

Optimization of Acceptance of Waste Retribution in Efforts to Increase Regional Original Income in the City of Bandung

*Keni Kaniawati^a, Obsatar Sinaga^b, ^aWidyatama University, Indonesia,
^bPadjadjaran University, Indonesia, *Email: keni.kaniawati@widyatama.ac.id

The purpose of this study is to optimize the management of integrated retribution and waste retribution as expected to provide positive value and imaging of the city of Bandung, as a clean and environmentally friendly city by making waste as a resource that can be optimized as an energy source, also increasing regional original income (PAD) from the sector garbage retribution. The research method used is a descriptive qualitative method which aims to find out the nature and depth of the relationship between the two variables, by observing certain aspects to obtain data in accordance with existing problems. The data is processed, analyzed and further processed on the basis of theories that have been studied so that the conclusions can be drawn. The results of this study propose an integrated system built with web and mobile based information technology. The web and mobile-based information system are chosen by researchers because of the ease in access so that all groups are obliged to pay retribution and PD Cleanliness of Bandung City itself can easily monitor the management of waste retribution rates.

Key words: *Optimization, Waste Retribution, Waste Management, Local Revenue and application.*

Introduction

The city of Bandung as one of the cities that has experienced a rapid increase in population and is currently facing various social problems as a result of an imbalance between the population in an area with limited land and the potential of the area it has. Optimal waste management is a major challenge that is now faced by almost all major cities in Indonesia, especially the city of Bandung. The increasing population has resulted in an ever-increasing quantity of waste being generated, which must be followed by optimal management so that the waste problem does not cause environmental damage and a decrease in the quality of public health. The community waste generated in Bandung is currently projected at 1,549 tons / day with the total population in 2014 of 2,748,732 and garbage transported to the Waste Final Processing Site (TPA) is recorded at \pm 1100 tons / day, with the composition of organic waste at 57% and inorganic waste at 43% (JICA Final Report 2010).

One of the efforts of the Regency City government in addressing the problem of solid waste generation is to use WASTE BANKS in strategic locations such as Primary Schools, Middle Schools, Neighborhood RTs, RWs, and Villages. Waste Banks are places where the community can dispose of used goods such as plastic, bottles, iron, and other dry waste which are saved in the Trash Bank but they must make monetary payments for doing so. The results of the collection of bank waste can be made / recycled into useful items such as Bags, Flowers, Tablecloths, and other art items that can be marketed to the public. From the results of the sale of goods from the garbage the community or students who have provided trash can be paid, with the money able to be used to buy other necessities.

The concept of a waste bank in Bandung has begun to be implemented by the community at the RT and RW scale. Only the problem of guidance and management has not been integrated with the program in PD Pembersih.

The mechanism of waste management from waste sources is not yet optimal in place of garbage disposal. While integrated, lack of allocation of the TPS in the housing area, causing waste dumping at some temporary disposal points. In addition, the location of the TPS is poorly maintained so that the damage and order generated tend to interfere with the aesthetics of the city. Here are the locations where the TPS are spread in the city of Bandung.

To manage waste in Bandung City, PD Cleanliness conducted a variety of innovations, among others with a waste bank were, composting, biodigester, bioconversion with maggot, and so forth, so that the waste disposed of in the TPA was reduced. For this reason, a substantial cost is incurred considering the large volume of waste capacity and the cost of fuel oil (BBM). One way to compensate for this is to increase company revenue from the billing sector. The identification of problems in this study are as follows:

1. How is the management of waste retribution in Bandung City?
2. How is the original regional income in the city of Bandung?
3. How big is the effect of optimizing the management of waste retribution on local revenue in the city of Bandung?

The purpose of this study is to find out:

1. Management of waste retribution in Bandung City.
2. Local revenue in the city of Bandung
3. The effect of optimizing the management of waste retribution on local revenue in the city of Bandung.

Literature

Garbage is material that; has no value, or is not valuable for ordinary or primary purposes in manufacturing, or defective goods in manufacturing, or excess material, or rejected or discharged materials (Ministry of Environment, 2005). In Act No. 18 concerning Waste Management, it is stated that the definition of waste is the remainder of human daily activities and / or from solid natural processes. Waste Management is a systematic and continuous activity which includes waste reduction and handling (Ministry of Environment, 2007). Garbage is a material that is wasted or disposed of from sources of human activity or natural processes that have no economic value (Suprihatin, 1999). Meanwhile, Radyastuti, 1996 (in Suprihatin, 1999) states that waste is a resource that is not ready to use.

Garbage is something that is no longer useful, discarded by its owner or the original user (Tandjung, 1982 in Suprihatin, 1999). The government is responsible for the adequate collection and disposal of waste from the settlement, however, because there are other things that must be prioritized in the development of the region, and the lack of supporting funds for the operation of solid waste management, making in some areas this waste management activity is not as expected.

Waste sources based on Tehobanoglous et al., (1993), can be classified as follows:

1. Resettled Regional Resources.

Garbage in residential areas is sourced from households, apartments, dormitories and so on. Types for this area include food waste, paper, cardboard / cardboard, plastic, cloth, leather, haircuts, wood, glass, cans, aluminum, iron, special waste leaves (including bulky waste, garden waste, electronic goods, batteries, oil, tires), household waste containing b3.

2. Commercial area

Commercial area waste comes from shops, malls, markets, restaurants, office buildings, hotels, motels printing, workshops, and so on. The types of waste for this area include paper,

cardboard, plastic, wood, food scraps, glass, iron, special waste (including bulky waste, garden waste, electronic goods, batteries, oil, tires), b3 waste, and so on.

3. Institution

Institutional waste comes from schools, hospitals, prisons, government offices, places of worship, and so on. This type of waste for institutions is the same as the type of waste in commercial areas.

