

## A Study on The Independence of Malang Waste Bank (BSM) Based on Swot Analysis

Rahmat Hidayat<sup>1</sup>, Bagyo Yanuwadi<sup>2</sup>, Budi Prasetyo<sup>3</sup>

<sup>1</sup> Masters in Environmental Resource Management and Development, University of Brawijaya, Malang, Indonesia

<sup>2</sup> Faculty of Mathematics and Science, University of Brawijaya, Malang, Indonesia

<sup>3</sup> Faculty of Agriculture Science, University of Brawijaya, Malang, Indonesia

### Abstract

The aim of this paper is to know the independence of Malang waste bank based on SWOT analysis. This paper focuses on the BSM condition by analyzing and allocating its internal factors (strengths and weaknesses) as well as external elements (opportunities and threats). An organization is necessary to identify its strength, weakness, opportunities and threats in order to know the solutions which in turn make the organization evolves. SWOT analysis, however, helps to identify quantitatively the BSM real condition by looking for the quadrant position. Seven internal independence-related factors which have been analyzed with SWOT were: 1) Legal Entity, 2) Organizational Structure, 3) Human resource, 4) BSM enterprises and activities, 5) waste management mechanism, 6) infrastructure, 7) BSM finance. There are four external factors: 1) Government role 2) Corporate social responsibility of PT. PLN Chapter East Java 3) Waste market opportunities 4) People participation as BSM customer. The results of quantitative SWOT analysis on internal and external factors were used to find the BSM quadrant position based on the identification total score timed to the determined weight value. According to the SWOT analysis, the BSM recent condition was in quadrant 3, which meant that the organization was in a weak condition but still had the opportunity to grow and to be independent if the strategy was changed.

**Keywords:** BSM Independence, Malang Waste Bank, SWOT Analysis

### INTRODUCTION

In Indonesia, there is a serious problem of trash. As quoted from The Jakarta Post (2015) in 2015, "every person produces 0,7 kilograms of waste everyday". The total number of Indonesian is 250 millions of people. It means each day the total waste is 175.000 tons. This condition is a nightmare for Indonesia. Therefore, the waste problem should be solved because waste gives bad effect to the environment. Thus, Malang waste bank was built to help Malang government reduces the volume of garbage dumped to the wasteland.

BSM is a place to manage inorganic waste. It has been operated since 2011 until now. It becomes the icon of Malang and the object of comparative studies by many districts and cities in Indonesia because Malang is one of the first initiators of waste center, one of the indicators of Adipura rating held by Ministry of Environment and Forestry. It has much experience and has faced both internal and external constraints or challenges.

The Ministry of Environment and Forestry (KLHK) has included waste bank to be one of the indicators in Adipura rating since 2012 in which

waste bank should be well known to everyone. It develops a model of waste reduction by using community-based process of 3R (reduce, reuse, recycle) through the waste bank regulation issued by Minister of Environment and Forestry No. 13 Year 2012 on Guidelines for the Implementation of Reduce, Reuse, and Recycle through Waste Bank.

In the process of Adipura assessment in 2016, the Ministry of Environment and Forestry included waste bank as Adipura assessment indicator with Malang waste bank (BSM) as the model. BSM has many units that spread in all districts of Malang city and Malang regency such as Turen, Gondanglegi, Tumpang, Wagir, etc.

BSM was treated as national pilot project by the Ministry of Environment and Forestry provided as a model for the districts and cities in Indonesia which plan to set up a waste bank or participate in Adipura competition. Most of the people from other cities and districts who learn the BSM management want to make their regions win the Adipura too.

The waste banks in Indonesia are mostly built at small and local scale model in which village as BSM unit is largely regarded as sideline activities of the community. It is different from Malang waste bank centre whose employees are paid. While the activity in other waste bank units

---

**Name** : Rahmat Hidayat  
**Email** : rahmat150675@gmail.com  
**Address** : Jl. Kemantren III No.77 Malang

in Indonesia is only a side job of the members. Therefore, the other waste banks in Indonesia are expected to be as independent as BSM. There are some waste bank centres in Indonesia such as in Makassar, Cimahi, Sukabumi that form a waste bank but the operations are charged by agencies that handle such waste or garbage bank, which usually called as institutional-based waste bank centre.

