

DEVELOPMENT STRATEGY OF WASTE BANK-BASED BAITUL MAAL WA TAMWIIL (BMT)

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ABSTRACT

This study aims to design a strategy for developing sharia cooperatives based on waste banks. This research was conducted at the Pulo Kambing Kinship Union Cooperative (KBKPK). Data was collected by collecting questionnaires, conducting in-depth interviews and direct observation to the research site. The data analysis method was carried out descriptively using a business model canvas (BMC) and analysis of strengths, weaknesses, opportunities, threats (SWOT). The results show that the internal and external factors that most significantly affect the waste bank-based sharia cooperative are (1) human resources with a high social spirit and professional management, (2) supporting infrastructure, (3) the ability to read market opportunities, and (4) government support and synergy. This study recommends KBKPK management to integrate the financial records of its business units to strengthen key resources and implement the formulated strategy by setting measurable performance targets for each business unit.

ABSTRAK

Penelitian ini bertujuan untuk merancang strategi pengembangan koperasi syariah berbasis bank sampah. Penelitian ini dilakukan di Koperasi Bersatu Kerabat Pulo Kambing (KBKPK). Pengumpulan data dilakukan dengan mengumpulkan kuesioner, melakukan wawancara mendalam dan observasi langsung ke tempat penelitian. Metode analisis data dilakukan secara deskriptif menggunakan dengan menggunakan business model canvas (BMC) dan analisis kekuatan, kelemahan, peluang, ancaman (SWOT). Hasil penelitian menunjukkan bahwa faktor internal dan eksternal yang paling signifikan mempengaruhi koperasi syariah berbasis bank sampah adalah (1) sumber daya manusia yang berjiwa sosial tinggi dan manajemen yang profesional, (2) sarana prasarana yang mendukung, (3) kemampuan membaca peluang pasar, dan (4) dukungan dan sinergi pemerintah. Studi ini merekomendasikan manajemen KBKPK untuk mengintegrasikan pencatatan keuangan unit bisnisnya untuk memperkuat sumber daya utama dan menerapkan strategi yang dirumuskan dengan menetapkan target kinerja yang terukur untuk setiap unit bisnis.

INTRODUCTION

Densely-populated cities often become the main source of waste. Indonesian cities are estimated to produce 38.5 million tonnes/ year, which equals 200,000 tonnes/day and increase by 2-4% per year. As the country's capital with 14,469 people/km², Jakarta still faces problems in waste management. There are approximately 2430m³/day of improperly managed waste in Jakarta. According to data published by

Statistics Indonesia in 2010 and 2011 regarding residential expenses for consumption, most people in Jakarta spend their money on non-food products (66.24% and 63.01%) than food products (33.76% and 36.99%, respectively) (Widyaningsih, 2015). Increasing income can change people consumption patterns and affect their waste production. Changes in urban society consumption patterns also result in more volume, types, and characteristics, turning waste into Indonesian cities' crucial problems (Putri, 2012).

East Jakarta has a 188,03 km² area divided into ten districts and 65 villages. The population of East Jakarta was 27.94% of the total population of Jakarta Province. In this study, Cakung district was selected as the research site, with 526.466 people (18.51% of the East Jakarta Population). Population growth is positively related to waste production rate. The Sanitation Agency of Jakarta Province showed that waste production in Jakarta increases every year. East Jakarta itself produce approximately 1,849 tonnes of waste per day, which equals 55,470 tonnes/month. This waste, according to Jakarta Province Sanitation Agency data (2014), mainly consist of organic waste (53.75%), paper waste (14.92%), and plastic waste (14.02%). Out of 1,849 tonnes of produced waste, only 1,688 tonnes were collected, leaving 181 tonnes of uncollected waste per day. The agency had 164 dump trucks in 2014 and still find it difficult to collect all garbage in East Jakarta, causing some garbage left uncollected. The current waste management system in Indonesia includes several stages, including (1) waste pickups, (2) waste collections in temporary waste disposal sites, and (3) waste transport to the final waste disposal site. Along with the sustainable development concept, traditional waste management should shift to a new paradigm.

