

# ANALYSIS OF BUSINESS DEVELOPMENT IN LAPTOPIN.ID STORE THROUGH THE TRIPLE LAYERED BUSINESS MODEL CANVAS APPROACH

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*Abstract – Digitalization forces people to be able to utilize technology in their daily activities. Laptops are a supporting tool for doing work to learning. The used laptop business is booming with prices that are much cheaper than new laptops. With intense competition, a business model is needed so that the business can continue to survive and develop. The purpose of this research is to project the Laptop in business model which will produce the best strategy for decision-making considerations in the context of developing an ongoing business using the Triple Layered Business Model Canvas. The method used in this research is a descriptive method with a case study approach. The steps taken are (1) SWOT Analysis Formulation, (2) Triple Layered Business Model Canvas Strategy Formulation, and (3) PMIA Method. Where this research finds that businesses are in a growth and build position through an integrative strategy by working on the B2B market, in mapping the business model 3 aspects can help Laptop in to create business value, namely (1) economic aspects, by creating consumer forums to create loyal consumers (2) environmental aspects, processing electronic waste through third parties and (3) social aspects, providing opportunities for persons with disabilities to become part of the shop employees. Decision-making on the TLBMC Laptop in elements using the PMIA (Plus Minus Implication Analysis) method gives a total PMIA score sequentially from largest to smallest, namely the economic layer +39, the environmental layer +33, and the social layer +29. These results indicate that the current decision-making in Laptop in business development is appropriate and feasible to continue.*

*Keywords: PMIA method; SWOT Analysis; Triple Layered Business Model Canvas; Used Laptops.*

## I. INTRODUCTION

The Covid 19 pandemic has had an impact on various aspects, as well as the electronic goods industry. People are forced to enter the digitalization era in order to stay connected amidst the social restrictions imposed. Data from the Central Statistics Agency (BPS) show that the gross domestic product (GDP) at constant prices (ADHK) for the metal goods, computers, electronics, optics and electrical equipment industries amounted to IDR 49.87 trillion in the first quarter of 2022. The industry's GDP was reported to have increased by 6.8 % compared to the same period the previous year ( year on year / yoy). The large number of people who need laptops, such as students, students to office employees, makes the target market for this business quite broad.

Social restrictions in almost all parts of the world have resulted in an increase in the number of transactions through marketplaces and have increased operational costs, this has led to an inevitable increase in the price of electronic goods. Declining income coupled with the high price of new electronic goods has forced people to switch to buying used electronic devices at much cheaper prices. In addition to the low price, even used laptops are still very suitable for reuse. This is what makes the second hand laptop market very large and potential.

The city of Bandung is one of the cities where the second-hand laptop business is starting to mushroom. There are well-known second hand laptop stores such as the Bandung Electronics Center (BEC), Bandung Trade Mall (BTM), or Plaza IBCC. High competition makes the price offered quite low. BTM is known as a place to buy laptops and computers at low prices. According to 3 tenant owners selling second-hand laptops at BTM, this mall has not as high visitor traffic as BEC, but the quantity of offline and online sales is far greater. One of the 3 tenant owners admitted that during the pandemic, sales were much higher and fell when PPKM was loosened.

Laptopin is one of the used laptop shops in Bandung, which is located at the Bandung Trade Mall. According to the results of pre-research, the company, which has been established since 2016, has not been able to become the top of mind for laptop products in society, but can still continue to be developed with adequate resources so that Laptopin is able to compete with the large number of used laptop businesses in Bandung.

The second laptop business is a business that extends product usage by using it longer for second consumers. The use of waste also tends to be minimized in business operations, when a unit is damaged and cannot be resold, the spare parts inside



can still be used for service or reprocessed by third parties.

Laptopin.id tries to build a sustainable business, seen from the implementation of SOPs based on the zero waste method, such as minimizing the disposal of production residue by reusing plastic, boxes and bubble wrap arising from the remainder of the shipment of returned goods to the activity of sorting electronic waste such as batteries, hard disks and so on which can no longer be used for proper recycling and do not end up in landfills.

Not only sustainable business. In carrying out its business, Laptopin.id tries to keep it socially useful, not only based on the profit earned. In this case the owner has a goal or desire to absorb as much workforce as possible, especially for people with disabilities so that the business being run can benefit the whole community without exception. Apart from that, the Bandung Computer Traders Association Social Movement (GSIPKB) is also a place for Laptopin to connect with second hand laptop business activists in Bandung.

In the occasion of the interviews conducted with the owner of the Laptop shop, it can be understood that in their business activities the owner tries to create a business by paying attention to the value provided to his customers. As well as shop owners also have concerns not only in terms of economy but also business continuity from environmental and social aspects. However, in practice it is not yet possible to measure how much influence or level of aspects are realized. Companies must be able to make the best decisions about what consumers need and how to find these needs or requests at the lowest possible price [1], [2].

The Triple Layered Business Model Canvas (TLBMC) supports the development of sustainability-oriented business model innovations by considering three perspectives, namely economic, environmental and social aspects [3]. In line with this research, with the application of the TLMBC method, it is hoped that business can generate a new value based on the environment as well as socially. This new value can later become product differentiation which can be used as a long-term strategy to overcome competitiveness [4]. Triple Layered Business Model Canvas (TLBMC) as a supporting tool for exploring sustainable modeling creativity and sustainability-oriented innovation more broadly.