From an interview results with BSM committee, in 2016, there was a decreasing number of active BSM customers which influenced financial conditions of BSM because the inorganic waste that customer put declined. In fact, the financial condition is one of the measurements whether that waste bank is categorized as independent or not. The purchase of inorganic waste from BSM customer decreased significantly in 2016 to 43.77 % or Rp 77,378,180/month from the previous year, 2015. Thus, in 2015 there was a decreasing number of waste purchasing from Rp 266,292,842/month or 12.55% to Rp 22,191,070 or 11.15% in 2014. BSM independence condition and how the development ahead can be investigated by using SWOT analysis because BSM has become the motor of waste management for Malangese since 2011 and its sustainability must be preserved.

Malang waste bank is well known in Indonesia. Every institution is interested to learn about its management. However, the author wants to know about the real internal condition of BSM because BSM declines now as seen from several factors. One of the factors is the financial problem. Based on the financial report in 2016, BSM financial decline can influence the performance. That is why the author aimed at determining the future independence of BSM by SWOT Analysis.

### SWOT Analysis

BSM SWOT analysis is based on the logic that maximizes strengths and opportunities, but simultaneously can minimize weaknesses and threats. BSM performance sustainability can be determined by analyzing the combination of internal and external factors. Both of these factors should be considered in the SWOT analysis. SWOT analysis compares external factors in the form of opportunities and threats and internal factors in the form of strength and weakness.

Fredi Rangkuti (2004: 18) explains that the SWOT analysis is to identify various factors

systematically to formulate the company strategy. Strategy Analysis is based on the logic that maximizes strength and opportunities, but simultaneously to minimize weakness and threats. The decision making process is always associated with the development strategy of the missions, goals, strategies and policies of the company. Thus, the strategic planning should analyze the corporate strategy factors (strengths, weaknesses, opportunities and threats) in the current conditions.

Meanwhile, according to Kotler (2009: 51), SWOT Analysis is a way to observe the external and internal marketing environment. In this method, we have to think about what forces we have, what weaknesses are inherent in ourselves or our company then we also have to look at the opportunity that is open to us and eventually we should be able to know the threats, interference, obstacles as well as the challenges that we face.

### METHOD

There were two methods in this paper. First, the author analyzed the data quantitatively. The second was analyzing data qualitatively. Qualitative analysis was conducted to the data from direct interview with an informant about the aspects below:

1. Internal Factors  
Several aspects being analyzed in this factor were strengths and weaknesses. The main factors were legal identity, organization structure, human resources, enterprises and the activities, waste management mechanism, facilities and infrastructures, and BSM finance.
2. External Factors  
This factors were analyzed in terms of opportunities and threats. The author used four factors, namely roles of central and regional government, roles of CSR of PT. PLN (Persero) distribution East Java, opportunity of market, and participation from society to be BSM customers.

Table 1. SWOT Matrix Table Kearns

| INTERNAL \ EXTERNAL | OPPORTUNITY                  | THREATS               |
|---------------------|------------------------------|-----------------------|
|                     | STRENGTH                     | WEAKNESS              |
| STRENGTH            | <i>Comparative Advantage</i> | <i>Mobilization</i>   |
| WEAKNESS            | <i>Divestment/Investment</i> | <i>Damage Control</i> |

Source : Hisyam, 1998

Note:

Cells A: Comparative Advantages

This cell was a combination of two elements of strength and opportunities, so it made possible for an organization to be able to develop faster.

Cell B: Mobilization.

This cell was an interaction between threats and force. The mobilization efforts should be made to resources as the strength of the organization to lessen the outside threat which in turn change the threat into an opportunity.

Cells C: Divestment / Investment

Organization's weaknesses interacted with opportunity from the outside of this cell. This situation provided an option to a fading situation. Opportunities provided was very convincing but cannot be used because there was not enough power to work on it. The alternative was removing the opportunities that exist for the benefit of other organizations or imposed work opportunities (investment).

