

# WASTE MANAGEMENT BUSINESS DEVELOPMENT STRATEGY THROUGH JEKNYONG APPLICATION IN PURWOKERTO CITY

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#### **ABSTRACT**

The waste problem in Purwokerto City, Banyumas Regency, Central Java Province is very complex considering the huge amount of waste, reaching 60 tons per day. While the landfill has limited capacity and is constrained by many objections from the community around the landfill. Therefore, to anticipate these problems, the local government launched the Jeknyong application from its regional company, PT Banyumas Investama Jaya. This research aims to analyze the business development strategy of waste management with the Jeknyong application system. The analysis technique used is descriptive analysis to analyze the government's contribution to waste management, community participation, recycled waste products, and income, as well as SWOT, IFE, EFE, and IE Matrix analysis to identify waste management business development strategies. The data used are primary data and secondary data. The research samples in this study were the people of Purwokerto City and the leaders and staff of PT Banyumas Investama Jaya. The results of the analysis show that (1) the contribution of the Banyumas Regency government in maintaining environmental cleanliness is very good. (2) the level of community participation in the Jeknyong application has started to look positive. (3) Recycled products that can be produced by PT Banyumas Investama Jaya include coal substitute fuel, paving blocks, and roof tiles. (5) The SWOT analysis result shows that the most appropriate strategy to use is the Intensive strategy, Integration strategy, and weaknesses-opportunities strategy.

**Keywords:** Strategy; Business Development; Jeknyong Application; SWOT; IE Matrix

#### 1. Introduction

The growth of a city should essentially consider the concept of sustainability which includes preserving the natural environment, increasing community participation, and increasing local economic growth. Waste, which is synonymous with something dirty and smelly, makes it difficult for every city to find an ideal place for municipal waste disposal. One of the cities in Indonesia, Purwokerto City in Banyumas Regency, Central Java Province, is also trying hard to find a solution to its waste management.

The waste problem that has arisen in Purwokerto City is that it is very difficult for the government to find the right place for the final disposal site of waste. This is due not only to the limited capacity



of the available landfill but also because of the rejection of the community who object to the proposal of their area to become a landfill area.

In such conditions and referring to Law No. 18 of 2008 concerning waste management, an important breakthrough was made by the Banyumas Regency Regional Government by issuing Regional Regulation No. 02 of 2019 concerning the Banyumas Investama Jaya Regional Company which tries to find references to business opportunities that can be done as well as to play an active role in Green Economy activities by building a community waste processing business. The ideas and investments issued are expected to play an important role in overcoming the waste problem for the local government, especially by utilizing appropriate technology.

This is in line with the opinion of Daradiba (2021), which states that it has become an inevitable necessity for an area to go towards modernization in all fields, including in the problems of community life. The use of technology is a form of modernization. One of the benefits of using technology is that it can be used to facilitate community work in dealing with plastic waste through an application where in this application the community can work in a structured manner in their work. Thus, waste management is not just collecting and processing, and disposing of it, but there is a well-organized management process so that the results achieved can be by the goals set and risks can be minimized as well as possible.

PT Banyumas Investama Jaya as a company engaged in the processing of community waste through the Jeknyong application and recycling into multi-purpose products is also expected to be able to be an effective and efficient solution to the problem of waste in the city of Purwokerto.

The advantage of this application for the community is that the community will benefit compared to conventional waste disposal methods because by using the Jeknyong application, the existing waste will be an additional source of income for the community. After all, Jeknyong is buying waste from the community which is calculated per kilogram so that it will increase community income. In addition, the waste is collected by officers with mobile phone communication, and the use of the application can also increase public awareness and participation in the green economy program. However, the phenomenon in the field shows that the utilization of the Jeknyong application is not optimal because there are still limited people who use it. Therefore, it is urgent to conduct a study that can determine the right strategy for the development of waste management businesses through the Jeknyong application in Purwokerto City.

