Proposed Ideal Business Model of an IoT Online Store (Case Study of Cosmic.id)

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ABSTRACT: Cosmic.id is one of the businesses engaged in the IoT industry. It has been established since 2018 and is selling the products via e-commerce (Tokopedia). Cosmic.id has three products categories; in-house products (LoRa, and Development Board), resale products (Resistor, Connector, Capacitor, and etc) and custom products or services (Bridge Monitoring System, Temperature Sensor, and etc). Currently, Cosmic.id serves 2 segmented customers; B2C and B2B. Both segment give profit to the company, but since the internal resources are limited, then Cosmic.id has to decided which segment that the company should focus on, so the company could gain more revenue and have stable revenue for each month. The research objective of this thesis is to discover the ideal model business of Cosmic.id, B2B or B2C, therefore they could focus more to gain more revenue for the business. Also, another purpose is to discover whether the existing Unique Value Proposition is still relevant to the target model and what needs to be fixed. The research conducts in qualitative study, interviewing existing and prospective customers, both B2C and B2B customers. During the research, it was found that the B2B segment has a big opportunity for Cosmic.id's revenue streams. It could give more revenue to the business, but some efforts have to be done to reach that market. In addition to that, some parts of the existing Unique Value Proposition are not relevant to the current condition. The end outcome of this study is the focus on B2B customers and the new Unique Value Proposition, which will be applied in this business and is given in the form of OKR and KPI in accordance with consumer needs. It is hoped that Cosmic.id and the team would do their best to provide the products that the market really needs and apply the new Unique Value Proposition both for B2B and B2C customers, so that the company will have stable revenue and could be sustained in the future. It is also hoped that Cosmic.id could contribute to the IoT development in Indonesia since there are not many LoRa manufacturers in Indonesia.

KEYWORDS: Business Model, Consumer Needs, B2B, B2C, IoT, LoRa, Unique Value Proposition.

INTRODUCTION

The emergence of the Internet happened not only within human interaction but also in machine-to-machine communication. The era of the Internet of Things -IoT to be short- is so hype. It enables the fields of Industry 4.0, Society 5.0, Smart City, Big Data, etc. IoT focuses on giving value-added services to customers. Some of the key that consist of important values of IoT are: increasing production capacity, saving production cost, real-time monitoring, and shortening decision-making time. One of the important components of IoT products is Lora. LoRa is a long-range, low-power wireless technology platform that operates in the unlicensed industrial, scientific, and medical radio bands [1]. The goal of LoRa is to eliminate repeaters, lower device costs, extend device battery life, boost network capacity, and support a large number of devices [2]. It's a type of physical layer that's employed for long-distance communication. LoRa is the de-facto wireless platform of Internet of Things (IoT). Semtech's LoRa chipsets connect sensors to the Cloud and enable real-time communication of data and analytics that can be utilized to enhance efficiency and productivity. LoRa devices enable smart IoT applications that solve some of the biggest challenges facing our planet: energy management, natural resource reduction, pollution control, and infrastructure efficiency.

BUSINESS PROFILE

In Indonesia, we have a unique requirement regarding the LoRa technology. Referring to the "Perdirjen SDPPI Kominfo No. 3 Tahun 2019", it stated that the allowed frequency was within the range 920-923 Mhz. This has no similarity to any other countries. For instance, the Asian Countries set the frequency at 923-925 MHz. Based on the differences mentioned earlier, we found 3 most critical problems regarding LoRa application in Indonesia:
1. Indonesia technical regulation is unique with no similarity within region nor globe

2. Most of LoRa are imported with unaffordable prices and consume more time to arrive in Indonesia
3. Much of imported LoRa does not solve the Indonesian problem

Based on the problems mentioned above, it brings an opportunity to local players like Cosmic.id as we are more familiar with both the Indonesian market and regulator. We have our own in-house team that is able to build LoRa that is compatible with Indonesia's allowed frequency range. Cosmic.id was established in 2018. Cosmic.id wants to be part of customer solutions by providing specialized IoT products and services, such as LoRa, Arduino, Raspberry Pi, Development Board, Resistor, Capacitor, Inductor, and many more IoT-related components. We have been established in 2018 and have been thriving since then. Our initial marketing channel is through popular e-commerce, Tokopedia.

VISION AND MISSION

Cosmic.id's vision is to improve people's lives through technology and make Indonesia proud of its own "karya anak bangsa". The company mission are:

- Providing affordable and customer-centric IoT products and services
- Preferred as digitalization enabler products in Indonesia
- Maintain collaborative cooperation with the digital ecosystem

RESEARCH OBJECTIVES

The research objective of this thesis is to discover the ideal model business of Cosmic.id, B2B or B2C, therefore we could focus more to gain more revenue for the business. Furthermore, another purpose is to discover whether the existing Unique Value Proposition is still relevant to the target model and what needs to be fixed.

CONCEPTUAL FRAMEWORK
A. INTERNAL ANALYSIS
1) SEGMENTING, TARGETING, AND POSITIONING ANALYSIS

A market segment is a group of people, businesses, or organizations with similar interests, features, or qualities. Market segmentation is the practice of categorizing consumers' shared wants and demands [3]. Segmentation could be broken down into smaller groups of consumers with various wants, traits, or behaviors that may call for different marketing approaches or mixtures [4]. Similar requirements, wants, and expectations may exist among the customer sectors. As a result, businesses should consider which segments they should target. For Cosmic.id, the market segment is B2C and B2B. The company must determine which segment to target after the client segments have been identified and characterized. Customers will have a wide range of expectations. Customers may value an unique, high-quality service, for example, whereas others may be more costly. Targeting is a technique for choosing the appropriate segment, and businesses must balance their abilities and resources against the demand for a variety of segments [5]. It is in the business's best interests to find any unmet market needs, as there may be clients who aren't being sufficiently served by competitors. The next step is to determine which segments are the most profitable and which segments will be supplied using RFM analysis. RFM is as R (Recency): The time since the last transaction; a smaller price indicates a higher likelihood of a purchase behavior by the consumer; F (Frequency): the quantity of purchases done during a specific time period; a higher frequency implies a higher level of loyalty; M (Monetary): the amount of money spent over a specific time period; a larger value suggests that the business should put more emphasis on that customers [6].
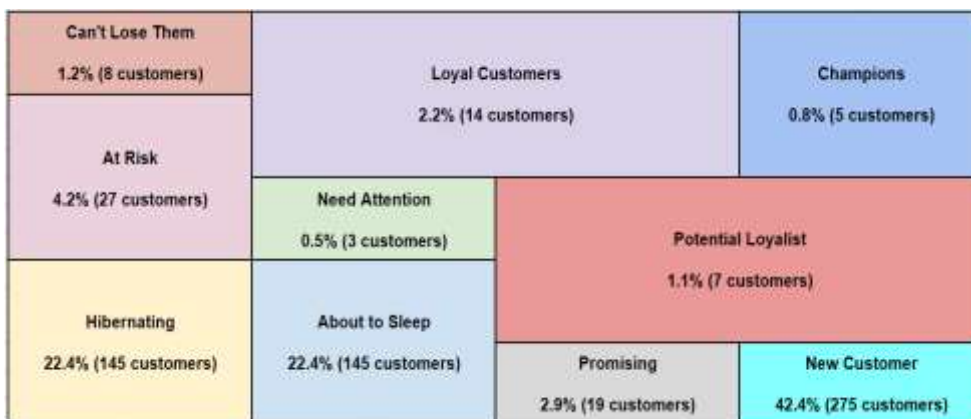
Figure 1. RFM Analysis