Cells D: Damage Control

The cell was in lowest condition than others because it was a combination between the organization's weaknesses and the external threats, and therefore wrong decision will brought great disaster for the organization. The strategy must be taken was Damage Control (controlling losses) so it did not become more severe than expected. The second method was qualitative data analysis conveyed from the sum of the identification scores of the internal and external factors. It was also important to know the real condition of the BSM. Therefore, in this analysis, the author attempted to use two approaches, namely:

The above SWOT qualitative data can be developed into quantitative data via SWOT Analysis calculations developed by Pearce and Robinson (1998) in order to know exactly the real position of the organization.

The calculations were made through three stages, namely:

- 1). Calculating score (a) and weight (b) factor point as well as the total number of multiplication of scores and weights ( $c = a \times b$ ) on any factor of S-W-O-T; The score (a) calculation of each factor point was conducted independently (calculation of a factor point should not be influenced by the calculation of the other factor points). The option of scale score range determines the accuracy of ratings, but the most commonly

used is from 1 to 10, with the assumption that 1 means the lowest score and 10 means the highest score. The weight (b) of each factor point was calculated in dependency. That is, the calculation of a factor point was by comparing the level of importance to the other factor points. So, the calculation formula was a value that had been obtained (the range was equal to the number of factor points) divided by the large number of factor points).

2. Performing a reduction on the total number of factors S to W (d) and a factor of O with T (e); Scoring ( $d = x$ ) further into the value or point on the X axis, while the scoring ( $e = y$ ) further into the value or point on the Y axis;
3. Finding the organizational position which was indicated by point (x, y) in the SWOT quadrant.

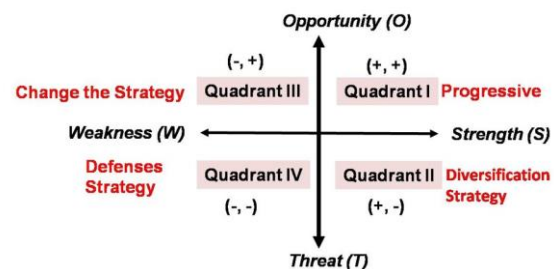


Figure 1. Position Quadrant SWOT

- **Quadrant I** (positive, positive)

This position indicated a strong and organization and had good opportunity. Recommendation of strategy given was progressive which meant that the organization was in good and steady condition, so it was possible to expand, enlarged growth and achieved maximum progress.

- **Quadrant II** (positive, negative)

The organization was in the strong condition but it faced a big challenge.. The suitable recommendation strategy was diversification strategy. It meant the organization was in the stable condition but also faced many challenges which predicted the organization to be difficult to develop if relying on the previous strategy only. The organizations were advised to immediately multiply the tactical strategy variations.

- **Quadrant III** (negative, positive)

This position indicated a weak organization but had a very opportunity. The recommendation strategy was Strategy change. It meant that the organizations were advised to change the previous strategy. Therefore, the

previous strategy would not be suitable and it was difficult to catch the opportunity and improved the performance.

- **Quadrant IV** (negative, negative)

The organization was in a weak condition and faced many great challenges. Recommended strategy was Defense, which meant that the internal condition were in dilemma. Therefore, it was advisable to use the survival strategy to control the internal performance. This strategy was maintained while it was trying to fix the condition.

In this analysis, first, the author collected the primary data by conducting observation and interview. Then, it was supported by secondary data which was identified and analyzed qualitatively whether they were categorized as internal or external indicators which support the sustainability of BSM independence.

After the internal and external factor had been identified, they were summed with the identification factors and multiplied by the weight of each factor to find out the quadrants of BSM current position.

The value of each internal factor, namely:

- a. Score 20 was given to human resources, enterprises and BSM activities, and facilities and infrastructure in BSM.
  - b. Score 15 was given to organizational structure.
  - c. Score 10 was given to the factor such as waste management mechanism and BSM financial management.
  - d. Score 5 was given to the legal entities factor
- As for the value of external factors was directly multiplied by 100.

#### **Location**

The location of this study was Malang waste bank located in Jl. S. Supriadi 38A, Sukun, Malang. The author surveyed, observed, and collected data from August to October, 2016.