According to the statistical data, 74% of waste in Indonesia was organic waste, while the rest of it consisted of cloth, metal, and plastic. This condition is viewed as an opportunity for the recycling and reuse business sector. According to Kurniawan (2015), the waste bank can serve as an answer to social problems related to waste while generating profit at the same time. During the fifth Regional 3R Forum in Asia and The Pacific held in Surabaya in 2014, Balthasar Kambuaya stated that the economic potential of waste management in Indonesia is estimated to reach Rp. 15 billion per month through reduce, reuse, recycle (3-R) system. In order to minimize the pollution and environmental damages due to people's waste, the Ministry of Environment and Forestry (KLHK) held a green campaign known as *Gerakan Indonesia Bersih Sampah 2020* on 21 February 2016. KLHK (2017) estimates that waste in Indonesia will reach 68 million tonnes in 2019, and 14% of it (approx. 9.52 million tonnes) is plastic waste (Antara News, 2016). There are 5,244 waste banks in Indonesia, spread in 31 provinces and 218 municipalities/ regencies with a monthly sales turnover of 1,4 billion rupiahs. The amount of waste significantly increased from 2016 (22.5%) to 2017 (29.58%). The waste bank possesses a good development and growth potential, as the current waste bank can only reduce 1.7% of the national waste.

Kerabat Pulo Kambing (KPK) waste bank is initiated by Vera Nofita, and is located in Kampung Pulo Kambing, East Jakarta. Koperasi Bersatu Kerabat Pulo Kambing (KBKPK) is a cooperative officially established on 9 July 2015, as recorded in Deed of Establishment (DOE) no. 32, Notary official H. Rizul Sudarmadi, SH. M.Kn in Jakarta. Vera Nofita, the initiator of KPK waste bank, stated during the interview that she was triggered by the economic condition in Kampung Pulo Kambing, where most people were entangled with moneylenders. She wanted to provide a saving program for them, but they find it difficult to save in the form of money. After consulting to APK Foundation and other institutions, she established the waste bank pre-cooperative. This waste bank continues to grow and had 178 members in October 2015. The waste bank attempts to build a partnership with many parties, including insurance company so that its member can have life insurance when they save their waste. KPK waste bank put efforts to transform itself into a Sharia Cooperative (Baitul Maal wa Tamwiil (BMT) so that it can become a professional institution and obtain fair funding to develop its waste bank. This is one of many interesting phenomena related to the implementation of the green economic movement that is integrated with the Islamic economic system. This paper aimed to design a development strategy for KBKPK using business.

LITERATURE REVIEW

Theoretical Background

Baitul Maal wa Tamwiil (BMT), also known as Sharia Saving-Loan and Financing Cooperative (KSPPS), is a cooperative that operates various business activities, including Sharia-based saving loan, financing activities, *zakat*, *infaq*, and *waqf* managements. KSPPS plays an important role in three domains: Social empowerment, economic empowerment, and business development.

BMT is the most sustainable business model as it holds considerable social roles (Ascarya, 2014). BMT activities could be found in real and financial sectors, with social and commercial functions. Hence, the development of waste bank-based BMT could serve as one of the models for developing a sustainable sharia financial industry in Indonesia. There are eight primary criteria of sustainability: Aid-independent (MFI performance), outreach, savings (social development program) profitability (MFI performance), risk mitigation (Financing program), social services (Social development program), pick-up service (financing program), and average funding (outreach).

As a relatively new business model, this waste bank-based BMT needs strategies to maintain its operation to survive and reach its goals. One of the aspects of strategic management is to have a good business model, as it helps acquire and create values to gain profit (PPM Manajemen, 2012).

According to Osterwalder and Pigneur (2014), a business model can be well-described using a business model canvas. This canvas can illustrate how a company gain its profits since it covers four primary elements of a business: customer, proposition, infrastructure, and financial sustainability. The canvas comprises nine elements, namely customer segment, value proposition, channel, customer relationship revenue stream, key activities, key resources, key partnership, and cost structure.