The writer has conducted RFM analysis for 648 customers which bought Cosmic.id's products in March - August 2022. Based on the results, it was found that the biggest percentage of the customers is the New Customers (275 customers out of 648 customers), and the one that needs to be improved is Hibernating customers. Product positioning is the final stage of target marketing. Firms formalize "positioning statements" that define the place they want to hold in the minds of their target customers in comparison to competitors' products or services. Customers are constantly evaluating products and services. As a result, marketers must develop positioning initiatives to increase the perceptions of their products among customers (and prospects). Here is the brand positioning for Cosmic.id between its competitors.
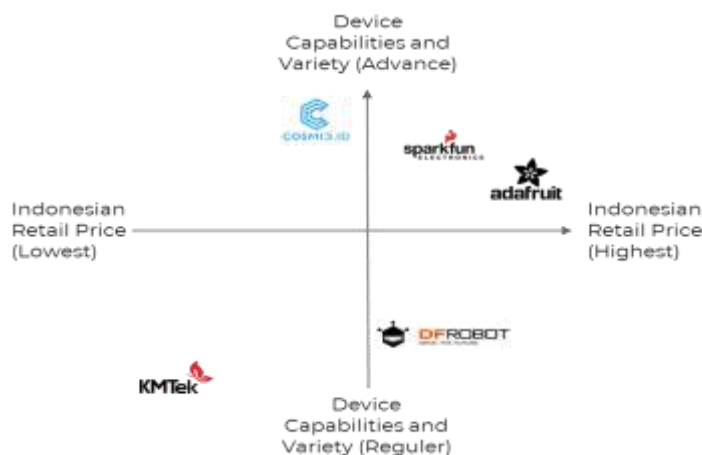

Figure 2. Brand Positioning of Cosmic.id

2) MARKETING MIX ANALYSIS

The marketing mix is a technique that marketers use to assist organizations design the best and most appropriate marketing decisions for their organizations in order to maximize consumer value and relationships. The marketing mix, refers to elements that a marketing manager can manage to influence a brand's sales or market share [7]. These characteristics are traditionally summed up as the four Ps of marketing: product, pricing, promotion, and location. McCarthy's 4Ps model (product, pricing, place, and promotion) is one of the traditional classifications of the marketing mix.

a) Product

A product is anything that can be supplied to a market for evaluation, procurement, usage, or utilization to meet a consumer's need or wish [8]. In simple terms, a product is a set of benefits that a marketer gives to a customer in exchange for a fee. When we purchase a dress, we are truly purchasing comfort for our body; similarly, when we purchase a set of makeup, we are purchasing

beauty since makeup is likely to make us look good. A product can also be a service, such as air travel or telecommunications. As a result, the term product refers to the organization's for-sale items and services.

Cosmic.id provides 3 kinds of products/services, such as:

1. In-house products
   For in-house products, Cosmic.id provides products such as LoRa and Development Board.
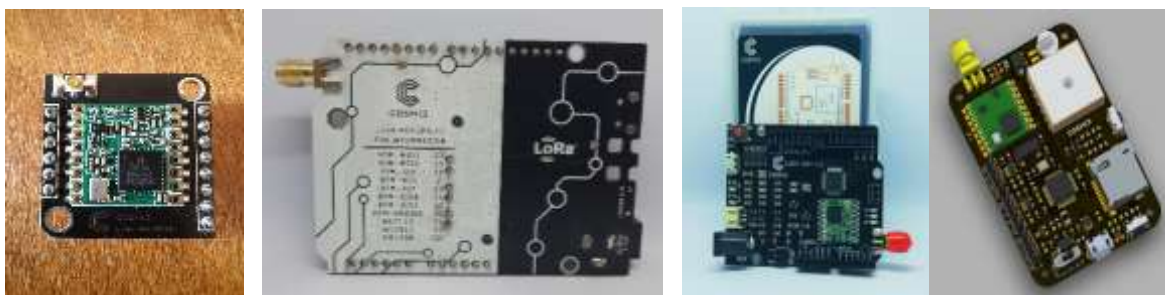

Figure 3. LoRa

2. Resale products
   For resale products, Cosmic.id provides products such as antenna, battery, capacitor, resistor, inductor, arduino, and etc. To gain the one-stop IoT devices provider, Cosmic takes the strategy of providing all IoT-related modules. We pick the niche market that has not really been handled by competitors. We have the most complete SMD electronic parts among all the online stores. We want to be the most preferable store to buy by its completeness. Here are the examples of resale products that we sell on Cosmic.id:
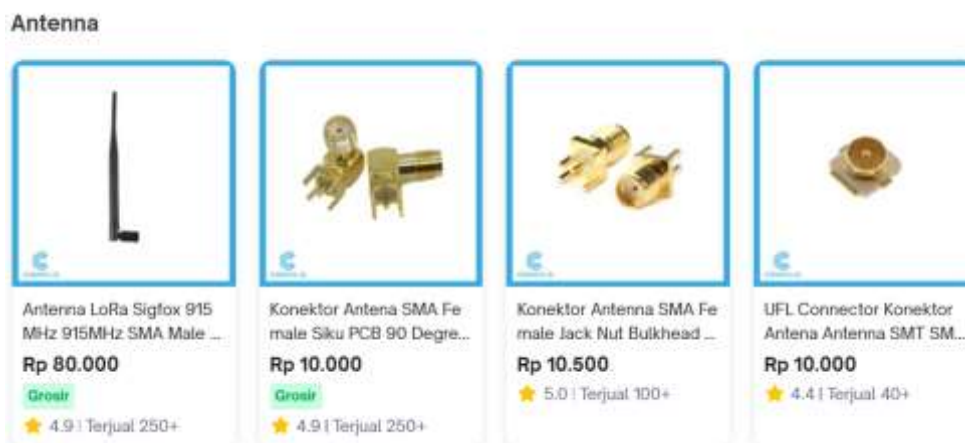

