or eBay. The lead time is about 3-4 weeks or even more than 1 month, depends on the International shipping condition and the high traffic in Indonesian Customs. This time consumption almost same with Japan import bag, but the Japan import bag has a wider variety of design there are more than 20 models which can be found in Japanese online stores. The Japanese brand also has some collaboration with anime or character series for make themed-itabag.

Looking at Figure 2, there are some gaps in a high-variety product with low lead time, high-variety with medium lead time, and low-variety product with low lead time. This gap can be opportunity while developing the product. The gap in a low-quality product with high price and low-variety product with high lead time are not wanted and don’t need to be filled.

After understanding the available gap in the market, new product value needs to be made to get customers. First, a deeper understanding of customers is needed, and this can be analyze using empathy map which leads to customers pain and gain. The empathy map can be seen in Figure 3. The customer of Colle is Anime and Manga Merchandise collectors. They are actively collecting mer-
Developing New Product Using Minimum Viable Product

chandise of *anime*. Some of them have friends with same hobbies and joining communities. Waiting for items for too long and don’t get many choices give them pains. Instead, getting the items faster with good quality and affordable price are their gains.

After understanding more about the customers and understand their pain and gain, the value proposition for the new product can be made using value proposition canvas in Figure 4.
The customer of Colle is *Anime* and *Manga* merchandise collectors. They have jobs to display their favorite character merchandise in their bag safely and not afraid they’re getting lost. So what Colle can give is a good designed to display the merchandise collection safely. They have some pain when getting the bag, such as the bag import taking too long time and many uncertainties. They also don’t find the color they want, and the design is too plain. They will be happy if they gain faster lead time, good quality and cheap price. So, Colle provides pain relievers by giving a product with faster lead time, give the wide variety of colors and pattern, and offer the variety of design. And to give gain for customers, Colle create more profit for the customer with faster lead time for the pre-order product, create a good and durable product, and give good price with bonuses for customers. This will give the bag a uniqueness and give pride to the customers who use it. This will be a new value proposition for Colle product. The additional value proposition then inserted to the business model canvas of Colle in Figure 5.

![Business model canvas](image)

After getting all the data and analyzing all the factors, a marketing mix can be made. The marketing mix of new product of Colle are:

1. **Product**

   Based on the process above, the best choice of product is a medium to large bag with many varieties of color, pattern, and design. Looking at the available technology now to make a decent print on a fabric, this kind of product is possible to be made. The prints can be done in-house or partnering with a local artist for profit sharing. This will help to gain more attracted consumer because some of the artists already have the fan base. The proposed product will fill the gap of higher variety with moderate to low lead time. The position can be shown in Figure 6 with the star shape.
Developing New Product Using Minimum Viable Product

The new product will give customers more freedom to choose which perfectly match their collections that they want to display. Without throwing out Colle good value of fast lead time, the new product will have a minimum lead time which can compete with other brands current products. For these requirement options, Tote-bag will be the best choice, it has a large printable area for custom images, really simple and easy to carry, and not taking a long time to be made. And because it’s an itabag, a clear cover for the bag is needed to make it functional. This new product will be named COLLEBS from “Colle” and “Collaboration” words. This COLLEBS product will be published in two categories, COLLEBS Anime and COLLEBS Pattern.

2. Place
The product will be sold online channel since the item is using the pre-order method. The online channel is Colle’s official website, social media, and online marketplace.

3. Price
Looking at previous prices of Colle’s product and market prices, the new bag decided to be sold for Rp200,000.00 with 10% discount as a promotion which leads to Rp180,000.00 price for each bag with 2 sided prints and clear cover bag.

4. Promotion
All the promotions are done online using social media of Colle. Paid promotions and discount used for 2 weeks promotion period to attract the customer. The accessory bonus also included in the package. The bag also promoted through some anime related groups in Facebook.