The Triple Layered Business Model Canvas adopts a triple bottom line approach to analyze the sustainability of an organization's business, which

directly integrates the creation of three values for a business model in a particular business. These tools have the potential to support the search for ways or strategies for sustainable creative innovation.

The Triple Layered Business Model Canvas can connect the process of developing business innovations on an ongoing basis to support a business to become more creative so that it is able to face and overcome the challenges it faces. So it can be understood that The Triple Layered business model canvas or TLBMC can be a tool that can map whether the three aspects that are the concern of business owners are actually being carried out or not.

Based on the problems that have been described, this study found that the approach through TLBMC can strengthen the business model of the Laptopin.id shop which is oriented towards sustainability, where by mapping using the Triple Layered Business Model Canvas approach and making decisions on TLBMC Laptopin elements using the PMIA (Plus) method. Minus Implication Analysis) can help Laptopin to make decisions in the development of the business being run.

## II. LITERATURE REVIEW

Business strategy is an effort to make decisions and actions designed to create an advantage in business competition, this aims to achieve the goals of a business being carried out. The general definition of business strategy is the point of view that strategy focuses on achieving a goal. The key actions that make up the strategy include the allocation of resources. This strategy means binding, integrating or linkage [4].

SWOT analysis is an analysis that focuses on 4 aspects, namely strengths, weaknesses, opportunities and threats. In this analysis, business people need to explore these four aspects, where these aspects will later become a reference in selecting a strategy that is suitable and in accordance with their needs. This analysis is also often abbreviated or also known as SWOT analysis. In its application, the SWOT analysis is summarized in simple tables and charts to make it easier for business people to map the aspects studied. In its application, SWOT analysis uses several matrices as a tool to simplify the application process.

The Business Model Canvas (BMC) is an application of business or business planning that can be implemented by business actors and companies, this is because BMC has an approach that is easy to understand and also very detailed in the components of the planning model. BMC Turns a complicated business concept into a simple one that is displayed on



a single sheet of canvas containing a business plan with nine key elements that are well integrated in it covering strategic analysis internally and externally to the company [5].

The Triple Layered business model canvas is a method of developing the BMC business model, which adds three components to the development process, namely: environmental, social and economic. Triple Layered Business Model Canvas (TLBMC) as a supporting tool for exploring sustainable modeling creativity and sustainability-oriented innovation more broadly. TLBMC complements and extends Osterwalder & Pigneur's original concept of an economically oriented business model canvas with a new layer of canvas exploring environmental and social value creation [4].

### III. RESEARCH METHODS

The method used by the authors in this research is to use a qualitative approach using descriptive analytic methods. The object of this research is business development using the Triple Layer Business Model Canvas, where the subject under study is one of the shops selling used laptops named Laptopin.id.

The data used in this study came from two sources, primary data, namely information obtained through direct interviews with the three Laptopin store owners and secondary data, namely data obtained based on documents and data such as information on the electronic goods trading industry, the central statistics agency, as well as information from published journals or proceedings. While the data collection techniques in this study were carried out in 3 ways, namely observation, interviews and documentation.

In this study the strategy formulation techniques used and important to be integrated into the decision-making framework have three stages from the formulation framework of the External Factor Evaluation Matrix (External Factor Evaluation - EFE), the Internal Factor Evaluation Matrix (Internal Factor Evaluation - IFE). Stage 1 is the input stage or input stage, containing the basic input information needed to formulate a strategy. After stage one is completed, then Stage 2, which is the matching stage, at this stage the research focuses on creating alternative strategies that make sense taking into account the main external and internal factors. Stage two techniques include: the Strengths, Weaknesses, Opportunities and Treatments SWOT Matrix, the Strategy Position Matrix and the Internal-External (IE) Matrix.

In the final stage, namely the decision stage which involves only one technique, the SWOT Matrix ((Strengths, Weaknesses, Opportunities, Threats) [5]. In this stage the researcher proposes to use the Triple Layer Business Model Canvas [4] as a practical tool for integrating economic, environmental and social concerns for the development of the Laptopin store business. After all the stages have been completed, the PMIA method is used to find out decision making on the TLBMC (Triple Layered Business Model Canvas) element of the Laptop store using the Plus Minus Implication Analysis (PMIA) method.

### IV. RESULTS AND DISCUSSION

Based on the results of the interview which is an in-depth interview with a source which is the owner who runs the entire business operation. The following is an Internal Factor Evaluation (IFE) matrix which will be used as an indication of the current business position.

**Table 1 Laptopin IFE Matrix**

| Internal factors |                       |          |         |             |
|------------------|-----------------------|----------|---------|-------------|
| Strategy Factor  | Strengths             | Weight   | Ratings | Score       |
| S1               | Supplier              | 0.20     | 4       | 0.80        |
| S2               | Strategic Place       | 0.05     | 2       | 0.10        |
| S3               | Distribution Channels | 0.10     | 3       | 0.30        |
| S4               | Cheap Product Prices  | 0.15     | 4       | 0.60        |
| S5               | Community             | 0.05     | 1       | 0.10        |
| Strategy Factor  | Weaknesses            | Weight   | Ratings | Score       |
| W1               | HR                    | 0.10     | 2       | 0.20        |
| W2               | Restricted stock      | 0.15     | 3       | 0.45        |
| W3               | Capital               | 0.15     | 2       | 0.30        |
| W4               | Purchase return       | 0.05     | 1       | 0.05        |
| <b>Amount</b>    |                       | <b>1</b> |         | <b>2.90</b> |