Figure 4. Antenna

3. Custom products/services
   For custom products/services, it depends on what clients would like us to create, for example, bridge monitoring system, pH and dissolved oxygen monitoring system, IoT-based power meter, etc. One of the projects we created was a bridge monitoring system for the rural area based on the LoRa technology. We help the customers pick the right sensors and all the related modules. Here is one example of the custom products:

Figure 5. Bridge Monitoring System

In Tokopedia, Cosmic.id has 685 products which grouped to 50 categories, not included if the customers want us to create custom products for them. Meanwhile our competitor, KMTek, only has 21 products which grouped to 8 categories. Here are each product categories both for Cosmic.id and KMTek.

Table 1. Products Categories of Cosmic.id and KMTek

Products Categories	Cosmic.id	KMTek
	Aksesoris	Microcontroller
	Aktuator	Modul Communiation
	Antenna	Box
	Arduino	Power Management
	Battery	Electronic
	CCTV	Sensor
	Crystal	Konektor
	Display	Mappi32 Kit
	End to End Solutions	
	Fuse SMD	
	Header	
	IC Power	
	Industrial	
	Induktor SMD 0805	
	Induktor SMD 0603	
	Induktor Beads	
	Kapasitor SMD 0402	
	Kapasitor SMD 0603	
	Kapasitor SMD 0805	
	Kapasitor SMD 1210	
	Kit	
	Komponen SMD	
	Konektor	
	LED 0603	
	LED 0805	

	LED 5050 LoRa NB IoT Mikrokontroller Mini PC Modul Elektronik Power Supply Resistor Array 0603 Resistor Semen Resistor SMD 0402 Resistor SMD 0603 Resistor SMD 0805 Resistor SMD 1206 Resistpr SMD 2010 Resistor SMD 2512 Sensor Shield Switch Tools Socket Tantalum Kapasitor Transistor Trimmer Capacitor 3D Printing Kabel USB	

b)   Pricing

Price is defined as the amount of pay for a product or service, or as the combined total that customers exchange in return for the benefits of obtaining or using the product or service [9]. It is the marketing mix's second most significant component. Fixing the product's price is a difficult task. Many considerations, such as product demand, cost, consumer ability to pay, pricing paid by competitors for similar items, government regulations, and so on, must be considered when setting the price. That fact, pricing is a critical decision area because it influences product demand as well as the firm's revenue.

This is the range of pricing for each product category in Cosmic.id:

1. Inhouse product: Rp 75.000 - Rp 21.999.000
2. Resale product: Rp 250 - Rp 7.750.000
3. Custom product/services: depends on the request

Both Cosmic.id and KMTek sell different kinds of Lora. Based on the Figure 2.13 and 2.14, Cosmic.id's Lora has a price range of Rp. 110.000 - Rp. 574.000 and KMTek has a price range of Rp. 197.000 - Tp. 632.000. But still we cannot compare them since it has different specifications.

c)   Place

Place is connected to a customer's accessibility to a product [8]. Goods are made to be sold to the general public. They must be made available to the public in a convenient location where they can purchase them.

Table 2. Sales Channel of Cosmic.id and Its Competitors

Sales Channel	Cosmic.id	Adafruit	SparkFun	DFRobot	KMTek	Link
Website	✗	✓	✓	✓	✓	Adafruit: https://www.adafruit.com Sparkfun: https://sparkfun.com DFRobot: https://dfrobot.com KMTek: https://www.kmtech.id/
E-commerce	✓	✗	✓	✓	✓	Cosmic.id: https://www.tokopedia.com/cosmic-iot SparkFun: https://www.amazon.com/stores/SparkFunElectronics/page/8F120F7A-9F4B-41A7-A913-A2EA441961E3?ref_=ast_bln DFRobot: https://www.amazon.com/stores/DFROBOT/page/BFD6A856-AD8B-474C-B856-8229F8D47212?ref_=ast_bln KMTek: https://tokopedia.link/IHeJyVcdmrb
Social Media	✓	✓	✓	✓	✓	Cosmic.id: https://www.instagram.com/cosmic.id_iot/ Adafruit: https://www.instagram.com/adafruit/ https://twitter.com/adafruit SparkFun: https://www.instagram.com/sparkfun/ https://twitter.com/sparkfun

					DFRobot: https://www.instagram.com/dfrobot_official/ https://twitter.com/dfrobotcn KMTek: https://www.instagram.com/kmtek.indonesia/

Based on the Table 2, it could be concluded that Cosmic.id and its competitors have different kinds of platforms for selling the product. For example Cosmic.id sells via e-commerce and social media, but not the website. AdaFruit sells via website and social media, meanwhile SparkFun, DFRobot and KMTek sells vi website, e-commerce and social media.

d)   Promotion

Promotion is a combination of advertising, product promotion, personal sales, and public relations that communicates the product's advantages and persuades target buyers to buy it [8]. Promotion is a communication program serves three crucial functions in marketing strategies: delivering needed information and suggestions, persuading target customers of the benefits of a particular product, and urging them to take action in specific circumstances [10]. Currently Cosmic.id only uses Tokopedia Ads for the promotional media. Meanwhile the writer cannot find any additional information about the advertisement that its competitors use.