Furthermore, determining the development strategy of the Jeknyong application requires an analysis of the internal environment of the strengths and weaknesses of PT Banyumas Investama Jaya, as well as opportunities and threats that arise from the external environment. The SWOT analysis is very useful to be able to get a complete picture of the company's existence and determine an effective and efficient strategy.

#### 1.1 Research Question

Based on the background of the problem, the research question that arises is how the business development strategy of waste management with the Jeknyong Application system in Purwokerto City.



#### 2. Literature Review

According to Law No. 32/2009 on Environmental Protection and Management, article 1 paragraph 2 explains the need for systematic and integrated efforts made to preserve environmental functions and prevent pollution and/or environmental damage which includes planning, utilization, control, maintenance, and law enforcement.

#### 2.1 Waste Management

Waste management is a systematic, comprehensive, and sustainable activity that includes waste reduction and handling. Waste management needs to be carried out in a comprehensive and integrated manner from upstream to downstream so that it provides economic benefits, is healthy for the community and safe for the environment, and can change people's behavior. (DIY environmental agency, 2019). Waste management can be called an 'entry point' to achieve sustainable development targets because it is a multisectoral issue that has an impact on various aspects of society and the economy.

Waste management is linked to issues of health, climate change, poverty reduction, food and resource security, and sustainable production and consumption (UNEP, 2015).

Waste and its management is also one of the things that is mentioned several times in the indicators of sustainable development goals by the United Nations (UN). This is certainly because the environment in general is one of the things that is focused on developing the concept of sustainable development itself. In Indonesia, this is also in line with one of the pillars of the SDGs or Sustainable Development Goals put forward by the Ministry of National Development Planning and the National Development Planning Agency (BAPPENAS), namely the Environmental Development Pillar, whose goal is to achieve sustainable management of natural resources and the environment as a support for all life.

#### 2.2 SWOT Analysis

SWOT analysis is one of the methods widely used to determine business development strategies. A strategy is a tool to achieve goals in a company in the long term and to determine follow-up programs and resource allocation priorities. Meanwhile, according to Freddy Rangkuti (2017), Strategy is the long-term goal of a company, as well as the utilization and allocation of all resources that are important to achieve these goals.

In SWOT analysis, strengths, weaknesses, opportunities, and threats faced by the company can be identified. By looking at the strengths owned and developing these strengths, the company will certainly be more advanced than existing competitors. Likewise, the weaknesses must be corrected so that the company can exist. Opportunities must be utilized as well as possible by the company so that sales volume can increase, and threats that will be faced by the company must be faced by developing a good marketing strategy.



#### 3. Research Methodology

This research uses Qualitative research methods. Qualitative research according to Hair (in Sangadji, 2010) is research on problems in the form of current facts from a population which includes activities to assess attitudes or opinions of individuals, organizations, circumstances, or procedures. The writing method used in this article is a descriptive method, which presents data, analyzes, and interprets based on the implementation of company policies that can describe the strengths, weaknesses, threats, and opportunities of the company.

According to Sugiyono (2020), descriptive analysis is a statistic used to analyze data by describing or describing the data that has been collected as it is without intending to make general conclusions or generalizations. Most of the data and information collection methods used in this study were obtained directly through primary data, and various references related to SWOT analysis through books, journals, and articles. Based on the matching, it is analyzed and then concluded that the best development strategy is applied to Waste Management Through Jeknyong Application in Purwokerto City.

#### 4. Results and Discussion

Banyumas Regency is one of the regencies with Purwokerto city as its capital is the center of the western province of Central Java. Banyumas Regency, like other regions in Indonesia, has a complex waste problem. In every corner of towns and villages, there are still many open dumping activities. Meanwhile, every place is constrained by limited facilities and infrastructure for waste collection, transportation, and final disposal.