Business Solution
The new product needs to be tested. For this research, the best choice is to test the product using Minimum Viable Product from Lean Startup. Minimum Viable Product or shortened as MVP is an advancement strategy in which a new product or service is created with sufficient features to fulfill the first customer called an early adopter, these

![Figure 6 Product positioning map]
people are eager to try something new, and the best part is they will give the feedback (Ries, 2011). Functional MVP is best for this research because it leads to the real consumer which can test the real product. Also, the MVP will still be accessible to another consumer which not purchasing also, so this will be effective in finding out the factors or the cause they choose to buy or not buy the product.

The value propositions of this new product are giving pride by having a unique bag which matches their need. So, there are 4 features need to be accommodated in the initial MVP: give media that can display collection safely, give a wide variety of color, give short lead time, and give a reasonable price. As the name, the MVP must be minimum at cost but still viable to the customer. One of the possible MVP for physical product is a catalog. The catalog can show the customer the list of available products with only a picture of the plain tote-bag model with design place on top of them and not the real final product. To sample the material and color, the digital or printed color pallet and the small pieces of the material sample can be used. For online distributed catalog, the zoomed photo of the material can be used to give an understanding of the material to the customers. This will be posted on the website and social media of the company. The testing will be done in 2 weeks from December 11 to December 25 with the fast-preorder method. The processing time to make the bag is 7 to 10 days excluding the shipping time to each customer. On week three, the result from the test is collected. The final sales report can be seen in Table 3.

Table 3 COLLEBS sales report

<table>
<thead>
<tr>
<th>Product</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>8 9 10 11 12 13 14</td>
<td></td>
</tr>
<tr>
<td>COLLEBS Anime</td>
<td>0 0 0 1 0 1 1</td>
<td>1 0 1 1 0 1 0</td>
<td>7</td>
</tr>
<tr>
<td>COLLEBS Pattern</td>
<td>0 0 0 0 0 0 1</td>
<td>0 0 1 0 1 0 1</td>
<td>4</td>
</tr>
<tr>
<td>Total Sales</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
</tbody>
</table>

Then to understand the cause, feedback from customer needed. To get the feedback from customers interview are conducted. This interview will include open ended questions which can show the opinion of the respondent. The interviews are done to find more depth feedback on the products from the customers. The customer then contacted and asked to be interviewed about the bag they purchase. If they are willing, Colle contacts them by phone. This applies to all early adopters. The interviews were done with 5 customers, 3 COLLEBS buyers and 2 COLLEBS potential buyers. Both inputs are needed for better result of the interview. The interviews done with semi-structured questions, so there are only some grand tour questions listed. The list of questions for the interview is listed in Table 4 and Table 5.

Based on the interview and the coding for both COLLEBS buyer and non-buyer, the result can be summarized:

- The color choice is good enough, but the anime theme it needs to be expanded.
- Customer hopes to use their own images on the bags.
- Customer hopes the idea can be expanded to other models of the product.
- The customer wants anime theme more than a pattern.
Table 4  Interview questions for COLLEBS buyer

<table>
<thead>
<tr>
<th>Objective</th>
<th>Grand Tour Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understanding the reasons for choosing the product</td>
<td>Why did you choose to buy this product? What are the factors that lead you to buy this product?</td>
</tr>
<tr>
<td>2 The comment about purchased COLLEBS product</td>
<td>What do you think about this product after receiving them? What do you like about this product? What things don’t you like about this product?</td>
</tr>
<tr>
<td>3 COLLEBS Product Usage</td>
<td>When did you use the COLLEBS product? What do you think after using COLLEBS for a while? Does COLLEBS fulfill your needs?</td>
</tr>
<tr>
<td>4 Input for COLLEBS</td>
<td>What do you think can be improved with COLLEBS product?</td>
</tr>
</tbody>
</table>

Table 5  Interview questions for the non-COLLEBS buyer

<table>
<thead>
<tr>
<th>Objective</th>
<th>Grand Tour Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understanding the reasons for not buying</td>
<td>Why did you choose to not buy this product? What are the factors that lead you to not buy this product?</td>
</tr>
<tr>
<td>2 The comment about COLLEBS Product</td>
<td>Do you like the idea of COLLEBS? What things don’t you like about this product?</td>
</tr>
<tr>
<td>3 Things that can be Improved</td>
<td>What do you think about this product? What more do you expect from COLLEBS? What do you need from an itabag?</td>
</tr>
<tr>
<td>4 Things that should be thrown up</td>
<td>What should be removed from COLLEBS?</td>
</tr>
<tr>
<td>5 Customer preferences</td>
<td>What is your preference for itabag?</td>
</tr>
</tbody>
</table>

- The picture needs to be improved than simple images.
- The customer concern about the quality.
- Information about the fan-merchandise rule.
- Improvement of the model needed.