SWOT Analysis provides four perspectives to assess elements of a business model. This analysis model systematically identifies a range of internal and external factors in order to formulate the company strategy. This analysis is grounded on how to maximize the strength and opportunity while minimizing weaknesses and threats.

Studies on Canvas Model, Waste bank, and Microfinance

Wiwik Sudarwati and Meri Prasetyawati suggest that strength and threat-based 9-block canvas diversification strategy can improve product market share and innovation. Using business model canvas and SWOT analysis, Kakunpala designs a development plan consisting of stages to win the competition in the tourism industry (Sonninen, 2016). Lira Parahita Agnia Putri and Maya Ariyanti employed a business model canvas to map the Co& Co Space business model to grow in Indonesia.

Regarding the waste bank program, Ruski (2014) concludes that waste banks can increase the customers' income. In the same vein, Indra Suryahya (2015) found that waste banks can deliver a product with high economic value while addressing waste problems. It is important to apply green economy principles in the Sharia economic system in order to protect the ecosystem while improving economic development and minimize the gap. The use of renewable energy is one of the keys to a successful green economy in Indonesia, as this type of energy offers both direct and indirect profits (Budiarto, Wardhana dan Prastowo, 2016). Yusuf (2014) argues that BMT plays a significant role in improving people's economies. This aligns with Rouf (2014), who argues that microfinance positively affects sustainable environmental development.

RESEARCH METHOD

This study was categorized as a qualitative case study. This study took place in Koperasi Bersatu Kerabat Pulo Kambing (KBKPK). The primary data were collected by distributing questionnaires, conducting interviews, and observation, while the secondary data were collected by reviewing relevant literature. The data were analyzed using SWOT analysis, then mapped into a matrix to describe the business model

in the business model canvas template. KBKPK is one of the initiators of the waste bank-based Sharia cooperative. Informants in this study were recruited through judgmental sampling technique, a non-probability sampling technique based on expertise that fits information required by the study. For this study, internal and external informants were recruited. The internal informants included the KBKPK initiator (i.e., Vera Novita) and the management. They were considered to have adequate capacity to answer the questioners related to the cooperative business model. Meanwhile, the external informants included members, practitioners, and the government's employees in the field of BMT and waste bank. They were recruited to help to evaluate KBKPK.

RESULT AND DISCUSSIONS

The canvas model extraction depicts 9 (nine) elements: customer segment, value proposition, channels, customer relationship, revenue stream, key resources, key activities, key partners, and cost structure. Customer segment describes a group of individuals or organizations served by the company. It is the core of business model development. In the business model canvas, the customer segment is classified into lending and funding segments. According to informants of this study, the value proposed by KBKPK includes ease, care, and one-stop service. Meanwhile, the channel describes how KBKPK delivers its product to the customers. Customer relationship describes how KBKPK maintain customers through the direct service for customers and profit-sharing report to the investors and gift programs. Key resources of the business model describe the most pivotal assets needed by the business. Meanwhile, key activities explain the business operation related to important aspects (Osterwalder and Pigneur, 2014). In this model, cost describes the cooperatives expenditure, focusing on The most important expenditure for business operations. Meanwhile, the revenue stream describes important key success for business continuity. To date, KBKPK is known to have nine key partners.

Key Partners <ul style="list-style-type: none"> ● Yayasan Baitul Halim ● CSR Antam ● Bringinlife ● Bank Syariah Mandiri ● BRI ● Dinas Koperasi ● BNI ● Bank Sampah KPK 	Key activities <ul style="list-style-type: none"> ● Marketing ● Financing ● Crowdfunding ● Social Activities ● Collection 	Value Proposition <ul style="list-style-type: none"> ● Ease ● Care ● One-stop service 	Customer Relationship <ul style="list-style-type: none"> ● Direct service to customers/ personal assistance ● Presenting profit-sharing report to investors ● Gift program 	Customer Segment <p><i>Lending</i></p> <ul style="list-style-type: none"> - Male and Female - 17 to 55 years old - Small and medium scale business owners - Gross income of Rp.3.000.000 per month - Located in Cakung District <p><i>Funding</i></p> <ul style="list-style-type: none"> - Male and female - 17-55 years old - Income of Rp. 5.000.000 per month - KPK waste bank members
	Key Resources <ul style="list-style-type: none"> - Human resources - IT System - Software - Capital 		Channels <ul style="list-style-type: none"> - Office - Word of mouth - Website, social media - Brochure, booth 	
Cost Structure <ul style="list-style-type: none"> - Management Salary - Promotion Cost - General Cost (Electricity, phone, water, etc) - Investment Cost - Rent Cost 		Revenue Stream <ul style="list-style-type: none"> - Profit sharing margin - PPOB fee - Insurance fee - Administration fee 		