The waste problem in Banyumas Regency is getting worse as the population increases. In addition, awareness of waste disposal and management still needs to be improved. The waste problem in Banyumas is already quite alarming. In 2018, Banyumas Regency reached the level of a waste emergency, due to difficulties in waste management.

The Banyumas Regency Government is finally trying to overcome the waste problem by targeting Banyumas Regency as a zero waste area. Various efforts were made by the Banyumas Regency Government in an integrated manner by cooperating with the community from the smallest network to the large network. More specifically, the Banyumas district government has implemented various waste management efforts, starting from the replacement of landfills to TPST (Integrated Waste Disposal Sites).

Currently, the Banyumas district government has built several TPSTs at certain points. One of the Banyumas TPSTs that has been running well is the TPST located in Kedungrandu. Until now, the total number of TPSTs in Banyumas Regency is 23 TPSTs spread across various villages and subdistricts. These TPSTs are currently running independently, which means that they can support their opens, such as operating electricity resources, paying employee salaries, and procuring equipment and fuel for waste triangles.

In addition to the construction of the TPST, the Banyumas Regency Government also launched the Banyumas Online Waste (Salinmas) application as an effort to deal with waste problems in

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Banyumas Regency. The Salinmas application is the result of innovation and cooperation between the Environmental Agency (DLH) and the One-Stop Integrated Licensing Investment Agency (DPMPTSP) through the Banyumas Investment Gallery Information System (SiGAIB). The Banyumas district breakthrough with the Salinmas application was then enhanced with the launch of the Jeknyong application.

4.1 The contribution of PT Banyumas Investama Jaya in protecting the environment, especially in Purwokerto City

The idea of being able to solve the waste problem completely and permanently, from the community, then the waste is sorted as much as possible. On that basis, the idea emerged to create the Jeknyong application. To attract more interest from the community, the Jeknyong waste management application is made with a paid system, so that the company, PT Banyumas Investama Jaya, will buy waste from the community. So far, people who dispose of their waste are paying the officers, while with the Jeknyong application, the community will get income from depositing their waste.

This application has the advantage of taking all inorganic waste in household waste. There are 17 kinds of plastic waste. Some types of waste accepted include PET bottles, black plastic, white plastic, glass bottles, used items made of brass, copper, and others. In addition, plastics that have no selling value such as candy waste will also be helped to be transported by Jeknyong officers. Even a wide variety of used goods will also be priced accordingly.

Various breakthroughs have been made by the government, starting from the construction of integrated waste management sites (TPST), the purchase of pyrolysis machines for waste destruction, cooperation with refuse derived-fuel (RDF) managers to environmental and education-based landfills (TPA BLE) which are expected to be completed later this year.

Various movements and breakthroughs that have been made by the Banyumas Regency government show that the Regency government is very serious about being able to overcome its waste problems. Even with the Jeknyong application that has been launched by the Banyumas Regency government, it has made Banyumas Regency a place for comparative study visits from various cities and regencies, even outside the island.

Banyumas Regency's commitment to overcoming waste problems and making the city area waste-free is realized by the construction of an environmentally sound and educational landfill with a value of Rp 44 billion in Wlahar Wetan, Kalibagor District.

4.2 Community participation to support the program and become members in waste management

The existence of the Jeknyong application as a superior product from PT Banyumas with all the advantages including in terms of technological sophistication, being able to run practically, the existence of a pick-up system, and the purchase of the waste disposed of. These advantages are tools to stimulate public interest in becoming part of the Banyumas Regency government's program to create a waste-free Banyumas Regency and protect the environment for future generations.



Based on data from PT Banyumas Investama Jaya, the number of Jeknyong application users until December 2022 was 6,349 people. This condition is certainly a fairly reasonable thing considering that the Jeknyong application is still new, so there is still plenty of time for PT Banyumas Investama Jaya to be accepted by the Banyumas community, especially in Purwokerto City. The public response to the existence of the Jeknyong application in Banyumas Regency, especially in Purwokerto City, is quite good with an average addition of 16.2 people per month. This shows that the existence of the Jeknyong application is quite well known and accepted by the community, but there is still a need for more intensive promotion and socialization to attract the interest of the community in the city of Purwokerto.