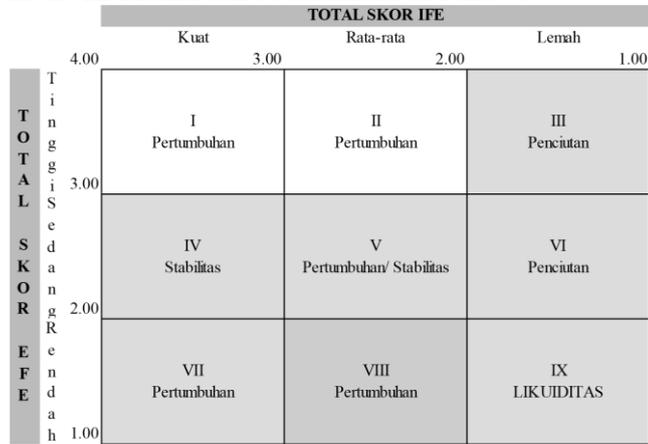
In Table 1 Laptopin's IFE Matrix shows a matrix score of 2.90 where this number indicates that Laptopin's internal position is currently in a medium/average position. The following is an External Factor Evaluation (EFE) matrix.

**Table 2 Laptopin EFE Matrix**

| External Factors |                                   |          |         |             |
|------------------|-----------------------------------|----------|---------|-------------|
| Strategy Factor  | Opportunity                       | Weight   | Ratings | Score       |
| O1               | Digitization                      | 0.35     | 4       | 0.140       |
| O2               | Middle to Low Market              | 0.30     | 4       | 0.120       |
| Strategy Factor  | Threats                           | Weight   | Ratings | Score       |
| T1               | Low trust                         | 0.10     | 2       | 0.20        |
| T2               | Refurbished Laptops on the market | 0.15     | 1       | 0.15        |
| T3               | Battery waste                     | 0.10     | 3       | 0.30        |
| <b>Amount</b>    |                                   | <b>1</b> |         | <b>3.25</b> |



In Table 2 Laptopin's EFE Matrix shows a score of 3.25 which can be interpreted that the condition of the company responds strongly to opportunities and threats that affect business continuity. Based on the results of the IFE and EFE analysis, the Laptopin IFE Matrix has a total score of 2.90, while the Laptopin EFE matrix has a total score of 3.25 Laptopin's position in the IE Matrix can be described as follows.



**Figure 1 Laptopin IE Matrix**

Based on the results of the IE matrix shown in Figure 1, it can be seen that Laptopin's current position is in quadrant II. The position in this quadrant gives an indication that currently the laptop is in a growth and build position. In this position the right strategy to implement is an intensive strategy or an integrative strategy.

This intensive strategy includes market penetration, product development as well as market development. Meanwhile, the integrative strategy includes forward, backward and horizontal integration strategies. In this condition the right strategy to apply to Laptopin is an integrative strategy in the form of a forward, backward or horizontal integration strategy. Because Laptopin has more or less control over the price given, and has great potential to work on the B2B market. Therefore, the right alternative strategy for Laptopin is an integrative strategy.

**Table 3 SWOT Matrix**

|  | Strengths  | Weaknesses  |
|--|--|---|
|  | a. Supplier<br>b. Strategic Place<br>c. Distribution Channels<br>d. Cheap Product Prices<br>e. Community | a. HR<br>b. Restricted stock<br>c. Capital<br>d. Purchase return                    |
| Opportunity                                | SO   | WO  |
| a. Digitization<br>b. Middle to low market | a. Extending the supply chain, acting as a supplier for similar businesses                               | a. Create targeted KPIs and jobdesks, conduct HR training and development to reduce |

|   | <p>b. Comparing laptops to fulfill digitalization through online media</p> <p>c. With low prices and strategic locations, you can enter the lower middle market, which incidentally is the largest market in Indonesia</p> <p>d. Utilizing the community as a market price control</p> | <p>purchase returns and take advantage of digitalization</p> <p>b. Funding to increase the stock of goods to be able to meet middle to low market demand</p> |
|---|--|--|
| Threats   |  | WT   |
| <p>a. Low trust</p> <p>b. Refurbished laptops on the market</p> <p>c. Battery waste</p> | <p>a. Build trust through the many distribution channels it has</p> <p>b. Trying to educate from the smallest line (community) to jointly build a good market for consumers</p> <p>c. Work together to recycle battery waste generated from laptops that are not good</p>              | <p>a. Store branding is a store that can be trusted, prioritizes quality, is responsible for the environment and provides guarantees to its consumers.</p>   |

Based on the results of the overall mapping of the business model, the results of the mapping of the business model carried out by researchers and also the results of discussions with related parties, it can be seen that the Laptopin business model is very possible for updating and also for further development using TLBMC (Triple Layered Business Model Canvas). The proposed Economic-Based Development TLBMC Model on Laptopin based on the results of observations and discussions with related parties, a proposal was found in the form of an economy-based TLBMC as follows.

1. Customer segment

Segmentation on target consumers is one of the important points. Market segmentation aims to group consumer characteristics that distinguish certain consumer groups from the whole market (Isfahami: ). Laptopin consumer segmentation can be seen from several factors, namely:

- a. Geographical Segmentation, in this segmentation Laptopin should focus its segmentation on various small areas in Indonesia with middle incomes and technology needs that are starting to develop.