3) VRIO FRAMEWORK

VRIO is a framework for determining if specific business resources can provide a long-term competitive advantage [11]. Value, rarity, imitability, and organization are four empirical measures of a firm's ability to achieve sustainable competitive advantage. This model states that a company can only obtain and maintain a competitive edge if it possesses resources that meet all of the VRIO criteria.
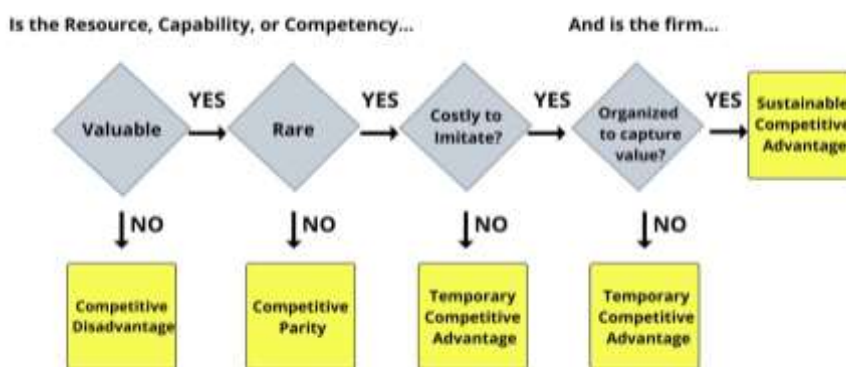

Figure 6. VRIO Analysis of Cosmic.id

From the VRIO Analysis, it was found that the resources that are owned by Cosmic.id are mostly sustainable competitive advantage for supplies, skillful human resources, high-quality supporting tools, brand image, low price products and fast shipment. Meanwhile, the other resources owned by Cosmic.id are temporary competitive advantages for easy to reach out, Bahasa Indonesia support language provided, and customers relations. With the same numbers are competitive parity for e-commerce channels, free consultation and digital advertising. From the analysis, in terms of resources that are temporary competitive advantages and competitive parity will be evaluated so that they could become sustainable competitive advantage.

EXTERNAL ANALYSIS

A. COMPETITOR ANALYSIS

Finding our competitors' advantages and disadvantages is done through competitor analysis. We can discover more about each competitor's marketing tactics by looking at their marketing, price, channels for promotion, market share, and other information in a competitive study. The identification of competitors is a crucial activity for a business to examine their competitive landscape, strengthen their defenses against potential intrusions from competitors, and develop attack and defense plans [12]. It serves as a crucial preliminary to the process of competitor analysis and serves as the beginning point for an investigation of the dynamics of strategic plan. A competitor analysis may help us learn about our sector and the competitive environment, develop our unique value proposition, offer actionable benchmarks to assess our progress, pinpoint our competitors' winning tactics, and smooth our marketing approach to keep a competitive edge.

Table 3. Competitor Analysis

No.	Competitors	Website	Similar Features	Different Features	Pricing
1.	Adafruit	https://www.adafruit.com	• Provide LoRa Connectivity-based Device • Targeted DIY makers, IoT enthusiasts, and System Integrators related with IoT	• English-based Support • US-based Production Cost • Provide more varieties of category, not only in LoRa market, but also in more generic electronic technology • Has dedicated online store	High LoRa https://www.adafruit.com/product/3072 USD 19.95 (exclude shipping + import fee)
2.	Sparkfun	https://sparkfun.com	• Provide LoRa Connectivity-based Device • Targeted DIY makers, IoT enthusiasts, and System Integrators related with IoT	• English-based Support • US-based Production Cost • Provide more varieties of category, not only in LoRa market, but also in more generic electronic technology • Has dedicated online store	Medium LoRa https://www.sparkfun.com/products/12775 USD 12.95 (exclude shipping + import fee)
3.	DFRobot	https://dfrobot.com	• Provide LoRa Connectivity-based Device • Targeted DIY makers, IoT enthusiasts, and System Integrators related with IoT	• English and Chinese-based Support • China-based Production Cost • Provide more varieties of category, not only in LoRa market, but also in more generic electronic technology • Don't provide solution • Has dedicated online store	Medium LoRa https://www.dfrobot.com/product-1665.html USD 16.9 (exclude shipping + import fee)
4.	KMTek	https://www.kmtech.id/	• Provide LoRa Connectivity-based	• Having less number of products	Low

| | | https://tokopedia.link/IHeJyVcdmrb | Device
• Indonesian-based company
• Indonesian-based technical support
• Provide IoT solutions
• Utilize e-commerce, does not have dedicated online store | • Having more number of IoT solutions
• Currently established | https://www.tokopedia.com/tuni/mappi32-plus-antena-3-dbi-development-kit-16-mb-ota-lorawan-support

IDR 657.000 (relatively cheap since it is the flagship product which costs more while buying the above foreign brands) |

As seen on the Table 3, both Adafruit and Sparkfun manufacture their products in the US, DFRobot manufactures their products in China, and only KMTek manufactures their products in Indonesia, the same as Cosmic. id. Related to the language, because Adafruit and Sparkfun are originally based in the US, they only provide English as the supporting language. DFRobot provides English and Chinese, and KMTek provides Bahasa Indonesia, the same as Cosmic.id. Related to the price of the products, Adafruit, Sparkfun and DFRobot are obviously more expensive than KMTek and Cosmic.id, and the customers also need to pay more for the taxes and shipping fees. Furthermore, if we are looking at Cosmic.id's competitor in Indonesia - KMTek, they have more IoT Solutions, such as: End-to-End IoT Solution, Integrating Solution, IoT Training by Order/Request, and Tech-Product Photography, but less of IoT products/components. Cosmic.id surpasses KMTek in terms of the number of goods, we have approximately 685 of IoT products or components that we sell in Tokopedia, ranging from LoRa or general components such as sensor, capacitor, resistor, battery, Arduino, and etc. Cosmic.id also outperforms the badge, rating and also the response time. As we could see on the picture below, KMTek has an average of 6 minutes response time, 5 bronze badge and 4.9 product quality scores. Furthermore, as per June 25th when these pictures are taken, KMTek closes their Tokopedia store and will reopen on July 1st, which make the customers are difficult to reach or buy the product from them. Meanwhile Cosmic.id has an average of 1 minute response time, 1 gold badge and the perfect 5.0 product quality scores.