Figure 1. Extracted Business Model Canvas

The synergy between the waste bank and the cooperative is consistent with the government program. There has been a MoU between the Ministry of Environment and Forestry and Ministry of Cooperative and Small and Medium-scale business no. PKS: 1/MENLHK/PSLB3/PSLB./0/3/2016 on the empowerment program for environment-based cooperatives and micro, small, and medium scale businesses. This agreement aimed to improve the empowerment of cooperative, micro, small, and medium-scale businesses in waste management through (1) Designing assistance program through PLIT-KUKM, (2) Implementing partnership program, (3) empowering cooperatives and micro, small, medium scale businesses in the field of waste management, and (4) monitoring and evaluating the partnership program.

Through this MoU, waste banks are expected to have a more robust institutional status in cooperatives, thus improving their business network development. According to Tyasning, an informant from the Ministry of Environment and Forestry, the synergy between the Ministry of Cooperative and MSMEs and Ministry of Environment and Forestry has not exhibited significant progress. However, waste banks possess various models beyond this MoU, such as Regional Technical Unit under Regional Government (funded by Regional Government budget), community-based waste banks that survive by public funding and CSR programs, and private waste banks. Before these ministries establish an MoU, regional governments have provided assistance to transform waste banks into a cooperative.

In the future, the existing waste banks will be provided with access to banking facilities to support their capital. Currently, the cooperative has built an agreement with BNI and BRI to obtain financing facilities. Through this agreement, the regional government issued a recommendation to the ministry of environment and forestry regarding waste banks that need funding. This recommendation was then applied to the BRI central office. The recommendation is then followed up by the BRI branch nearest to the recommended waste banks. The financing will be approved if the waste bank meets the bank conditions. In collaboration with BNI, the bank attempted to link the waste bank and the BNI's banking system. The waste bank was provided with a saving account and bank card so that the waste bank member could access their money. However, since the nominal is too low, they find it difficult to withdraw their money through regular ATMs. In practice, the bank card is brought to the waste bank in order to see the total deposited waste and withdrawn money. When the amount is significant enough, the money can be withdrawn in the appointed ATM. In terms of its business scale, waste banks are categorized into a unit and main waste banks.

SWOT Analysis

Strength

KPK waste bank has possessed a legal entity as a business unit under KBKPK. This status allows KPK waste bank to partner with other entities such as Cooperative and environmental affairs offices, regional governments, and other partners, including banking institutions and private companies. KBKPK has a strong brand as it synergizes cooperative and a waste bank. In addition to having high social values, management of KBKPK In addition, it also possesses a key figure that can drive the members and become an inspiration for the society. Lastly, KBKPK possesses a good network with its key partners.

Weakness

KBKPK weaknesses included limited facilities, infrastructures, and equipment to manage waste. Furthermore, they need to have innovative, skilled human resources to develop the business. Other weaknesses come from limited capital and unstable price. The management skill also needs further improvement, particularly related to waste bank management. It was also found that KBKPK held too many events, causing them to lose attention to their key activities (i.e., fund collection and financing). Another weakness comes from an imbalance between the gain and the effort made due to poor production management and quality control.

Opportunity

KBKPK has opportunities to grow as the government supports the development of the waste-based cooperative. The government support through training and continuous assistance helps waste banks to survive the competition. The government's Indonesia Bersih Sampah 2020 program and people's green lifestyle trends also serve as the cooperative opportunity to grow. Moreover, industrial sectors also need

plastic and paper waste supplies for their operation. Waste potential continues to increase for recycling activities.

