

Topic: Landfill Dashboard

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Problem Background

- All the information of every incoming vehicle and trash amount that they bring into the landfill is collected and stored in paper.
- Employees and landfill personnel do not know on a regular basis how much trash in yards and its weight in pounds is incoming to the landfill.
- Landfills in Puerto Rico are being closed down by the EPA and DRNA due to having excess capacity than permitted.
- In 2020, the newspaper Primer Hora reported that some landfills receive an estimate of over 500 tons of trash on a daily basis.
- Having a daily or at the moment progress report of the amount of trash that the landfill has received may help landfills adjust to the necessities that need to be taken care of before being pursued by the EPA and DRNA to cease operations.

Target

- The goal to be achieved by Wednesday, April 27th is that when information is requested regarding the amount of trash or other materials that enter the landfill it can be known at the time due to the automatization and ease of access of the data through a database and a dashboard with multiple other analytics.

Causes

- Lack of funding. Why?
- Lack of knowledgeable personnel for the required resources. Why? tradespeople
- Outdated methods. Why?
- Increased amount of landfill income per each available landfill without the required resources available to monitor actual capacity. Why?

Countermeasures

- Inform municipalities and citizens of the importance of the proper maintenance of landfills and their negative effects if not done properly to ensure proper funding for the future.
- Recruit and hire people with the proper knowledge to work on technology and software related to improving systems related to data and information processing.
- Reevaluate methods of operation and determine modern and more effective ways of managing information.
- Provide landfills with the necessary tools and equipment to have a higher processing rate of information for the increase incoming of incoming resources and materials.

Check/Evaluate

- The project’s success will be determined by factors such as continued growth of the platform in terms of usage by the landfill, reduction of handwritten information that need to be processed manually and
- The project’s failure will be determined if the information stored in the platform does not match or does not go along with manually revised data.
- Evaluate an experimental period in which both methods, the dashboard and manual processing, are ran simultaneously to confirm the project’s effectiveness and usefulness.

Act/Standardize

- To ensure the success of the project, it shall be standardized in other landfills to maintain and acquire a global record of statistics regarding the volume and amount of trash that is being deposited.
- This platform could also be utilized for anything that has to do with incoming loads of materials or similar products, like recycling centers or construction materials facilities.