4. Construction, restoration or demolition of buildings

Garbage where construction, restoration or demolition of buildings is sourced from areas of construction, road repairs and so on. Types of waste that are among others, wood, remnants of tire material / residual material, and so on.

5. Urban services

Garbage from urban services is sourced from street sweeping (sidewalk cleaning), garden fields, beach cleaning, recreation areas, and so on. Types of waste that exist, among others, tree branches, leaves, paper, wrapping paper, cigarette butts, and so on.

6. Industry

Industrial waste sourced from industrial industries, light industry, factories, and so on. The type of industrial waste depends on the book material used, non-industrial waste including the rest of the paper food, garbage.

Research Methode

The method used in this research is descriptive method. "Descriptive method is a method used to describe or analyze a research result but not used to make broader conclusions". According to Sugiyono (2013: 3), descriptive research is as follows: "Descriptive research is research conducted to determine the value of an independent variable, either one variable or more (independent), without making comparisons, or linking one variable to another".

According to Moch. Nazir (2011: 54), the descriptive method is: "The study determines the facts with the right interpretation which includes studies to accurately describe the properties of several groups and individual phenomena and studies to determine the frequency of occurrence of a situation to minimize bias and maximize reliability.

This descriptive method is a method that aims to find out the nature and deeper relationship between the two variables by observing certain aspects more specifically to obtain data in accordance with existing problems with research objectives, where the data is processed,

analyzed and processed more continued with the basis of the theories that have been studied so that the conclusions can be drawn.

Descriptive research activities involve the collection of data that is used to describe the characteristics, elements, characteristics of a phenomenon usually in the form of quantitative / table or qualitative.

Results and Discussion

The problem of managing Bandung city waste retribution according to the author consists of several factors. The first factor is the problem of the payment mechanism. There are still many groups who are obliged to pay fees that do not pay retribution as they should. This can be seen that during the 2015 billing period, the amount of billing evidence issued was 98,700 pieces, 83,080 collected retribution sheets, while 15,620 uncollectible levies (Jamaluddin, 2016).

In addition, if we examine the distribution of the executing billing apparatus, it turns out that it is not comparable to the amount of compulsory payment of fees (Jamaluddin, 2016) so that PD Cleanliness in the city of Bandung tries to cooperate with the private sector but the results have not been maximized.

Based on data from the PD Cleanliness report in Bandung City in 2015, the amount of revenue reached 97.07% (PD Cleanliness of Bandung City, 2015) from the target set. This number looks quite ideal, but in reality PD Cleanliness in Bandung also receives subsidies from the city of Bandung for Rp. 88,806,000,000. This means that even though the revenue target is almost 100%, the cost of expenditure is not comparable to the revenue because the PD Cleanliness in Bandung City still needs subsidies from the government.

Another factor according to the author is the retribution payment rate. In an article written in Kompas (Ramdhani, 2017), Mayor Ridwan Kamil said, that the rates for the group to pay for housing groups were disproportionate. This is because the number of people per family is not included in the payment count. This means that for a family of 7 people, the family will pay a retribution rate of the same amount as a family of only 3 people. According to the City of Bandung Perwal in 2013 alone (Mayor Regulation of Bandung No. 316, 2013), the class of residential houses was only divided based on electricity, land area, and building area.

Based on the problem analysis section, a solution is needed so that the problems presented in the section can be overcome. In this case the researcher proposes an integrated system built with web and mobile based information technology. Web and mobile-based information systems are chosen by researchers because of the ease of accessing them so that all groups are

obliged to pay fees and PD Cleanliness in Bandung City itself can easily monitor the management of waste retribution rates.

To optimize the payment of waste retribution researchers designed the waste retribution application so the user can see the bill first before making a payment. Data on the travel tariff is obtained from the internal data inputted by the PD Cleanliness officer in Bandung itself. Meanwhile, individual data such as heads of families, companies, or industries are obtained from data in the city government of Bandung.

In the current business process, the public can pay garbage fees through the private sector. This process can be done, but is not directly involved in the business process of this system. In this process, after the private sector receives payment from the community, the private party hands over to the PD Cleanliness of the city of Bandung. PD Cleanliness of Bandung City only then made payment inputs to this system.

Group data input, along with criteria and tariffs that must be paid by the offender, must pay garbage fees. With this feature, if there are future tariffs and criteria adjustments, it will be easy to do. To facilitate supervision and monitoring, the PD Cleanliness of Bandung City must be able to monitor the tariffs of the actors who are obliged to pay garbage fees either paid or unpaid. The tariff for waste management services is in accordance with Perwal 316 Year 2013 as follows: Description: DL = Electricity; LT = Land Area; LB = Area of Image Building Waste Management Services Tariff, according to the Regulations of the Mayor of Bandung Number 316 of 2013. From the results of the evaluation in 2015, revenue reached 86.30% of the 2015 revenue target with details of 70% of the Residential Category, 14% of the Commercial Category, 13% of the Informal Sector Merchant Category (PSI), and 3% of the Public Transportation Category.

Conclusions And Suggestions

This research aims to analyze the problems faced by PD Cleanliness in Bandung city, with a solution is needed so that the problems presented in the section can be overcome. In this case the researcher proposes an integrated system built with web and mobile based information technology. Web and mobile-based information systems are chosen by researchers because of the ease of accessing them so that all groups are obliged to pay fees and PD Cleanliness in Bandung City itself can easily monitor the management of waste retribution rates.

Based on the 2013 Guidelines on article 5 waste retribution (Mayor Regulation of Bandung No. 316, 2013), there are 5 groups obliged to pay for waste management services, namely the Residential Class; Commercial / non-commercial; Social; Informal Sector Traders; and



Public Transportation. Each group has a tariff that has been specified accordingly with the garbage produced.

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