#### 4.3 SWOT Analysis

Based on the research that has been carried out using interviews, observations, and other supporting documents, a SWOT analysis is then carried out. SWOT analysis is used in discussing the results of this study to classify strengths, weaknesses, opportunities, and threats that come from internal and external sources. Based on this classification, the supporting factors and inhibiting factors in the waste management strategy in Purwokerto City can also be identified.

In the SWOT analysis, internal factors (strengths and weaknesses) and external factors (opportunities and threats) are identified. In detail, the results of the identification of Internal and External factors from the analysis of the existence of the Jeknyong application in Purwokerto City are described in the following data:

#### 4.3.1 IFE (Internal Factor Evaluation) Matrix

The IFE matrix is the result of the identification and analysis of various kinds of situations or conditions that exist internally at PT Banyumas Investama Jaya as the owner of the Jeknyong application in Banyumas Regency. In this internal identification and analysis, it is described the strengths and problems that exist in the company, as well as its weaknesses. The results of the identification and analysis of the internal and external conditions of PT Banyumas Investama Jaya as the manager of the Jeknyong application in Banyumas Regency are known and the total value in the IFE matrix is 3.17. The results of the internal factor analysis can be seen in Appendix A.

#### 4.3.2 EFE (External Factor Evaluation) Matrix

The EFE matrix is the result of the identification and analysis of various kinds of situations or conditions that exist in the external PT Banyumas Investama Jaya as the owner of the Jeknyong application in Banyumas Regency. In this internal identification and analysis, the opportunities of PT Banyumas Investama Jaya and its threats are described. The results of the identification and analysis of external conditions in the form of opportunities and threats of PT Banyumas Investama Jaya are known that the total EFE matrix value is 3.42. The results of the analysis of internal factors can be seen in Appendix B.

#### 4.3.3 IE Matrix (Internal External)

The main purpose of the process of identifying and analyzing various factors in Internal Factor and External Factors through the IFE and EFE Matrix is to determine the position of PT Banyumas Investama Jaya, Banyumas Regency. Furthermore, by knowing the position of the company, in



the end, the most appropriate strategy for the development and management of waste in the city of Purwokerto, especially through the Jeknyong application, can be applied.

Tabel 1. Matrik Internal – Eksternal (Matrik IE).

#### TOTAL WEIGHTED AVERAGE IFE

FE			Strong 3,0 – 4,0	Medium 2,0 – 2,99	Weak 1,0 – 1,99
GE E		4,0	3,0	2,0	1,0
AVERA	Strong 3,0 – 4,0	3,0	I	II	III
ЕІСНТЕБ	Medium 2,0 – 2,99	2,0	IV	V	VI
TOTAL WEIGHTED AVERAGE EFE	Weak 1,0 – 1,99	1,0	VII	VIII	IX

Based on Table 1, it can be seen that with a total IFE value of 3.17 and EFE of 3.42, the waste management through the Jeknyong application managed by PT Banyumas Investama Jaya is in the Quadrant / Cell I position. This has an understanding that the Waste Development and Management Business with the Jeknyong Application from PT Banyumas Investama Jaya is currently in a "grow and develop" condition. Under these conditions, an intensive strategy (market penetration, market development, and product development) or an integrative strategy (backward integration, forward integration, and horizontal integration) is most suitable for the company PT Banyumas Investama Jaya.