#### **RESULTS AND DISCUSSION**

The SWOT analysis results which affect BSM independence based on a qualitative analysis were as follows:

##### **A. Internal Factor**

###### **❖ Strengths**

1. Legal Entity (2 scores identification)  
BSM had a Cooperative Legal Deed, Endorsement of Malang Mayor, Disturbance permit (HO), business licence (SIUP) and certificate of company registration (TDP).

Then, It also had a management and employees.

2. Organizational Structure (1 score identification)  
BSM had a lot of experience for almost five years began at 2011-2016.
3. Human Resources (1 score identification)  
There was a harmonious relationship among employees because they used to eat together for lunch, help each other and had an emotional connection.
4. Enterprises and BSM Activities (10 scores identification)
  - 1) BSM had 70 types of waste which could be deposited in BSM and it did not have any competitor in Malang
  - 2) There were many customers, particularly in BSM units. BSM just needed to take the garbage from their units.
  - 3) Most of the customers did not take their savings until Eid Al-Fitr, so it could be an additional capital to BSM
  - 4) It used manual and computerized savings and withdrawal administrative transaction as in conventional banks
  - 5) BSM had a stable waste price because it was updated in 3 or 6 months
  - 6) It had a trasher which can increase the price of waste especially for PET plastic type
  - 7) There was a good cooperation relationship with stalls or garbage collectors by substituting (barter) the plastic garbage need to be crushed by BSM and the rubbish owned by the collectors (Barter here are selling garbage).
  - 8) Many visitors from other cities came to BSM and bought the crafts.
  - 9) There was an additional incentive to the employees from workshops or the visitors.
  - 10) Most of BSM customers come directly to register and ask for socialization or workshop.
5. Waste Management Mechanism (5 scores identification)
  - 1) Sorting 70 types of waste into 100 types. It would increase the price of each item, so it would be more expensive than before.
  - 2) Many stalls and waste collectors were looking for waste in BSM because BSM took clean and good quality waste from household.
  - 3) Suitable and honest weighing in the waste purchasing and selling process.

- 4) BSM had a cash purchasing and selling system which made waste stalls and collectors interested to sell or purchase waste in BSM.
  - 5) Shredded plastic pieces were fit to factory's demand. Therefore, no matter the amount of the shredded plastics was always bought by factory.
  6. Infrastructures of BSM (2 scores identification)
    - 1) BSM rent the office and warehouse in 2012-2014 (2 years) and renewed from 2014 to 2019 (5 years)
    - 2) There were many facilities (computers, desks, chairs, vehicles, etc) as BSM assets which were granted by Malang government and CSR program of PLN East Java Distribution.
  7. Finance of BSM (2 scores identification)
    - 1) BSM had big potential of waste as there were increasing number of customers of BSM unit. It caused an improvement on the number of waste deposited to BSM.
    - 2) BSM income was also earned from the visitors who came or joined the craft - recycle training.
- ❖ **Weaknesses**
1. Legal Entity (1 score identification)
    - 1) Paid 1% of Tax Penalty from the BSM income instead of its profit.
  2. Organizational Structure (3 scores identification)
    - 1) There were unclear division between management tasks and administrative and technical tasks.
    - 2) The employees still did not really understand the responsibility of each position.
    - 3) SOP was not optimally used because the tasks were done based on orders and customs.
  3. Human Source (6 score of identification)
    - 1) It was still centralized in one figure of the BSM founder as Director.
    - 2) The manager educational background was still low and he was lack of experience.
    - 3) There were too often employees and manager changing
    - 4) Employee's salary was below regional minimum wage (UMR)
    - 5) The penalty for employees who did not do their responsibilities were not optimally given.
  - 6) The human resources were limited because it had low ability of paying salaries.
  4. Enterprises and Activities of BSM (6 scores identification)
    - 1) Sudden collection of waste without previous confirmation to BSM caused late schedule.
    - 2) Waste collection did not fit in one area route. It took a long time.
    - 3) It needed a long time taking trash from customers who did not have a warehouse or weighing tools as well as new customers who needed assistance to sort different types of waste.
    - 4) The Waste Savings Management Information Systems (MIS) was still not automatically worked (passbook was still manual printed) and it was not connected to garbage stock, sales and overall financial record of BSM
    - 5) Guests and visitors mainly from agencies or government who did not give arrival confirmation disturbed the management activities.
    - 6) There were some waste prices that was cheaper than those of stalls and waste collectors
  5. Waste Management Mechanism (4 scores identification)
    - 1) Separating waste into 70 items took a long time and more energy to sorting
    - 2) There were residues which were not worth selling for the huge amount of waste received, especially the waste from BSM units
    - 3) The difference between the record of waste stock in the purchasing records and the real situation caused by a conversion from one type of junk code into several types of waste and residual waste
    - 4) Lack of supervision and control on stock trash for a physical check and inventory taking was not conducted regularly. It was conducted after there was a loss or a striking difference between the data and the real condition
  6. Infrastructures of BSM (4 scores identification)
    - 1) Many complaints were received because there were some wastes were not taken because due to limited transportation vehicles owned by BSM to pick up the waste.