Threat

Demands on waste banks begin to be answered by the regional governments. The waste bank should offer a higher buying price than the collector to attract waste pickers to join as the waste bank member. Another threat emerges as some people view KBKPK as a competitor, leading to social envy. The majority of people has not been aware of the value of waste. The product delivered by the waste bank should fit the environmental conditions. There is also different understandings of the combination of the waste bank, hydroponics, and creative house.

Based on the SWOT analysis, Internal and External Factor analyses could be made. In this stage, informants were asked to rate each factor. In SWOT analysis, each strategic factor was weighed and rated to determine the significance of each strength-weakness and opportunity-threat. The weighing was done by considering the effect of each factor on the achievement of the company goal, compared to other factors in the group. Factors with the most significant effect on the company goal achievement were weighted with the highest score. The total weight of each factor (i.e., opportunity, threat, strength, and weakness) is 100%. Each factor was rated using a score ranging from 1 to 5 with the following criteria: 1. Very insignificant; 2. Insignificant; 3. Medium; 4. Significant; 5. Very significant. The rating was done by comparing the current condition of each factor (performance) to the predetermined standard (e.g., annual target, industrial average, or best practice benchmarking).

Scoring was done by multiplying the weighing score to the rating score, resulting in strength, weakness, opportunity, and threat scores. In order to find out the Internal Factor Evaluation score (IFE), the total weakness score is subtracted from the total strength score. Meanwhile, the External Factor Evaluation score (EFE) can be obtained by subtracting the threat score from the opportunity score. It was found that the strength and opportunity score was 4.80. Meanwhile, the weakness score was 3.65, while the threat score was 3.25. These scores indicate that the strength and the opportunity are higher than that of weakness and threat. Based on the score above, KBKPK's coordinate in the SWOT diagram was determined.

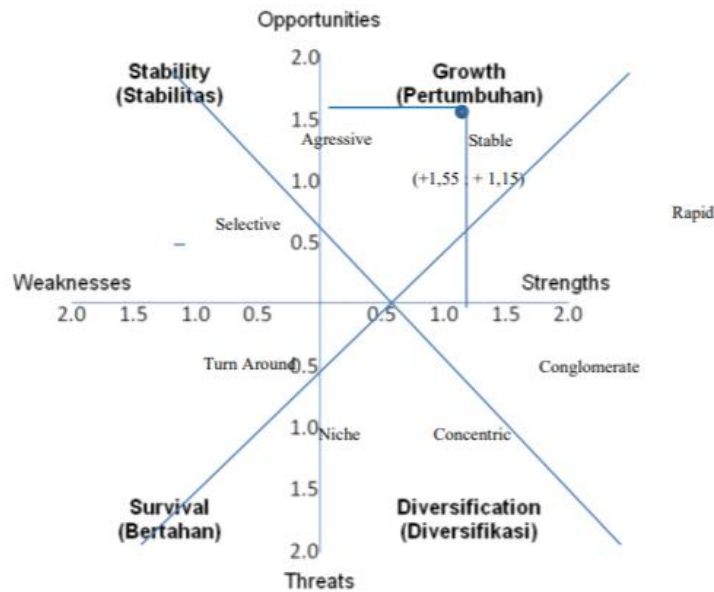


Figure 2. Positions of Koperasi Bersatu Kerabat Pulo Kambing

It was found that the coordinate point was +1.15; +1.55, indicating that KBKPK was in quadrant I. According to Pearce and Robinson (1998), this position indicates that a company is strong and has potential. Thus, it is recommended to apply a progressive strategy as KBKPK potentially expands and grow its business. Meanwhile, according to Rangkuti (2006), a company in quadrant 1 with an S score < 0 stable growth indicates that the company has the potentials and strength to optimize the available opportunities. The strategy that should be applied in this condition is to support aggressive growth policies.

The Cooperative Strategic Plan

Nine elements of the business model canvas can be used as a starting point to make changes in designing the KBKPK business model. These elements could be further identified using SWOT analysis. Although KBKPK is quantitatively categorized in the SO group, it is necessary to map each element that should be improved, reduced, created, or eliminated.