In this Intensive strategy, PT Banyumas Investama jaya must have started to make various breakthroughs including the following:

- Penetration into new markets by continuing to be more active in promoting and socializing with the public, especially in areas that are still not many members of the Jeknyong application, and utilizing existing waste banks as agents for the company in conducting promotional and socialization activities.
- The addition of facilities and infrastructure will be very important to be able to increase the production capacity of waste recycling. The existence of this strategy will facilitate the marketing of recycled products which so far are still based on the ordering system only, as a result of limited production.
- Strategy to improve service quality by improving services to the community, especially by adding a fleet for garbage pickup in the community, so that the level of trust and community



- satisfaction will increase, and this will have an impact on improving the performance of the company itself.
- Product development strategy by increasing the number of products that can be produced according to the level of need in the community, for example, tourism souvenir products, household appliances, and so on.
- Network strategy by adding TPST so that the community is increasingly aware of the company's existence, and also as a means of simplifying or shortening the work chain of the company.

Furthermore, in the Integrative strategy, the company, PT Banyumas Investama Jaya, must be able to evaluate and improve performance internally to improve the quality of service to the community. In addition, in this integration strategy, the company must carry out control and control of suppliers, and establish cooperation with various companies, and also the government.

The backward integration strategy is carried out by continuing to improve and expand community participation in waste management through the Jeknyong application. This strategy must also be accompanied by an increase in service quality and maximum performance from employees and leaders.

Furthermore, the future strategy is to further expand the market for recycled waste products such as paving blocks, roof tiles, and coal substitute fuels, through a more intense and in-depth cooperation process. In addition, no less important is to utilize the existing TPST as a sales agent for recycled products.

While the horizontal strategy is carried out by establishing cooperation or forming various kinds of waste management groups such as by multiplying TPST and utilizing these groups as marketing agents.

#### 4.3.4 SWOT Matrix Analysis

SWOT analysis is an analysis by calculating the difference in the values of strengths, weaknesses, opportunities, and threats with the scores that have been obtained in the calculation of IFE and EFE analysis. This analysis uses a SWOT matrix diagram with X (strengths and weaknesses) and Y (opportunities and threats) coordinate points.

To determine which quadrant the right strategy location is in, it is necessary to first calculate the X and Y values using the following formula:

X = (total strength score - total weakness score)/2

Y = (total score of opportunities-total score of threats)/2

The results of the SWOT analysis can be seen in Figure 1.



### Opportunities

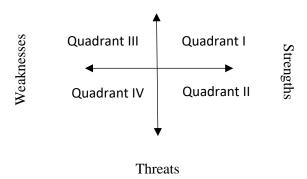


Figure 1. SWOT Matrix.

Based on the previously calculated IFE and EFE values, the results of the calculation using the SWOT formula are x (-0.035) and y (0.31). Thus it can be concluded that the right strategy is in quadrant III, so the best strategy to use is the WO strategy. The most urgent weaknesses - Opportunities (W-O) strategy options to implement are as follows:

- Preparation of a strategic plan regarding waste management from the community to the recycler, as well as product marketing.
- Increasing the number of facilities to collect waste from the community.
- Preparation of a promotion strategy to the community about the existence of the Jeknyong application as an application that has an economic value from the sale of its waste.
- Increasing socialization activities to the community about the importance of quality waste management for themselves and their environment in the present and for future generations through the waste recycling process.

### 4.3.5 Linkage of SWOT Matrix and IE Matrix

Based on the SWOT Analysis and IE Matrix, in waste management in Banyumas Regency, some results are in line between the two regarding the most appropriate strategy to be implemented.

Based on the SWOT Analysis, it is known that the most appropriate strategy is the W-O Strategy. In its application, the W-O Strategy is directed towards the demands of the company, namely PT Banyumas Investama Jaya as the manager of the Jeknyong Application to further optimize Promotion and Socialization activities. This is because the Jeknyong application is an extraordinary breakthrough in waste management, but in reality, the Jeknyong application has not been widely recognized by the public and stakeholders. The result is that the company's level of development in producing recycled products and the ability to attract people to become members of the Jeknyong application is still not optimal.