- 2) The maintenance cost of the transportation vehicles was expensive because they were quite old.
- 3) The limited area for sorting, storing, and production activities.
- 4) Lack of packing supporting facilities (press machine) and garbage cleaning facilities for production (package busting machine), as well as frequent damage of the shredding machine or.
7. Finance of BSM (5 scores identification)
  - 1) There was a less control from Director to the financial reports
  - 2) The financial management was still manually conducted and it was not supported by a fast and effective program
  - 3) The financial condition was not stable because it was influenced by the decreasing price or unsold waste stock.
  - 4) Every-week evaluation on the profit and loss report aimed to minimize the bigger loss risk was not done regularly and correctly
  - 5) There was not a business development since 2012 until now.

#### **B. External Factors**

##### **❖ opportunities (9 scores identification)**

1. BSM existence was already known well in national and international levels since it was regarded by the Ministry of Environment and Forestry as the best and successful waste bank, as well as published by Malang government in many electronic and print media, so that the current BSM was no longer needed a marketing.
2. The waste bank centre and waste bank unit was one of the indicators of *Adipura* competition assessment, so Malang government was committed to maintaining the *Adipura* award attempted to develop the only Waste Bank in Malang (no competitor).
3. Malang city government had granted budget for socialization, training and coaching of BSM and the community since 2011 until now in 3R BSM activities to motivate the customers as well as increase the interest of people to be the BSM customers.
4. BSM has become the icon of 3R movement in Malang, so the visits from other regions to BSM motivated the BSM

management, employees and customers to maintain and develop it.

5. A village shining competition was organized by Malang government with the availability of waste bank unit as one of the indicator of the competition assessment, the participants certainly formed at least a waste bank unit in every 4 to 6 citizens association (RW).
6. BSM was already trusted by the public so that there was a good cooperation with the government, social organizations, private sector and society in terms of the purchase and sale of waste which removed any barrier in the activities
7. There were opportunities for business development mainly waste plastic type for BSM became honorary member of the Association of Recycled Plastic Indonesia (ADUPI) which was assisted for the sale of plastic waste processing results.
8. There was a support from CSR of PT. PLN Persero East Java Distribution by giving many facilities that is needed started in 2011 until now
9. There was an increase in the community participation to become BSM unit customers qualified for a direct view of economically and environmentally positive impact of neighbourhood association (RT) or citizens association (RW) that had been running the waste bank.

##### **❖ Threats , (4 scores Identification)**

1. The decrease on the waste price any time affected the waste sales in BSM
2. There were some waste items which prices were cheaper than those of the stalls or waste collectors, so the customers chose to sell their wastes to the collectors.
3. It was difficult to find the PET plastic type that will be chopped because there were many new grinders business in Malang who competed to get the PET.
4. There was a foul play among the waste stalls or collectors who sell PET plastic to BSM (included the rock, metal, glass, etc.) as it was considered important for the raw materials of the plastic shredder.

Based on the identifications above, BSM quadrant position was analyzed based on SWOT analysis value by multiplying the total scores of identification to the respective weight of each factor had been determined.