B. CUSTOMER ANALYSIS

The customers anticipate that the business will fulfill all of their needs [13]. They want the business's performance to match the image, product quality, delivery dates, and price-to-quality ratio at an acceptable level. It could be done by interview the targeted participants. The research methodology in this research uses qualitative methods. The data will be collected by interviewing existing and potential customers who have some criteria such as the one who has a profession as an IoT/hardware engineer/developer, and researchers. During the interview, the writer asked several questions such as:

Table 4. Research Questions

Questions	Objectives
Existing customers: 1. What did you buy in Cosmic.id? 2. How many items that you bought in Cosmic.id? 3. When did you do the purchase? 4. How did you know about Cosmic.id? 5. Did you find any advertisement related to Cosmic.id on Tokopedia? 6. Why did you choose Cosmic.id in the first place? 7. What do you think about the items that we provide?	To understand: ● Purchase Volume ● Average Spending/Transaction ● Channel of Communication ● Decision Maker ● Product Innovation ● Pricing ● Visual Merchandising

8. What is your impression related to the after-sales service of Cosmic.id? 9. What do you like the most about Cosmic.id? 10. What you don't like about Cosmic.id? 11. Do you want to refer Cosmic.id to your friends? 12. Do you have any suggestions for Cosmic.id?	● Brand Loyalty
Prospective customers: 1. Are you an IoT developer/researcher/enthusiast? 2. What are your daily activities related to your work? 3. What do you usually need to buy regarding IoT components? 4. What problems are you facing related to the purchase of IoT components? 5. Who are the stakeholders or decision-makers, and what is the approval process? 6. How long does it take for you to buy a product? 7. What are your expectations related to the whole process of buying a product?	

C. BUSINESS MODEL CANVAS

The Business Model Canvas (BMC) was designed by Alexander Osterwalder and Yves Pigneur in 2010. They mentioned that the Business Model Canvas describes the rationale of how a business generates, delivers, and captures its value. BMC makes it simple and obvious how a strategic plan is centered around nine essential building blocks [14]. Still, it also inspires students and businesspeople to consider the reasons behind these interactions and their effects. It is a tool that uses spatial positioning and connected flows to graphically map out important structural parts and their interactions. The nine essential building blocks of the BMC are Customer Segments, Value Proposition, Customer Relationships, Channels, Revenue Streams, Key Resources, Key Activities, Key Partners, and Cost Structure.

Figure 7. Existing BMC of Cosmic.id

Based on the explanation of the current BMC above, there are still some aspects that are not optimized yet, such as channels, customer relationship and Unique Value Preposition. As it has been mentioned above, Cosmic.id only sells its products via e-commerce. Cosmic.id also only provides messaging via e-commerce, social media, and WhatsApp numbers. Cosmic.id's social

media has not even been active since a couple of months ago, so Cosmic.id's teams do not know whether the current channel is suitable for the customers or whether the current Unique Value Proposition is still relevant.

D. Root Cause Analysis

Root-cause analysis is an amazingly effective tool for performing a correct and thorough system-based examination of critical flaws [15]. The cause-and-effect diagram truly concentrates on locating the source of the particular flaws and contributing elements. It is also concerned with creating a strategy with a measuring approach that will allow the effectiveness of the plans to be assessed. Based on the analysis and the interview results, it is found that some factors that become the Root Cause Analysis such as the figure below:
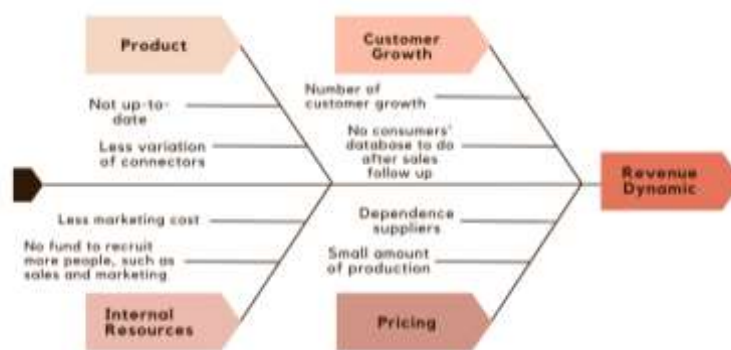
Figure 8. Root Cause Analysis

The monthly revenue of Cosmic.id has been unstable since the first month of the selling until now. Based on the analysis and the interview results, there are four main parts that play big parts for this reason. The first one is related to customer growth. Not only is the revenue unstable, but also the number of loyal customers is really low. Cosmic.id's team does not have a proper customers database for the team to keep track of the sales, which means it is hard to do the after sales follow up or to send the promo messages, either via Whatsapp, email or the e-commerce messaging feature. In that way, the number of customer growth is also unstable for each month. The second reason is related to the pricing. Cosmic.id produces the products in small quantities, that makes the selling price is quite high to cover the production cost. In some categories, Cosmic.id's products are more expensive than other online IoT stores, and the customers tend to buy from the cheapest store. The third reason is related to the product itself. The products that Cosmic.id sells are not up-to-date and has less variations than other stores. Cosmic.id does not have a dedicated person to do the research related to the most needed items in the market. So sometimes the customers could not find the products that they need in our store.

Also for example, a connector in Cosmic.id stores has only 26 variations, meanwhile in other stores, they have approximately 35 more variations of connectors, The last reason is related to Cosmic.id's internal resources. Currently Cosmic.id has a few employees such as an admin and some freelance hardware engineers. Cosmic.id does not have a dedicated person to do the sales and marketing in the company, and only uses Tokopedia Ads as the only source of marketing effort. In that way, we could not reach more customers especially for B2B customers since we only sell the products via e-commerce (Tokopedia).

BUSINESS SOLUTION

A. SWOT ANALYSIS

SWOT analysis assesses the internal and external opportunities and risks in the environment of a business, as well as its strengths and weaknesses [16]. The internal analysis is used to pinpoint the organization's resources, capacities, core capabilities, and market opportunities. The external study examines the resources of rivals, the industry environment, and the overall environment to find market opportunities and risks. The goal of a SWOT analysis is to make use of the knowledge a business has regarding its internal and external surroundings in order to design its strategy appropriately.
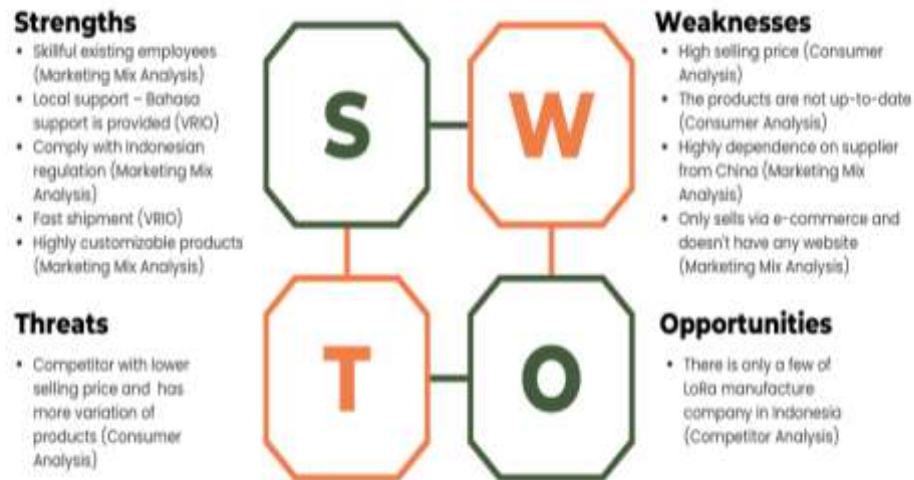
Figure 9. SWOT Analysis