- b. Demographic Segmentation, Laptopin classifies its segmentation age into two groups, namely 18-25 years who are students and 25-45 years who are active workers.
- c. Segmentation based on habits, in this segmentation Laptopin should be able to focus more on consumers with an interest in gaming activities. Laptopin's social media content that raises the issue of games is on average liked and has a higher level of interaction than other content. So this indicates that narrowing segmentation to consumers with gaming activities can enlarge the market and increase interaction which can later become sales.
- d. Segmentation based on consumer purchasing power, based on this factor Laptopin has been able to place its position in the purchasing power segmentation of consumers with middle to low income.

## 2. Value proposition

Based on observations of the business that Laptopin runs from the start of incoming goods until the goods are ready to be sent to consumers, Laptopin is very concerned about customer satisfaction and after sales service . After-sales service is a service provided to customers who have purchased or used the product they purchased [6] (Kasmere: 2017). After-sales service includes defects, rejects, returns, replacements, product warranties, customer service, immediate repair services, periodic maintenance and repair programs, availability of components and spare parts [7] (Diana: 2018). So, Laptopin is advised to be able to focus its value on after-sales service to consumers. Laptopin currently provides a replacement unit guarantee if there are problems with the unit being sold, but this is felt to be insufficient to become value for the company. So Laptopin can try to do community marketing through the consumer community . Consumer community or consumer community which is one of the important tools in building a brand [8] . Where in the forum can accommodate criticism, suggestions, complaints to create a community with the same interest in technology. Through this forum, Laptopin can also provide discount vouchers and coupons that aim to give a special taste and increase consumer repurchase in the forum.

## 3. Channels

Currently, Laptopin has two distribution channels, namely through offline stores (physical shops) and online stores (marketplaces and social media). If Laptopin's value proposition can create a buyer community forum, this container can become a new distribution channel by providing various offers for second and subsequent purchases. Through community marketing , Laptopin can have loyal consumers while increasing consumer confidence in the products it sells. Apart from that, Laptopin can also maximize the potential for low prices to be able to reach more B2B.

## 4. Consumer Relations

In addition to customer services and live streaming via social media to connect with potential customers, community marketing can also be used to build company relationships with consumers. Community marketing is a group consisting of people who have the same interest in a particular brand that is formed in the real world, physical or virtual world [9] (Freitas: 2017).

## 5. Revenue Streams

This factor allows a group or company to create and offer a product value, reach markets, maintain relationships with consumers, and earn income. Key resource requirements vary according to the type of business model [10] (Osterwalder & Pigneur, 2010). Currently, Laptopin's revenue is only through laptop sales and service. Seeing the enthusiasm of the social media audience for gaming laptops at low prices, Laptopin can increase its income through selling accessories for gaming support tools such as batocera flash drives, rgb keyboards, headsets to wireless mice.

## 6. Key Partners

Companies form alliances or partnerships, for various reasons [10]. Based on production activities, Laptopin has the following key partners:

### a. Laptop suppliers

Suppliers are the most important aspect in a merchandise company. In this case, Laptopin has suppliers who are in the first circle of goods importers from Singapore. This makes Laptopin able to provide competitive prices with good quality. Laptopin needs to continue to be able to maintain good relations with suppliers for the continuity of a sustainable supply of goods.

### b. Supplier of SSD and HDD



In addition to laptop units, SSDs and hard drives are a vital part of the production process. Due to the availability of stock with uncertain storage, Laptopin has to buy a new SSD and hard drive to provide the various storage needs demanded by consumers.

c. Packaging equipment supplier

The final process in Laptopin production activities is packaging or packing. In this process, Laptopin requires several supplies that must always be on hand, such as bubble wrap, packing wood, duct tape, plastic wrapping, etc. The high need for this equipment means that Laptopin needs to have a supplier of packing equipment that provides low prices, good quality with high quantity purchases.

d. Supplier of mice and bags.

Laptopin provides facilities in the form of a free bag and mouse for every unit purchase. The bag and mouse provided by Laptopin bought them through a third party, with requests as much as the sales of their laptops. Then mouse and bag suppliers become key partners who can offer competitive prices to be bonuses on every laptop purchase.

7. Key Activities

Key activities are also needed to create and deliver value propositions, reach markets, maintain relationships with customer segments, and earn revenue [10]. There are several key activities that need to be considered during production, as follows:

a. Production

the Quality Control (QC) process , here the incoming unit will be checked for its feasibility, if there are defects both functionally and physically the unit will be returned to the supplier. Then enter the Preparation stage, where units are prepared to then enter the next stage. Install the Application, this stage is carried out so that the unit that reaches the consumer can be used immediately. Packing, after the application installation stage is complete, the unit is then packaged as needed. The final stage is shipping, currently we are working with expedition branches to carry out pick-ups, although some expeditions still have to be delivered to their respective pools.

b. marketing

Marketing activities are key activities, where activities consist of live streaming , creating content, serving consumers offline and online.

8. Key Resources

Key resources are very important assets needed to make a business run [10] . HR is one of the key resources in this business, with quality HR the business can run well and reduce potential losses. The following are the human resources owned by Laptopin, based on their work divisions such as technicians, marketing, admin and finance.