Table 1. The Results of BSM SWOT Analysis

| NO    | INTERNAL                                 | Bobot | Strenght (S)  | S Grade | Procentage |
|-------|--|-------|---------------|---------|------------|
|       |  |       | Skor          | (1x2)   | %          |
|       |  | 1     | 2             | 3       | 4          |
| 1.    | Legal Entities                           | 5     | 2             | 10,00   | 2,82       |
| 2.    | Organizational Structure                 | 15    | 1             | 15,00   | 4,23       |
| 3.    | Human Source                             | 20    | 1             | 20,00   | 5,63       |
| 4.    | Enterprises and BSM Activities           | 20    | 10            | 200,00  | 56,34      |
| 5.    | Waste Management Mechanism               | 10    | 5             | 50,00   | 14,08      |
| 6.    | BSM Infrastructures                      | 20    | 2             | 40,00   | 11,27      |
| 7.    | BSM Financial                            | 10    | 2             | 20,00   | 5,63       |
| Total |  | 100   | 23            | 355,00  | 100,00     |
| NO    | EXTERNAL                                 | Bobot | Opportunities | Grade   | Procentage |
|       |  |       | Skor          | (1x2)   | %          |
|       |  | 1     | 2             | 3       | 4          |
|       | Market opportunities, Competition        | 100   | 9             | 900     | 100        |
|       | Government Role, Community Participation |       |               |         |            |

| NO    | INTERNAL                                 | Bobot | Weakness (W) | S Grade | Procentage |
|-------|--|-------|--------------|---------|------------|
|       |  |       | Skor         | (1x5)   | %          |
|       |  | 1     | 5            | 6       | 7          |
| 1.    | Legal Entities                           | 5     | 1            | 5       | 1,09       |
| 2.    | Organizational Structure                 | 15    | 3            | 45      | 9,78       |
| 3.    | Human Source                             | 20    | 6            | 120     | 26,09      |
| 4.    | Enterprises and BSM Activities           | 20    | 6            | 120     | 26,09      |
| 5.    | Waste Management Mechanism               | 10    | 4            | 40      | 8,70       |
| 6.    | BSM Infrastructures                      | 20    | 4            | 80      | 17,39      |
| 7.    | BSM Financial                            | 10    | 5            | 50      | 10,87      |
| Total |  | 100   | 29           | 460     | 100,00     |
| NO    | EXTERNAL                                 | Bobot | Treatment    | Grade   | Procentage |
|       |  |       | Skor         | (1x5)   | %          |
|       |  | 1     | 5            | 6       | 4          |
|       | Market opportunities, Competition        | 100   | 4            | 400     | 100        |
|       | Government Role, Community Participation |       |              |         |            |

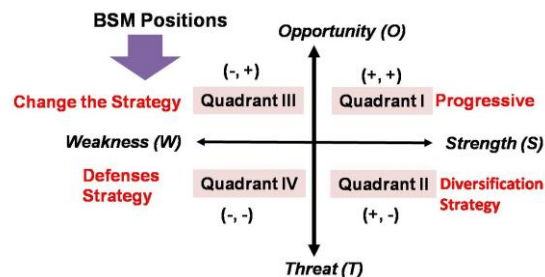


Figure 2. The Position of BSM in the SWOT Analysis

From the picture above, the **BSM positioning condition was in the third quadrant**, the total value of the strength of 355 was smaller (-) than the total value of weaknesses which reached 460, but the value of Opportunity (900) was higher (+) than the value of Threats of 400. Thus, the current condition of the BSM organization was weak but it had the opportunity to grow and to be independent, so that it needed to change the strategy. The previous strategy was considered not enough to see the existing opportunities as well as improve the performance of the organizations, such as the biggest internal weaknesses of BSM in terms of Human Resources (HR), Enterprises and Activities, and Infrastructures.

## CONCLUSION

Based on the SWOT analysis, BSM current internal condition was weak but it had an opportunity to become self-sustainable, so that it needed to strengthen the organization internally, especially in human resources, business development and adequate facilities and infrastructure.

Regarding the BSM internal weaknesses, it needs a human resource mentoring and coaching from Malang government especially the department which is responsible for waste management in Malang such as the Environmental department which should change the organization structure since January 1, 2017 and provide guidance and coaching to BSM from 2011 to 2014. It is expected that Malang government grants funds to BSM to reduce the debt of the BSM to the customers in 2016.