This is in line with the results shown in the IE Matrix that the position of the company (PT Banyumas Investama Jaya) in waste management through the Jeknyong application, is in the Cell I position. Based on this position, it shows that PT Banyumas Investama Jaya is called a company

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that is "growing and developing". The most appropriate strategy for companies that are included in quadrant III in the SWOT analysis which is relatively in line with the position in Cell 1 in the IE Matrix, namely intensive strategies (market penetration, market development, and product development) or integrative strategies (backward integration, forward integration, and horizontal integration).

Based on the SWOT Analysis and IE Matrix above, it can be concluded that both approaches assess that the most appropriate strategy to be carried out by PT Banyumas Investama Jaya in waste management through the Jeknyong application is a strategy that leads to promotion and socialization.

#### 5. Conclusion

Based on the results of research that has been processed and based on the data that has been obtained, the authors conclude the following points:

- 1) The contribution of the Banyumas Regency government through PT Banyumas Investama Jaya as a waste manager in Banyumas Regency can be said to be quite good, especially with a very good commitment to making Banyumas a waste-free district. Various breakthroughs that have been made with the launch of the Jeknyong application, the purchase of various waste processing facilities and infrastructure, and the procurement of waste recycling machines into multi-purpose products, are a reflection of the consistency of the Banyumas Regency government in waste management.
- 2) The level of community participation to become members of the Jeknyong application is quite good with the achievement of 6 thousand members and an addition rate of 16.2 on average every month. The level of community participation will increase as the level of public trust is expected to continue to increase.
- 3) Based on the results of the SWOT analysis, the right strategy for developing a waste management business with the Jeknyong application is the WO Strategy. This strategy requires the involvement of various parties or stakeholders to support the promotion, socialization, and improvement of recycling processing facilities, as well as the marketing of recycled products.
- 4) Based on the results of the IE matrix, it can be seen that the position of PT Banyumas Investama Jaya is in cell 1. In this position, it means that the most appropriate strategy to implement is the Intensive strategy and Integrative strategy and this is in line with the results of the SWOT analysis.

#### References

Adekunle, M., and Agbaje, B.M. 2014, "Public Willingness To Pay for Ecosystem Service Functions of A Peri-urban Forest Near Abeokuta Ogun State Nigeria", *Journal of Development and Agricultural Economics Vol.4*(2), 26 January 2012, pp.45-50, University of Agriculture, Nigeria.

Agusman, A. 2013. Pengujian Organoleptik Teknologi Pangan. Semarang: Universitas Muhammadiyah

Amos Neolaka, 2008, Kesadaran Lingkungan Jakarta: Rineka Cipta



Shonah, 2013, Proses Pemberdayaan Masyarakat Melalui Pengelolaan Sampah Mandiri Berbasis Komunitas Studi Pada Bank Sampah Pitoe Kelurahan Jambangan, Surabaya, Surabaya, Publika, Jurnal Ilmu Administrasi negaraRangkuti, Freddy. 2017. Analisis SWOT Teknik Membedah Kasus Bisnis. Jakarta: Gramedia

Pustaka Utama. Rangkuti, Freddy. 2018. Analisis SWOT: Teknik Membedah Kasus Bisnis Cara Perhitungan Bobot, Rating, dan OCAI. Jakarta: PT. Gramedia Pustaka Utama

Sugiyono, 2018, Metode Penelitian Bisnis, Bandung: Alfabeta.