9. Cost Structure

The cost structure describes all the costs required to run a business model [10] . Based on operational activities, it can be mapped out several important needs that must be issued, namely the purchase of merchandise, shop rent, utilities, employee salaries and marketing costs.

| Business Model Canvas  |   |   |  |  |
|--|---|---|--|--|
| Key Partners   | Key Activities  | Value Propositions  | Customer Relationships   | Customer Segments  |
| <ul style="list-style-type: none"> <li>• Supplier laptop</li> <li>• Supplier ssd dan hardisk</li> <li>• Supplier alat packing</li> <li>• Supplier mouse dan tas</li> </ul> | <ul style="list-style-type: none"> <li>• Produksi QC, Preparation, Instal Aplikasi, Packing, Pengemasan</li> <li>• Marketing live streaming, membuat konten, melayani konsumen secara offline maupun online</li> </ul>  | <ul style="list-style-type: none"> <li>• Garansi ganti unit dan menjadi wadah berbagi informasi antar pegiat teknologi</li> </ul>                         | <ul style="list-style-type: none"> <li>• Kemudahan menghubungi customer service</li> <li>• Kemudahan klaim garansi</li> <li>• Forum komunitas pembeli</li> </ul>                   | <ul style="list-style-type: none"> <li>• Usia 18 – 45 Tahun</li> <li>• Pekerja</li> <li>• Pelajar</li> <li>• Gamers</li> </ul> |
|  | <b>Key Resources</b> <ul style="list-style-type: none"> <li>• Teknisi</li> <li>• Marketing</li> <li>• Finance</li> <li>• Admin</li> </ul>   |   | <b>Channels</b> <ul style="list-style-type: none"> <li>• Offline store</li> <li>• Marketplace</li> <li>• Social Media</li> <li>• Forum komunitas pembeli</li> <li>• B2B</li> </ul> |  |
|  | <b>Cost Structure</b> <ul style="list-style-type: none"> <li>• Pembelian stock</li> <li>• Sewa tempat dan utilitas</li> <li>• Gaji karyawan</li> <li>• Pembelian perlengkapan</li> <li>• Packaging</li> <li>• Biaya marketing : Ads, endorsement, event, promo campaign.</li> </ul> | <b>Revenue Streams</b> <ul style="list-style-type: none"> <li>• Penjualan laptop</li> <li>• Jasa service</li> <li>• Penjualan aksesoris gaming</li> </ul> |  |  |

**Figure 2** Proposed Economic Based Development TLBMC Model

In general, the layers in this environment-based development are the same as the previous canvas business model, where there is a mapping of how the income compares to the costs incurred. The TLBMC environmental layer is a way to assess how a company or organization can generate environmental benefits compared to the environmental impact resulting from its company's operations. TLBMC allows users to better understand where an organization's greatest environmental impact resides in its business model and provides insight into where an organization can focus its attention when creating environmentally-oriented innovations [4]. The following is an environmental-based TLBMC proposal based on the circumstances and concerns of business owners for their business that can be implemented.

1. Functional Values

The main function of the products sold by Laptopin is used laptops, where the reuse of used



laptops that are still very usable can extend their usage time by up to 3-5 years longer than they should. This method is expected to reduce electronic waste, by providing an opportunity for the middle to low end market to be able to enjoy high technology at low prices. In this way, Laptopin carries a zero waste waste treatment system. Zero waste management is management by sorting, composting and collecting salable goods [11]. Zero waste waste processing can be assisted by electronic waste processing vendors, especially battery waste which can then be reprocessed into vape batteries or children's toys. In addition, for buyback offers or unit trade-ins can be applied to reduce the amount of electronic waste that is not properly processed, then the proposal to add value to the business being carried out is to reduce plastic waste in the use of packaging, reducing plastic can be replaced with cloth-based packaging. such as a tote bag, or a safe custom box for shipping made from paper which is easier to recycle.

## 2. Material

Laptopin is a retail company whose product components are based on the production processes of large companies such as Lenovo, Dell and Hp. The production component extends the main activity components from the original business model canvas to the environment layer and captures the actions that organizations take to create value [4]. Where these companies have their own standards in the production process. Then in its operation Laptopin provides storage upgrade services such as hard disks and SSDs, where these complementary devices are purchased through import suppliers because there is no national brand that has issued these storage devices.

## 3. Production

Laptopin has a workflow in the product production process. The production component extends the main activity components from the original business model canvas to the environment layer and captures the actions that organizations take to create value [4]. The Laptopin Production Process Workflow describes the process from the beginning of incoming goods, until the product is used by consumers. The initial process when goods enter through suppliers arrives, the admin team and technicians collect data, starting from the quantity of goods received to the specifications per unit so that they are adjusted to the travel document, if there is a discrepancy, data collection and

reporting will be carried out to adjust the invoice. Then the incoming goods that have been recorded will enter the first quality control process, in this process the unit will be examined for its function and physical condition, if in this process there are problems with hardware function or physical defects, the unit will be separated and then returned back to the supplier. Then enter the second stage of the quality control process, where in this process the units that have passed QC 1 are checked for software and installation of standard applications such as MS Office, if there is damage to the software such as lock bios, the unit is separated from the unit that did not pass the first quality control for then returned to the supplier. Units that pass then enter the finishing stage, where units are prepared according to customer orders, additional applications such as games, design applications and others are installed so that the units can be used immediately. This process can then become a value for Laptopin. Units that have passed the finishing stage will be packed and sent according to the delivery receipt. If during the warranty period the unit received by the consumer is found to have problems with its function, then the unit will be accepted as a sales return which will then be replaced with a new unit. Old units that are returned will be included in the initial workflow.