Now BSM has become the icon of Malang on the waste reduction movement through 3R (reduce, reuse, recycle), so Malang government is greatly helped by the presence of BSM in motivating and teaching about 3R to Malang communities.

The author suggests BSM to be independent through some steps as follows:

1. Increasing the human qualities and quantities mainly on: a) improving the collection of trash from the customers especially from BSM units, b) being discipline in carrying out the SOP and giving a sanction to the employee who is not responsible, c) there is a strict control and supervision from the director and division managers to the waste stock recording clerk both in operation and production, d) financial management is based on the performances which means that fulfillment of financial expenditures is based on the production/finance, e) increasing the employee's salary and incentive according to the increasing of the performances revenue.
2. Maintaining a good cooperation with Malang government and CSR of PT. PLN (Persero) by providing regular reports to the organizations.
3. The role of these institutions is crucial to the BSM independence in the future. If these institutions do not provide assistance and guidance as well as fulfill the requirements of BSM, it will be in a dangerous situation. Adding the

transportation vehicles used to pick-up the waste either from the help of CSR PT. PLN and Malang government. It is really needed because the BSM income depends on the waste collection. If the number of BSM waste collection increases, the profit will increase too. One of the factors which deactivate BSM units is the trash collection delay or left-uncarried because of the limited transportation.

4. Establishing a good cooperation with waste stalls and collectors to increase the raw material of production the sale of the products and information about the price in each waste item. Besides, updating the increasing or declining price of the waste from the customer is really needed, Mostly, the raw material for production in BSM is taken from the waste stalls and collectors so that a good cooperation with them must be built to make it easier to get the raw materials and to sell the waste in BSM. BSM activities cannot be separated from waste business networks in Malang and the surrounding areas, especially in East Java, so this network will strengthen BSM in determining and updating the price of garbage to anticipate the waste purchase from customers and waste stock reduction in BSM.
5. Increasing the production facilities which are needed for optimal production and development.  
The trasher machine used by BSM is granted by DKP Malang and CSR of PT PLN in 2011 and 2012, so it needs a maintenance and development to improve the production of shredded plastic. The help in the form of machine addition is expected from Malang government, CSR of PT. PLN or other parties.
6. Engaging cooperation with hotels, shops, industries and other offices for waste collection.  
To improve the BSM financial income, one of the potential economic value of waste are in the neighborhood so BSM needs to increase cooperation with the hotels, shops, industries and offices so that they will become BSM customers.
7. Increasing an assistance to the customers to increase the sale value and customer service especially during waste collection

and BSM unit administrative coaching customers

8. Increasing a good cooperation with other universities and schools on mentoring BSM units to become BSM customers.

## REFERENCES

- [1]. Freddy Rangkuti. 2004. SWOT analysis techniques of Dissecting the business case, PT. Graedia, Jakarta.
- [2]. Kotler, Philip. Marketing management 12th Edition, Volumes I and II, Hendra Translation Firm. Jakarta: Pt. Eason, Cet. I, 2009.
- [3]. Moleong, Lexy j., 2007. The Qualitative Research Methodology. Teen Rosdakarya PTPublishesOffset. Bandung.
- [4]. Minister of Environment Regulation No. 13 of 2012 about implementation of guidelines reduce, reuse, and recycle trash through waste bank.
- [5]. Profile of the hapless Garbage Bank (BSM) 2015.
- [6]. The Jakarta Post. 2015. Jakarta. <http://www.thejakartapost.com/news/2015/10/09/indonesia-state-waste-emergency.html>.
- [7]. Xia Chan. 2011. A SWOT Study of the Development Strategy of Haier Group as One of the Most Successful Chinese Enterprises. International Journal of Business and Social Science Vol. 2 No. 11
- [8]. Ifediora Christian Osita, Idoko Onyebuchi R. and Nzekwe Justina. 2014. Organization's stability and productivity: the role of SWOT analysis an acronym for strength, weakness, opportunities and threat. International Journal of Innovative and Applied Research Volume 2, Issue (9): 23- 32.