Based on the SWOT analysis, there are some points pointed out regarding Cosmic.id's strengths, weaknesses, threats and opportunities. For strengths part, based on Marketing Mix Analysis, Cosmic.id consists of skillful existing employees that can work professionally, that products are complied with Indonesian regulation, and also it could be highly customized. Based on VRIO analysis, Cosmic.id provides Bahasa Indonesia for administrative things, and the products are shipped fast, even on weekends or public holidays. For weaknesses, based on the Consumer Analysis, it was found that the products that are sold by Cosmic.id are not affordable, they are quite expensive than the other stores. It was also mentioned that the products are not up-to-date and in some cases, the product variations are not complete. Based on Marketing Mix Analysis, Cosmic.id has a high dependence on their supplier in China. Sometimes the shipment is late or gets stuck in customs, that is also the reason sometimes Cosmic.id cannot fulfill the customers' orders. For threat parts, since it was found that based on the Consumer Analysis Cosmic.id's products are more expensive than other stores, the threat will be other stores which have lower selling price and have more variation or up-to-date products. For opportunities, based on the Competitor Analysis, it was discovered that there are only a few of LoRa manufacturing companies in Indonesia. With that situation, it opens a big opportunity for a local player like Cosmic.id to reach more customers.

B. INTERVIEW RESULTS

The interviews are intended to be asked to two kinds of participants; existing and prospective customers. For existing customers, they are two males and the occupation is IoT Engineer/staff. Both of them have purchased several products from Cosmic.id during 2020-2022. For B2C person, he recognized Cosmic.id's brand by doing some searching on Tokopedia. He was typing the products name on the search bar and Cosmic.id's name popped up on the top list. For a B2B person, he was advised by his friends about Cosmic.id. He was told that Cosmic.id sells good products and the after sales service is great, that is the reason he chose to but at Cosmic.id. The difference also comes at the decision maker and pricing part. For a B2C person, since the decision maker is himself, he felt that our pricing is a little bit higher than other stores. Meanwhile, for a B2B person, since the decision maker is his supervisor and the products would be paid by the company, he has no concern regarding the pricing. The most important part is related to the product innovation, both of them felt that Cosmic.id's products are not that complete and are out-of-date. There are other stores that sell products with more variations than Cosmic.id and the price is also lower than Cosmic.id.

For the prospective customers, they are two males; one is a university student (B2C) and the other is a junior IoT Engineer (B2B). Both of them never buy any products in Cosmic.id but they are actively buying IoT products from other online stores. For B2C person, regarding the products that he needs to buy depends on the tast given by the lecturers. So in this case, the decision maker is the lecturer. Meanwhile for B2B people, the same as the existing buyer, the decision maker is their supervisors. Both of them are also actively purchasing IoT products in e-commerce (Tokopedia) and have a couple of stores where they usually buy from.

Based on the interview, there are some of points that could be improved from Cosmic.id's business. First point is related to the product innovation. The customer mentioned that Cosmic.id's products are not up-to-date. The team has to do more research related to the products that are happening at the market. Furthermore, Cosmic.id's team could join to some IoT community in Facebook or other social medias to aware of the current situation of IoT development in Indonesia. Second point is related to the pricing. The customer pointed out that the selling price of Cosmic.id's products are more expensive than other stores. This thing happens because the team produce the products in small quantities, so the selling price has to be high in order to cover the production fee. The customer also suggest the team to give a discount for customers with massive buying. For this case, Cosmic.id's team would try to find a different supplier with cheaper price so that the selling price will be cheaper as well. In that way, customers tend to be loyal to Cosmic.id. Another suggestion from the customer is that Cosmic.id could try to sell the products to IoT company. Even though it is quite hard for a brand to enter a company procurement system, it is worth trying since the revenue will be high from B2B customers. Cosmic.id's team would try this suggestion and hire a salesman to enter the B2B market.

C. PROPOSED MARKETING SYSTEM
Based on the SWOT and the interview result, the writer re-do the BMC for B2C and B2B as stated below:
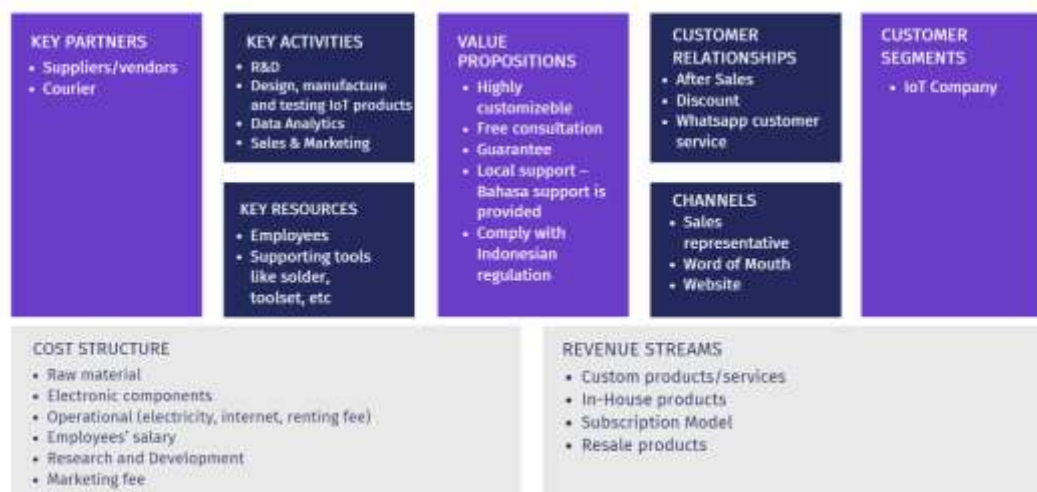