The improvement of the business model can be made without changing the customer segment for financing while adding partners such as waste collectors to the customer segment for funding. Changes in this customer segment could be made based on the potential integration of the KBKPK business, thus strengthening its waste management unit. Customer segmentation in the KPK waste bank will also increase with available opportunities and development plans to the TPS3R waste bank category. Waste bank customer segment may reach industrial and apartment managers' scale.

KBKPK proposes its values of ease, care, and one-stop service to its member and the community. Based on the interview, the prospective members also hope to open a waste savings account for additional income. Therefore, KBKPK could add a value of autonomy to its proposition. This is in line with KBKPK goal of increasing pre prosperous community's autonomy. The improved value proposed could also be done using a new tag line, e.g., *Sampah-Rupiah- Berkah*, through available channels, such as websites and social media, to strengthen the KBKPK brand that supports a green lifestyle.

KBKPK has the potentials to add more channels, particularly for marketing and distribution purposes, by applying information technology in its marketing system. Expanded channels are expected to improve the sales and values of KBKPK. Available partners, associations, private and public institutions can also be optimized to expand the KBKPK market. Changes in channel element can also affect other elements such as key partners, key activities, and cost structure.

A good relationship with customers can be established by appointing professional management and personal assistance officers who have integrity. Relationship with customers could be improved by optimizing community and partners and website and social media. Strong integration between KBKPK and Waste bank can significantly influence other elements. Increased production can result in an increased revenue stream due to changes in key resources, key activities, and cost structure.

The key resource currently held by KBKPK is considered insufficient, particularly regarding human resources and waste processing business. Therefore, it is necessary to add more physical resources, including new buildings and production facilities, followed by adding more human resources. It is also necessary to organize training programs and prosperity improvement programs to enhance human resource quality. Regarding the number of human resources, it is necessary to employ the available partner network or prospective members as freelance marketers to empower women to produce creative products from reused materials. Changes in key resources may lead to changes in key partners, key activities, cost structure, and revenue stream.

KBKPK expects to acquire more partners to strengthen its waste management business. Additional key partners to develop the waste bank is done by establishing a partnership with PT. JIEP, and PT. Fama Persada, as well as the government's Agriculture and Food Security Agency.

Changes in key activities can include increased production capacity, wet waste processing, and training for improving employees' capacity and capability in managing cooperative, marketing, or processing waste. Since there is a need to increase production capacity, it is important to add more key resources such as human resources, production facility, and production technology.

Regarding key activities, as one of the main supporting factors of this Sharia Cooperative is community support and green lifestyle, the management adds a new unit on educational tourism. This unit functions to welcome visits from any party, describe and socialize programs and activities in KBKPK. This new activity may affect the key resources, cost structure, and revenue stream.

As the business integration become stronger, the cost would be increased. However, at the initial stage, this cost serves as an investment for land, building, infrastructures, and other capitals, which could be obtained through the help of private companies' CSR programs. Another additional cost is the cost for management training in order to improve the quality of the human resources. The increased cost is expected to be in line with the positive revenue growth and waste management business development.

Based on the result of the SWOT analysis on nine elements of the KBKPK business model canvas, a new version was obtained. This revised version can be used as the basis to determine an alternative strategy in developing KBKPK business. The changes made in the revised version of the business model are presented in the following figure.

Waste bank-based BMT business activities represent the integration of cooperative and waste bank business processes. This integration does not necessarily change the core competence of cooperatives as a financial institution. It instead develops the cooperative through waste economic values.

This service integration allows the cooperative to have multiple segments with different values proposition and partners. Although cooperative and waste banks possess different characteristics, they share similar main values: ease, care, and favor. These values align with the waste bank's slogan "from trash to cash", which is managed according to the sharia principle to obtain the God's favor.



Figure 3. Business Integration Model

Figure 2 describes the business integration model of the waste bank-based sharia cooperative. This integration potentially develops along with available opportunities. KBKPK is expected to have a more strategic business unit based on the existing services and waste management business. Through support from new partners and the government, the waste bank can grow to the main and TPS 3R waste banks. The waste management business offers unique value that can serve as a revenue generator for the cooperative core business.