## 4. Supplies and Outsourcing

Things to consider in this process are a unique action for the company in order to support its competitive advantage. Laptopin has one partner for electronic waste processing, especially batteries which currently still rank first in environmental pollution from electronic waste. Battery waste is waste that can no longer be used which can then be recycled into batteries for toys, vape equipment etc. by third party vendors. So here the waste treatment vendor becomes outsourced from the proposed environment-based development from Laptopin.

## 5. Distributions

Distribution or distribution involves aspects of transportation used in operations, where companies try to ensure access to their functional value through physical means, such as considering shipping and packaging services. In practice, Laptopin maintains packaging so that the units sent are safe to their destination by wrapping using plastic wrapping, boxes, and bubble wrap, some units also use wooden packing in their packaging.



Excessive use of these packing tools can add to plastic waste which is difficult to decompose. It is recommended for companies to minimize the use of plastic or replace it with custom boxes that are safe for shipping or totebags for offline sales. Meanwhile, delivery is carried out through many access options through delivery courier services such as JNE, JNT, Anteraja, Shopee Express, Cargo, to Gosend and Grab Delivery.

6. Use Phase

The use phase focuses on the impact of participation in functional value, or the organization's core services and / or products [1]. In this case it includes maintenance, product repair and must include some consideration of material resources and energy requirements through their use. The products sold by Laptopin are an extension of the use of the previous user. In terms of maintenance, it's like on a new laptop usually, but there are a number of steps that are recommended to be able to further extend the usage period, such as changing the paste every 2 months and cleaning the engine fan regularly. Furthermore, product repairs can be handled by the shop because Laptopin opens services for unit repairs.

7. End of Life

End of life is when the client chooses to end consumption of functional value and often entails material reuse issues such as remanufacturing, reuse, recycling, disassembly, incineration or product disposal [4]. In environment-driven development, this stage supports a company to have greater responsibility than just selling functional value and exploring ways of managing the environmental impact of products sold at the end of their useful life. In this case, Laptopin provides a buyback or trade-in offer for the units issued. Then the units damaged or lacking in function will be distributed to third parties who accommodate them for recycling according to government regulations.

8. Environmental Impact

This stage is intended for companies to further explore the ecological costs of organizational actions. Traditional business models often encapsulate organizational impacts primarily as financial costs, the environmental impact component extends to include organizational ecological costs [4]. This development proposal raises greater costs to

replace the use of plastic packaging with packaging made from paper or cloth.

9. Environmental Benefits

This layer includes the ecological value created by the organization through reducing environmental impact and even regenerating positive ecological value [4]. Based on an environmental perspective, this stage provides space for Laptopin to explore services and innovations that can reduce the negative impact on the environment from its operations. By reducing the use of plastic in packaging and processing waste from batteries to offering buyback units or trade-in by working with vendors who can process waste, this will increase the value that Laptopin has so that it can be better known and become a reference for the same business to start environmentally friendly business.

| Usulan Model TLBMC Pengembangan Berbasis Lingkungan   |   |  |  |  |
|---|---|--|--|--|
| Supply and Outsourcing  | Production  | Functional Value   | End of Life  | Use Phase  |
| <ul style="list-style-type: none"> <li>• Vendor pengolahan sampah baterai</li> <li>• Vendor pengolahan sampai laptop</li> </ul> | <ul style="list-style-type: none"> <li>• Produksi QC, Preparation, Instal Aplikasi, Packing, Pengiriman</li> <li>• Pengolahan limbah</li> </ul> | <ul style="list-style-type: none"> <li>• Buyback unit lama ataupun tukar tambah</li> <li>• Pengolahan limbah sesuai regulasi</li> <li>• Penggunaan material packaging yang ramah lingkungan</li> </ul> | <ul style="list-style-type: none"> <li>• Buyback bangkai laptop</li> <li>• Tukar tambah unit</li> </ul>  | <ul style="list-style-type: none"> <li>• Perawatan seperti pada laptop baru</li> <li>• Penggantian pasta 1 bulan sekali</li> <li>• Pembersihan kipas secara rutin</li> </ul> |
|   | <b>Materials</b> <ul style="list-style-type: none"> <li>• Unit laptop</li> <li>• SSD</li> <li>• Hardisk</li> </ul>                              |  | <b>Distribution</b> <ul style="list-style-type: none"> <li>• Kurir Ekspedisi : JNE, JNT, Anteraja, Shopee Express.</li> <li>• Instan : Gosend, Grab Delivery.</li> </ul> |  |
| <b>Environmental Impact</b>   |   | <b>Environmental Benefits</b>  |  |  |
| <ul style="list-style-type: none"> <li>• Penambahan biaya untuk penggantian material packaging</li> </ul>                       |   | <ul style="list-style-type: none"> <li>• Mengurangi limbah elektronik</li> <li>• Mengurangi limbah plastik dari proses packaging</li> </ul>  |  |  |

**Figure 3.** Proposed Environmental Based Development TLBMC Model

The development of social-based TLBMC is intended to expand the previous canvas business model through an approach to stakeholders or stakeholders to be able to find out the mutual influence between stakeholders and the organization and how the social impact of this relationship is. In this development every element of the TLBMC model is mapped. The mapping of each element can be described as a whole, so that it can explain social benefits and social impacts on all stakeholders resulting from development. It is hoped that this mapping can maintain quality, increase innovation and social value. The following is the result of mapping the social-based development of Laptopin.