Dinas lingkungan hidup dan kehutanan DIY (2019) pengelolaan sampah rumah tangga, https://dlhk.jogjaprov.go.id/pengelolaan-sampah-rumah-tangga. Diakses pada tanggal 21 juni 2023

Sucipto. 2012. Teknologi Pengolahan Daur Ulang Sampah. Yogyakarta, Gosyem Publishing

Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta

Sumantri, 2015. Kesehatan Lingkungan. Jakarta, Kencana Prenada Media Group

#### **Appendix**

Appendix A. Internal Factor Analysis Matrix

No.	Strength	Weight	Ratings	Score
1	The Jeknyong application can be trusted to manage community waste very well	0.05	4,5	0.22
2	There is a regional regulation that regulates waste services	0.06	4,5	0.27
3.	There are funds from the regional budget allocated for waste management	0.06	4,2	0.25
4.	Availability of potential funding sources that can be used to improve waste management facilities and infrastructure	0.05	4,7	0.24
5.	There is a clear SKPD in waste management	0.06	4,3	0.26
6.	The existence of communication media used for socialization	0.06	5	0.30
No.	Weakness	Weight	Ratings	Score
1	The promotion by PT BIJ has not been optimal regarding the existence of the Jeknyong application	0.06	2,7	0.16



2	Not optimal socialization activities to the public about the existence of the	0.06	2,2	0.13
	Jeknyong application	0.00	_,_	0.13
3.	The media used for promotion and outreach are less attractive	0.06	2,2	0.13
4.	There is no plan and strategy for waste management, including the institutions and arrangements	0.06	2,7	0.16
5.	APBD capacity is not maximized in supporting waste management	0.06	2,2	0.13
6.	Garbage development has not become a regional priority	0.06	2,4	0.14
7.	The equipment available to process waste into multi-purpose goods is incomplete	0.06	2,4	0.14
8.	Facilities for waste collection and transportation are lacking	0.06	2,5	0.15
9.	Production resulting from waste processing is not by the needs and raw materials available	0.06	2,2	0.13
10	The existing workforce is not sufficient to handle all tasks and responsibilities in implementing the Jeknyong application	0.06	2.25	0.13
11.	The quality of human resources to manage waste is still lacking	0.06	3,1	0.18
	Total	1	54.5	3,17

### Appendix B. External Factor Analysis Matrix

No.	Opportunity	Weight	Ratings	Score
1	The prospect of using the application is quite good, supported by the population of the city of Purwokerto which continues to grow rapidly	0.05	4,5	0.22
2.	There has been an initiative from some people who run a waste management program through a waste bank	0.05	4,2	0.21



3.	Community demands that require practicality and efficiency in all activities are very relevant to the	0.05	4.5	0.22
4.	Offered Jeknyong application There is cooperation with private	0.05	4.5	0.22
5.	companies (CSR) in waste processing There are business actors who have become consumers of waste-processing products	0.03	4,5	0.22
6.	The existence of privately owned mass media that can be used to promote and socialize the Jeknyong application program	0.05	4,9	0.24
7.	There is support from various parties at the provincial and district levels	0.05	4,5	0.22
8.	There are community members who have benefited, especially financially, from their involvement in the Jeknyong application	0.05	4,4	0.21
9.	There is information dissemination in the community regarding the profits obtained from the Jeknyong application	0.05	4,5	0.22
No.	Threat	Weight	Ratings	Score
1.	It is difficult to change the habits of people who use conventional waste collection services	0.05	2,7	0.13
2.	There are still many people who throw garbage in places that can damage the environment (rivers, vacant land, roads).	0.05	3,1	0.16
3.	It is difficult to change the mindset of people who tend to be difficult to get ahead	0.05	3	0.15
4.	Not all people have sophisticated mobile phones	0.05	3,1	0.16
5.	Not all communities are reached by the solid waste services managed by PT Banyumas Investama Jaya	0.05	2,6	0.13
6.	The lack of public knowledge of the			
	importance of environmental health	0.05	2,7	0.14



8.	Limited manpower to be able to reach all levels of society who need fast	0.05	3,1	0.16
	service on waste problems	0.00	0,1	0.10
9.	There is still a low level of public			
	awareness of waste management and	0.05	3	0.15
	processing activities			
10.	The role of the private sector tends to			
	be less than optimal when it comes to	0.05	2,1	0.11
	waste problems		,	
	Total	1	68.5	3,42