A SWOT analysis on the Business integration strategy of waste bank-based BMT is described as follow: KBKPK in the future will be transformed into TPS 3R waste bank. With its current strong brand and key figure, KBKPK has established an MoU with PT. Jakarta Industrial Estate Pulogadung (JIEP) to manage approximately 1200 m² of land for waste processing. This land will be equipped with various infrastructures, such as plastic shredder, composter, etc. An effort is also made to establish a partnership with PT FAMA to support KPK waste bank Synergy with government institutions is also expected to accelerate the transformation process from regular waste bank to main waste bank. KPK waste bank's capital to be the main waste bank is sufficient as it already had parent institutions (i.e., KBKPK) and guided partners.

By transforming into a TPS3R waste bank, the KPK cooperative-waste bank integration plan would become stronger. When turning to the TPS3R category, the KPK waste bank would be allowed to manage wet wastes. Dry waste can be sorted according to market demands. For instance, plastic bottle waste can be sold to the manufacture, while paper waste can be reused to create new products with higher economic values. Unsold plastic waste can be shredded and turned into plastic pellets to make eco-brick, increasing its economic value. The wet waste can be used for compost and Hydroponic business unit. Through such developments, more waste bank members can also be cooperative members.

Through such transformation, KBKPK will no longer rely on merely funding. Waste pickers, collectors, and strategic partners can become cooperative members. Members can use their waste savings to pay the compulsory savings or join the NyimaS program (gold saving program using waste). The cooperative members can also become a freelance marketer to offer the cooperative products. The investment program offered by KBKPK can be more varied, where members can develop investment opportunities in hydroponics. Through such development, KBKPK revenue is expected to be more diversified through new revenue potentials.

Along with the business integration development, the KBKPK empowerment domain should also be diversified. The empowerment domain comes from receiving and distributing donations and creating new employment opportunities through creative products craftsmen clusters. Moreover, the development of educational tourism unit can also strengthen the KBKPK brand and value propositions.

Based on the interviews with experts, several keys to successful waste bank-based cooperative includes (1) strengthening cooperative management professionalism through training or professional recruitment, (2) Improving the business infrastructures, including scales, administrative records, computerization, waste processing machines, warehouse for the main waste bank, (3) ability to read the market and business opportunities through innovations, (4) Having human resources with high community spirit, (5) the government support and synergy, (6) digital marketing for cooperative and the waste bank, and (7) ability to find access to institutions.

Key Partners <ul style="list-style-type: none"> ▪ Yayasan Baitul Halim ▪ CSR Antam ▪ Bringinlife ▪ Bank Syariah Mandiri ▪ BRI ▪ DinasKoperasi ▪ BNI ▪ Agriculture and Food Safety Office ▪ PT JIEP ▪ PT Fama ▪ Waste Collectors ▪ BEKRAF ▪ Association 	Key Activities <ul style="list-style-type: none"> ▪ Marketing ▪ Financing ▪ Crowdfunding ▪ Social Activities ▪ Collection ▪ Dry and Wet Wastes Processing ▪ Hydroponics ▪ Educational Tourism Key Resources <ul style="list-style-type: none"> -human resource - IT system - Software - Capital -Waste processing infrastructure and facilities - cluster 	Value Proposition <ul style="list-style-type: none"> ▪ Ease ▪ Care ▪ One-Stop Service ▪ Autonomy <p>Tag line : Sampah – Rupiah-Berkah</p>	Customer relationship <ul style="list-style-type: none"> ▪ Direct service to customers/ personal assistance ▪ Presenting profit-sharing report to investors ▪ Gift programs ▪ Community Channels <ul style="list-style-type: none"> - Office - Word Of Mouth - Website , Social Media - Brochure , booth -partner 	Customer Segment <p><i>Lending</i></p> <ul style="list-style-type: none"> ▪ Male and Female ▪ 17-55 years of age ▪ Small and medium-scale business owners ▪ Gross income of Rp. 3.000.000 per month. ▪ Located in Cakung District <p><i>Funding</i></p> <ul style="list-style-type: none"> ▪ Male and Female ▪ 17-55 years of age ▪ Income of 5.000.000 per month. ▪ KPK waste bank members ▪ Waste collectors ▪ Apartment managers ▪ Industry
Cost Structure <ul style="list-style-type: none"> - Management Salary - Promotion Cost - General Cost (Electricity, phone, water, etc) - Investment Cost - Rent cost - Training cost 		Revenue Stream <ul style="list-style-type: none"> - Profit-sharing margin - PPOB fee - Insurance Fee - Administration Fee - Waste sales, reuse, hydroponics -Tourism fee 		