1. Social Values

Companies with a sustainable orientation will have an organizational mission that clearly aims to create social value . Based on its operational work system, there are several possibilities that Laptopin can do at the social sustainability stage, namely by becoming a means of absorbing employment training, especially in the hardware sector for vocational students and people



with disabilities who need work experience before entering the real world of work.

## 2. Employee

At this layer, it is explained how a company or organization contributes to providing space where employees can develop and become an important part of the company. Currently Laptopin has 10 employees divided into three divisions, namely marketing, technicians and administration and takes advantage of the internship program from the Vocational High School (SMK) majoring in computers and the like. Based on the results of interviews on the views of company owners on placing their employees, there is concern about employment absorption, where business owners want to absorb more workers and reduce unemployment. From this view, it is considered that Laptopin is able to create quotas for persons with disabilities so they can become part of the team and contribute to the progress of the shop. This can be realized by collaborating with educational institutions for persons with disabilities and holding special training for hardware.

## 3. Governance

Governance is a system designed to direct the management of a company in a professional manner based on the principles of transparency, accountability, responsibility, independence, fairness and equality [12]. The management is intended to create cost efficiency and create good corporate governance or good corporate governance. There are several strategies that can be implemented, namely maintaining operational procedures so that they continue to run consistently, continuous socialization between employees and company owners, and conducting assessments and evaluations.

## 4. Communities

This stage aims for the two stakeholders to unite as a community that has harmony in the three layers of TBLMC. While economic relationships are built with business partners, there are social relationships built with suppliers and their local communities [4]. Together with the Bandung Computer Traders Association Social Movement (GSIPKB) Laptopin can work together with other computer and laptop business activists to provide benefits to others.

## 5. Societal Culture

Given that a business cannot succeed where the surrounding community fails, this component leverages the concept of sustainable value. So this stage identifies the potential impact of the company's

operations on society and how the company can contribute positively to society. The community culture that Laptopin tries to promote is trust and benefit to be given to every element of society, both through developing the work potential of each partner to empowering people with disabilities.

## 6. Scale of Outreach

The reach scale describes how close the relationship an organization has built with its stakeholders through its actions over time. This may include ideas for developing long-term, integrative relationships and impact coverage in a geographical, local, regional or global focus; as well as the impact of the organization in how and whether it overcomes social differences such as interpreting ethical and/or cultural actions locally across different cultures and countries [4] (Joyce & Paquin, 2016). It is hoped that from the proposals given on this outreach scale, Laptopin can absorb more workers and help the government reduce the unemployment rate, especially for people with disabilities.

## 7. End Users

end user element here is not the customer as meant in the previous business model canvas but how the value proposition meets the needs of end users, contributing to the quality of life of users. Users with similar needs are usually segmented based on relevant demographics, for example, age, income, ethnicity, education, etc. (Furqon, 2019). In carrying out its business, Laptopin offers comfort, security and convenience in the digitalization era.

## 8. Social Impacts

The social impact component addresses the social costs of an organization. This complements and extends the financial costs of the economic layer and the bio-physical impacts of the environmental layer [4]. The social impact that may occur from the business being run is the decrease in public interest in buying new products (local technology that currently exists such as Axioo and Zyrex brand laptops)

## 9. Social Benefits

This element discusses the positive impact created by the business being run. This component is to explicitly consider social benefits derived from organizational actions, as well as social costs, social benefits can be measured using various indicators [4]. Through this proposal, it is hoped that the resulting social benefits will be in the form of involvement and improvement of the quality of life of persons with disabilities, especially those who live in Bandung, especially the Kiara Condong area.



| Usulan Model TLBMC Pengembangan Berbasis Sosial   |  |   |   |   |
|---|--|---|---|---|
| Local Communities   | Governance   | Social Value  | Social Cultural   | End User  |
| <ul style="list-style-type: none"> <li>Gerakan Sosial Ikatan Pedagang Komputer Bandung (GSIPKB)</li> </ul>  | <ul style="list-style-type: none"> <li>Memelihara prosedur operasional agar tetap berjalan secara konsisten</li> <li>Sosialisasi yang berkesinambungan antara karyawan dan pemilik perusahaan</li> <li>melakukan penilaian dan evaluasi</li> </ul> <p><b>Employee</b></p> <ul style="list-style-type: none"> <li>Memfaatkan program magang siswa SMK</li> <li>Merealisasikan penyerapan tenaga kerja penyandang disabilitas</li> </ul> | <p>Sarana penyerapan pelatihan ketenagakerjaan pada siswa SMK siap kerja dan penyandang disabilitas</p>                                       | <p>Terciptanya kepercayaan dan kebermanfaatian dari bisnis yang dijalankan.</p> | <ul style="list-style-type: none"> <li>Keamanan</li> <li>Keamanan dan Kemudahan di er digitalisasi</li> </ul> |
| <p><b>Social Impact</b></p> <ul style="list-style-type: none"> <li>turunnya minat masyarakat untuk membeli produk baru (teknologi lokal yang saat ini ada seperti laptop merk Axioo dan Zyrex)</li> </ul> |  | <p><b>Social Benefits</b></p> <ul style="list-style-type: none"> <li>keterlibatan dan peningkatan kualitas hidup penyandang disabi</li> </ul> |   |   |

**Figure 4** Proposed Social-Based Development TLBMC Models

The Plus Minus Implication Analysis (PMIA) technique is a decision-making method by looking at alternative actions on a number of different factors [13]. The following is the result of an assessment of the elements of the economic, environmental and social layers of Laptopin.