Figure 10. New BMC of B2C

Figure 11. New BMC of B2B

In this New BMC of B2B, there are several parts that are the same with B2C parts, such as Key Partners, Key Activities, Key Resources, and Cost Structure. For Value Prepositions, highly customizable is the top of the list, because our customer - IoT company, they prefer to create custom products for their needs. That is one of the unique things that Cosmic.id could sell to the customers. Beside that, Cosmic.id also offers free consultation and guarantee while the contract is running. Any challenge or difficulties that the customers face during the usage of the products would be helped by Cosmic.id's team, 24/7. It relates to the Customer Relationship part where Cosmic.id always give their best service even after the customers purchase the products (after sales service). In Channels part, sales representatives would be at the top of the list, since it would be difficult for an IoT company to only see our product via e-commerce (Tokopedia). Sales representatives are needed to reach directly to the customers, explain the products thoroughly, negotiate the pricing, and be the connectors between the customers and Cosmic.id. Currently, Cosmic.id does not have any sales representatives, but we plan to hire one next year. Cosmic.id also plans to create a website as one of the Channels part. For the Revenue Streams part, there are custom products/services, in-house products, subscription models, and resell products. For subscription models, Cosmic.id's team plans to create a business model where a customer can subscribe to the services and pay it monthly or annually. That is one of the great ways to gain more revenue to the company.

D. WEBSITE STRATEGY

Website should be one of our sales channels, however, we have not implemented the website truthfully. Our website strategy is called "Website as Fully Digital Touch Point". This initiative will contain and leverage these aspect,

- Omni sales channels
- Products and Projects Portfolio
- Initial-to-end layer of digital sales funnel
- SEO implementation
- Brand awareness
- On-web issues resolution

Those strategies are designed to gain confidence of our customers and boost revenue of the company. Many of us must know that most of the world's current business processes are done digitally, that is why many new digital platforms emerge. Our long run vision is to fully digitalize the process, however, it is more wise to have several small milestones that sum up into the long run vision. Here is our website as a digital-touch-point roadmap:

Table 5. Digital-touch-point Roadmap

Q1 2023	Q2 2023	Q3 2023	Q4 2023
• Company Profile • Products Catalog and Projects Portfolio, Forward to Existing Marketplace • Contact Us Form • SEO Implementation v1.0	• Release FAQ of Products as Layer 0 issue resolution • Contact Us Form v2.0 only for Layer 1 issue resolution and business inquiries • SEO implementation v2.0	• Cart and digital payment, multi platform sales point (native website and public online platform) • Live chat and Contact Us v3.0 ticketing system • SEO implementation v3.0	• Self provisioning services • Live chat and contact v4.0 only for anomalies and stubborn issues resolution • SEO implementation v4.0

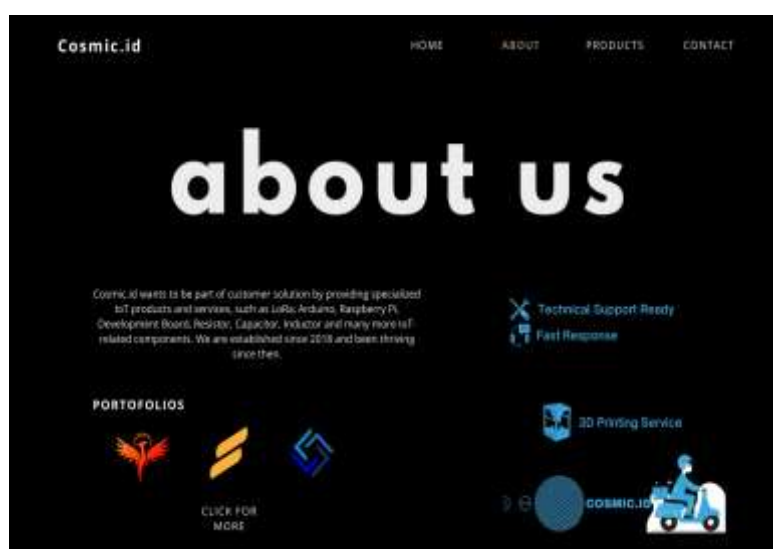**Figure 12**. Landing Page of Cosmic.id's Website (Home Page)

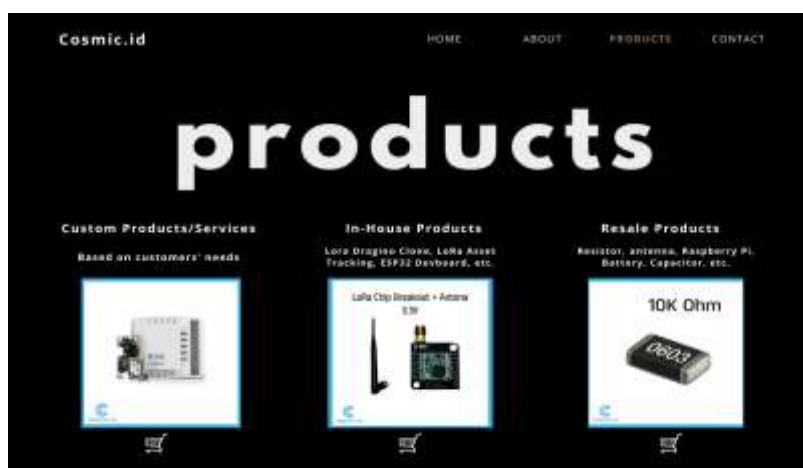**Figure 13**. Landing Page of Cosmic.id's Website (About Page)

Figure 14. Landing Page of Cosmic.id's Website (Products Page)

Figure 15 Landing Page of Cosmic.id's Website (Contact Page)