Figure 4. Adjusted Business Model Canvas

	Strength: <ol style="list-style-type: none"> 1. Strong and unique value proposition (5) 2. Key figures and management with high community spirit (4) 3. Good partners networking (3) 4. Adequate information channels (2). 5. Many prospective members (1) 	Weaknesses: <ol style="list-style-type: none"> 1. Limited facilities, infrastructure, and waste processing tools (5). 2. Limited capacity and human resources (4). 3. Suboptimal revenue from waste processing activities (3). 4. Suboptimal information channel (1) 5. Unmeasured key activities (2)
Opportunity: <ol style="list-style-type: none"> 1. Government support to Gerakan Indonesia Bersih Sampah (2020) and increasing trend in green lifestyle (5). 2. Unmanaged waste and Industrial demands on plastic waste (4). 3. Technology development that supports Cooperative and Waste Bank systems (3) 4. Opportunity of outsourcing and partnership with other entities (2) 	S-O Strategy <ol style="list-style-type: none"> 1. Turning KPK waste bank into the main waste bank in East Jakarta (25). 2. Establishing new partnership to develop waste processing business (18). 3. Developing educational tourism unit (10) 4. Optimizing technology for marketing and cooperative management (6). 5. Recruiting freelance marketers and creators (2). 	W-O Strategy <ol style="list-style-type: none"> 1. Looking for private institution CSR to support funding (25). 2. Participating in trainings to improve human resources professionalism and capacity (20). 3. Designing measurable work plan and target (20). 4. Establishing partnership with BEKRAF or similar government institution for waste processing business marketing (6). 5. Optimizing technology for marketing and cooperative management (3).
Threat <ol style="list-style-type: none"> 1. Competitors have better synergy (4) 2. Dependence on certain partner (3) 3. Fluctuating waste price (2) 4. Issues that sharia cooperative cannot have business unit (1) 	S-T Strategy <ol style="list-style-type: none"> 1. Strengthening and looking for new strategic partners. 	W-T Strategy <ol style="list-style-type: none"> 1. Strengthening KBKPK institution

Figure 5. SWOT Analysis

CONCLUSION

Based on the result of the study, it could be concluded that the most significant internal and external factors that affect the waste bank-based Sharia cooperative were (1) human resources with high social spirit and professional management, (2) supporting infrastructures, (3) ability to read the market opportunity, and (4) government support and synergy. SWOT analysis results indicate that KBKPK was in quadrant 1 with a score of (+1.15, +1.55). Thus S-O strategy (i.e., transforming into the main waste bank in East Jakarta, establishing new partnerships, recruiting freelance marketers, establishing educational tourism unit, and optimizing technology for marketing and management) is implemented.

This study recommends KBKPK management to integrate the financial record of its business units to strengthen the main resources and implement the formulated strategy by setting the measurable performance target for each business unit.

Regarding the limitations, this study have not presented financial data in a detailed and comprehensive manner and have not projected financial flows with existing business developments. In addition, considering that waste banks and BMTs/sharia cooperatives has a strong empowerment, it is necessary to conduct more research and analysis. Further research related to business integration, business feasibility studies of waste bank-based cooperative is also required in order to convince investors that integration of microfinance and waste management businesses is a promising busoness model. Future research is also needed to see the empowerment and social side of this solid waste management business and their effect on the welfare of members and the society.

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