**Table 4** Ratings on Each Element of the Laptopin Economic Layer

| Plus                          | minus             | Implications          |
|-------------------------------|-------------------|-----------------------|
| Customer Segments +9          | Key Resources -3  | Customer Relations +5 |
| Value Propositions +7         | Cost Structure -5 | Key Activities +3     |
| Channels +7                   |                   | Key Partnerships +8   |
| Revenue Streams +8            |                   |                       |
| PMIA score = 31 - 8 + 16 = 39 |                   |                       |

The results of the assessment in Table 4 of the Assessment of Each Element of the Laptopin Economic Layer show a total PMIA score of +39. Then the positive results obtained in the economic layer show that Laptopin has implemented good and profitable decisions in the economic aspect to be carried out in a sustainable manner. The data can also describe the elements as a whole, but there are elements that are less than optimal, namely elements of key resources and cost structure. So it is necessary to carry out further studies on the two elements that are less than optimal, so that the development of the Laptopin business model can run better.

**Table 5** Ratings on Each Element of the Laptopin Environmental Layer

| Plus                        | minus                   | Implications              |
|-----------------------------|-------------------------|---------------------------|
| Functional Value +7         | Environmental Impact -3 | Production +6             |
| Materials +8                | Use Phase -2            | End-of-Life +7            |
| Supplies and Outsourcing +6 |                         | Environmental Benefits +1 |

|                               |  |  |
|-------------------------------|--|--|
| Distributions +3              |  |  |
| PMIA score = 24 - 5 + 14 = 33 |  |  |

Table 5 Assessment of Each Element of the Environmental Layer Laptopin produces an assessment with a total PMIA score of +33. This means that Laptopin's current decision-making has had a positive impact and pays attention to the environment in managing its business. These results will be useful for Laptopin in increasing business innovation in a sustainable manner. Positive values arise as a result of the reuse and responsible waste management of the waste produced. However, managing and reducing the use of conventional packaging can increase production costs and disrupt the company's cash flow. So this layer of the environment needs to be paid more attention to and maintained its consistency, and continue to make sustainable innovations to minimize the resulting negative impact on the environment. There needs to be a review and improvement of the environmental impact and use phase elements so that the development of the Laptopin business model can run better.

**Table 6** Ratings on Each Element of the Laptopin Social Layer

| Plus                          | minus                | Implications       |
|-------------------------------|----------------------|--------------------|
| Social Value +8               | Scale of Outreach -4 | Social Culture +5  |
| End-User +5                   | Social Impact -3     | Governance +3      |
| Local Communities +3          |                      | Social Benefits +7 |
| PMIA score = 21 - 7 + 15 = 29 |                      |                    |

Based on Table 6, the PMIA score on the social elements of kombucha cascara is +29. That is, the positive score indicates that Laptopin's decision making can provide good reciprocal relationships with stakeholders involved in operational development. This reciprocal relationship involves various parties such as vocational education institutions, disability foundations, battery and electronic waste management vendors. It is necessary to pay attention again to the scale of outreach and social impact elements to maximize the development of this business model.

Based on the PMIA method used, decision making on the TLBMC Laptopin element produces the highest to lowest scores, namely the social layer +29, the environmental layer +33 and the economic layer +39. These results indicate that the current decision-making process is appropriate and feasible to continue because it has paid attention to every element in the three layers which is oriented towards sustainability. The economic layer is the layer that has the highest



positive impact because with a very large market and demand for the products sold, the profits can continue to increase. With the correct e-waste management system, it can extend the life of products and the potential for products to be disposed of in landfills and provide benefits by reducing the unemployment rate by absorbing more workers.

There are several elements that can have a negative impact with the development of the Laptopin business which can still be overcome and do not have a significant influence on the running of a business model that is created in a sustainable manner. In fact, this can be a consideration in making further decisions to develop the Laptopin business more broadly.

## V. CONCLUSIONS AND RECOMMENDATIONS

The results of the SWOT analysis show that the Laptopin store is in quadrant II which can be interpreted as a growth and build position. In this condition the right strategy to apply to this shop is an integrative strategy in the form of a forward, backward or horizontal integration strategy. Because Laptopin has more or less control over the price given, and has great potential to work on the B2B market. Therefore, the right alternative strategy for Laptopin is an integrative strategy.

In the implementation of the TLBMC that has been carried out there are several updates and also developments in economic, environmental and social aspects. TLBMC helps Laptopin to create a new value in the economic aspect by creating a buyer's community forum to share information about technology that can make buyers become loyal users. On the environmental aspect, there is a new value in the form of solutions for consumers with units that can no longer be used at all or want to replace them with new units by means of buybacks. Apart from being able to make loyal consumers, this can also reduce electronic waste which only ends up in landfills. final trash. From creating this value, a lot of manpower is needed, so in the social aspect a new value is created in the form of a means of absorbing employment training for ready-to-work vocational students and persons with disabilities.

Decision making on the TLBMC Laptopin elements using the PMIA (Plus Minus Implication Analysis) method gives a total PMIA score sequentially from largest to smallest, namely the economic layer +39, the environmental layer +33, and the social layer +29. These results indicate that the current decision making in the development of the

Laptopin business is appropriate and feasible to continue because it has taken into account all elements in the economic, environmental and social layers that are oriented towards sustainability.

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