After getting feedback, from lean startup concept, when the test was done there are two choices of the next step: pivot or preserve. While preserve is done when the hypothesis of the product is already correct, the pivot is a structured course correction designed to test a new fundamental hypothesis about the product, strategy, and engine of growth (Ries, 2011). Since the result show that the product not accepted enough, the pivot for correcting the product course is needed. That’s why after getting all the data and the input from the customers, the new test product should be made.

Based on the data, the new test product will need to have more choice of color, a freedom to make a request and possibly to use their own images with some limitation with no stolen images from other sources. Based on that approach, the concept of the new MVP is updated catalog with a wider variety of color, pattern, and illustrator choice and the ability for a customer to print or make their own images. A new submission system will be needed to make this new MVP work. There is also some attention from customers about the regulation in making fan-made items. There are some unwrit-
ten rules in doujin market to not make a profit that will hurt the original creators. The amount is unmentionable, but this must be one of Colle’s concern to continue using anime fan-made image as a product. Also, to avoid counterfeiting, only a personal made image that can be printed to COLLEBS. All the images which submitted will be checked if it’s their own images or it’s a stolen image. This allows Colle to keep Colle’s image as a local brand which supports local creators and not supporting bootleg items.

The New Minimum Viable Product will be the upgraded catalog and add the ability to print their own design. The new MVP will include a new process which never been implemented on Colle before, the image submission from customers. The customer can use their own image on COLLEBS product. The images will belong to the owner and Colle will not use that without permission. For future, the good artist who images good enough, Colle can try to invite the artist to join COLLEBS artist hub, but this is not a priority on this test.

CONCLUSION AND IMPLEMENTATION PLAN

The objective of this research is to find which product can be accepted by Colle’s customers. By getting all the insight from customers preferences by an interview the product which met the requirement from customers are made. The research result can be used to answer the research questions. The questions are:

- **What kind of product is acceptable to customers?**
  Customers want a product which has much variety of colors, pattern, and illustration. That variety will help them match their character and get pride in using the bag which their own. The customized bag also need fast production time to create gain for the customer.

- **How do the customers respond to the first test product?**
  Based on the interview result, the customers accept and adapt to the new product and showing interest. Some of them give inputs which can lead to a better product on next pivot. The result shows that improvement of the product is needed to attract more customers.

- **Which product gained more sales in the market on the first test?**
  Based on the data, the COLLEBS Anime product gets more buyer and perform better on the market. This means customers prefer to get more anime related theme on their itabag.

After the first test was done, the next test of new MVP must be done continuously, the implementation plan timetable can be found in Table 6.

### Table 6 Implementation plan timetable

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVP Design</td>
<td></td>
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<tr>
<td>MVP Testing</td>
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<tr>
<td>Data Collecting</td>
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<tr>
<td>Product Planning</td>
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<td></td>
<td></td>
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<tr>
<td>Final Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Developing New Product Using Minimum Viable Product

Since the next MVP is more complicated, the time needed for preparation is needed and more time to test is needed. If this test performs better, this means Colle moving to a better step. But if the next MVP perform worse, that means there are other factors that needed to improve or even changed entirely. Perhaps the business model should be modified more to meet customers’ needs. When the MVP accepted by the customer, the final product will be launched in full operating system.

The upgraded new product will need more resources because the customers can choose to use their own pictures and there must be a system for submitting their images. For the easiest choice, that can be done using email to Colle or uploading using the online form to Colle’s cloud account.

For the future researcher, this method will work better if more test were done, the process will show the flow how a minimum viable product can help to test the product with efficient cost. Because product test is an important thing to do before launching a full operating product in the market.

REFERENCES