E. B2B Proposed Purchasing Flow

As focusing on the B2B business, we propose a B2B purchasing flow as Figure 16. In order to run this flow, the team would also hire some dedicated person for the research and sales position, in order to reach more customers. The research team would find out the needs of IoT development in Indonesia, and the sales team would track the existing and prospective customers to keep track and offer Cosmic.id's products or services. Here is the proposed B2B proposed purchasing flow from the very first step until the last step:
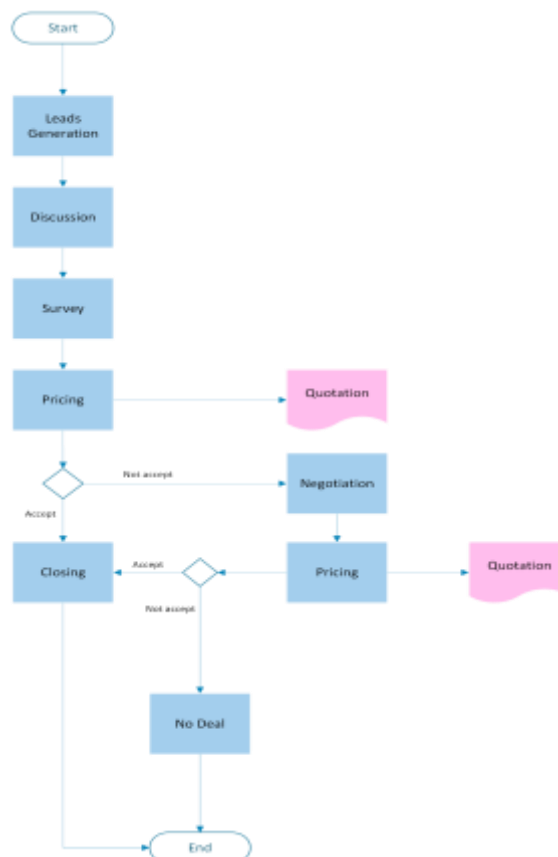

Figure 16. B2B Proposed Purchasing Flow

1. Leads Generation

Cosmic.id tries to use active marketing approaches for the targeted potential customers instead of relying only on customer inquiries. Moreover, we expected to gain more traffic gradually by the SEO implementation. In order to get the leads, we will catch up with the existing customers. Through two-way feedback collection, we will try to dig up more customers' pain problems. If customers are willing to share their current pain problems, then we just generated a lead. It will move to the next step, Discussion.

2. Discussion

In this part, Cosmic.id's team is trying to dig up more about the customers' pain problems. Our standing point is clearly to put our stand in the shoes as customers'. The format will be more or less like telling a story where customers are at the epicenter. This activity then generated specifications and detailed requirements. This activity is usually done via Google Meet or Zoom, or if the customers want to meet directly with the team, it is also possible to do.

3. Survey

After the discussion part, Cosmic.id's team needed to visit the site to survey about the location. It is needed to create the solution itself. For example if a customer wants to create a smart door for their apartment, then Cosmic.id's team needs to visit the apartment and measure the size of the door, the internet signal in that area, and etc.

4. Pricing

After doing the survey, Cosmic.id's team will calculate all the cost of goods and services (COGS) as the initial milestone of constructing the final pricing. We will add the risk management cost, expected profit, value added tax, etc. The first iteration will generate the initial pricing. If any adjustment is needed as the customer negotiates the price, then Cosmic.id's team would offer the customers another solution related to the targeted products. For example if an IoT company proposes a quotation for a specific temperature sensor, but then the price is still above their budget even after the negotiation, then Cosmic.id's team would adjust the scope of work, such as eliminating one of the components that the customer feels is too expensive. The customer could provide that component by themselves, then Cosmic.id would build the temperature sensor as they requested. In that way, the selling price would be lower and match the customer's budget.

5. Negotiation

After the customers check the pricing, it depends on them whether they want to accept the offer or they want to negotiate the price. In Cosmic.id, negotiation is allowed and we welcome the customers to express their wishes. If the customers want to negotiate the price, then Cosmic.id's team will re-calculate the price and send them the revised price.

6. Closing

If the customers agree to the pricing (former or revised version), then it means a deal and this is the last step of the purchasing flow. Cosmic.id's team will send the customers a contract to be signed. After the customers sign the contract and pay the agreed price, then Cosmic.id's team will begin to create the product. But if the customers still do not agree with the revised price, then it is not a deal.

CONCLUSION AND IMPLEMENTATION PLAN

This last chapter is the outcome of the study, beginning with the development of Cosmic.id's business through internal and external analysis. The objective of this study is to discover the ideal model business of Cosmic.id, B2B or B2C, also whether the existing Unique Value Proposition is still relevant to the target model and what needs to be fixed. Here are the summarized results of each objective:

1. Cosmic.id has been serving both B2C and B2B customers since the very beginning. Based on the analysis and the interview result, B2B customers show a promising profit for the sustainability of a company. Not only is the profit greater than B2C customers, it also could open to new revenue streams such as the subscription model. Subscription model means that the customer will pay continuously, either monthly or annually, for the products or services that Cosmic.id provides. The problem is currently, Cosmic.id does not put the maximum effort regarding the sales to B2B customers. In the implementation part below, the writer would describe some action plans that are needed to be done in order to maximize the marketing effort to B2B customers. In addition to that, Cosmic.id's team would also maintain the relationship with B2C customers.

2. The existing Unique Value Propositions are providing Bahasa support, the products comply with Indonesian regulation, affordable price and fast shipment. It transpires that there are several things that are not relevant to the current condition. Based on

the analysis and the interview results, the writer creates two new BMC; for B2C and B2B. It means that we have two Unique Value Propositions for different segments. For the new BMC for B2C, affordable prices are not relevant anymore since it turned out that our products are a little bit more expensive than other stores in several products categories. It happens because we produce the products in small quantities, so the production cost is high and the selling prices is also high. For the new BMC of B2C and B2B, the writer adds guarantee as the new point in Unique Value Proposition part. The customers love when the sellers provide guarantees for their products. Specifically for technical products, sometimes they do not function or perform well. If there is a guarantee provided then the customers could get a new one as long as the guarantee time is still available. The writer also adds two more Unique Value Proposition for B2B parts, they are highly customizable and free consultation. For B2B customers, they love it when they could ask for a specific product with custom specification. Free consultation is also needed because the custom products or services require a long discussion even after the purchase process is done. The writer does not add affordable price as the Unique Value Proposition for B2B because they do not care about the price since it would be paid by the company.

The action plan and time plan utilized in the monthly plan make up the implementation plan. The implementation consists of creating the legal entity, improving the current marketing strategy, new product development activities and also KPIs. As shown in the OKR (Objective Key Result) table below, the implementation plan is created to last six months, from January to June 2023.

Table 6 Objective Key Result and Key Performance Indicator

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