We are Saving Today's Environment (WASTE)

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Abstract— WASTE – WE ARE SAVING TODAY's ENVIRONMENT. It Is an app in which we going to deal with daily wastage problem in clear & simple manner or way. Keywords—INTRODUCTION, IDEA, RESEARCH, PROPER PLAN, BUDGET, MANAGEMENT TECHNIQUES, RESULT& CONCLUSION, REFERENCES.

INTRODUCTION

In this modern era solution of everything is present there through internet or other modern things but what about daily wastage created by human or other individual activities. In Urban area this problem doesn't occur as they have their own waste management system but what about the non-urban and small-town areas as they do don't have proper management system, most of the times we throw normal wastage on the side of the road or at an unusual place, and one by one many of us also throw garbage on that place which leads to a huge collection of garbage waste by which there is an increase in many types of pollution.

In India it is most common condition i.e., like in Old Delhi, many UP BIHAR or other state districts including their village and town, Border areas like Haryana-UP border etc.

IDEA

By using computer science engineering, we can make an app which works with the government anti-pollution services or any other anti-pollution community by which every Indian or other county people can send or tell their problem of pollution(waste) by using videos, photos or other circulating product by giving their location. After sending all the information by the user, the next working part is from the ant-pollution community either private or government which works according to the given location as they are available or not, then they take their action to clean or solve that problem by sending their workers to that place or by using their own tool and machines.

RESEARCH

Solid waste management is the one thing just about every city government provides for its residents. While service levels, environmental impacts and costs vary dramatically, solid waste management is arguably the most important municipal service and serves as a prerequisite for other municipal action. As the world hurtles toward its urban future, the amount of municipal solid waste (MSW), one of the most important by-products of an urban lifestyle, is growing even faster than the rate of urbanization. Ten years ago, there were 2.9 billion urban residents who generated about 0.64 kg of MSW per person per day (0.68 billion tonnes per year). This report estimates that today these amounts have increased to about 3 billion residents generating 1.2 kg per person per day (1.3 billion tonnes per year). By 2025 this will likely increase to 4.3 billion urban residents generating about 1.42 kg/capita/day of municipal solid waste (2.2 billion tonnes per year)

A survey by the Energy and Resources Institute has found that almost 90% felt that improper waste management in India posed a moderate to severe health risk, most usual case is that 95% of human ignores all these types of garbage (waste) and by which we have very uncomfortable environment i.e., presence of toxic gases by waste leads to global warming or unhygienic places leads to different disease.

PROPER PLAN

A. Required Tools

- Programming Language – Java, Python
- Software – Android Studio
- Good Laptop and Internet Connection

We use these tools to make our app such as Java & Python need for program the app, Android Studio will be used for constructing the app as all the coding, font styles, adding different sections, background & many more all these things can only be edited on Android Studio.

Laptop, desktop or PC's we need this thing because without it we can't do anything AS Android Studio is an PC's app which run in computers. Without Internet we can't publish it to the World Wide Web and for smooth working of app we need an Internet connection as to handle information from different users.

After publishing the app, we will contact different private and government sectors of Waste Management and after they will provide their facilities to the user as they want either paid or free.

User will have their own profile on the app which will be finalized after checking it with Gmail Id or any other proof document like Aadhar Card, Pan Card, Driving License etc.,

User or Companies will also collect points from their help or work in waste management, at a certain point they can redeem them in form of coupons or cash.

Revenue for the app will be deducted from companies' payment i.e., 5% or from the donation of government sectors.

The app will also be linked to Social media platforms like Facebook & Instagram etc. and with the help of them we will promote our App, User and the Companies.

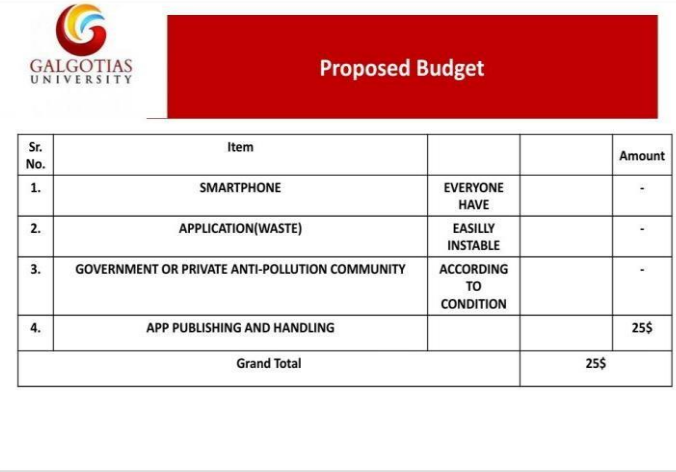
From the above picture we can understand that how the app works –

1. User will register in the app and willbe verified.
2. User will upload pictures and videos and give information of the area condition.
3. Government or Private Waste Management Sectors will check the area and after that they will take appropriate action for that area i.e., they will give the work to the company either Private or Government.
4. Revenue collection will be done after work has done and the app take his 5% money deduction and from it, app will provide coupons or cash to the user.
5. All the measures will be recorded in app i.e., the information given by user is correct and give the user promotion and if wrong the user will be terminated.
6. If information is correct and any sector or company come to do the work, their working style will also be measured. If the work is fine enough, they will also be promoted to fine working list otherwise they will get demoted i.e., their review will be marked as bad and they will not present in recommending list.
7. All the work will be posted regularly on social media platforms like Facebook & Instagram etc.

BUDGET

This Budget includes:

i. App making
ii. Software & Hardware Used
iii. Sectors & Companies Support
iv. App Publishing & Handling



Sr. No.	Item			Amount
1.	SMARTPHONE	EVERYONE HAVE		-
2.	APPLICATION(WASTE)	EASILLY INSTABLE		-
3.	GOVERNMENT OR PRIVATE ANTI-POLLUTION COMMUNITY	ACCORDING TO CONDITION		-
4.	APP PUBLISHING AND HANDLING			25$
Grand Total			25$	

MANAGEMENT TECHNIQUES

1. Introduction to Solid Waste Management:

   i. Collection including storage, transfer and transport.

   ii. Disposal, including any accompanying treatment.

The collection operation can be sub-divided into two-unit operations, collection and haul. The collection operation consists of removing solid waste from the storage point. The haul operation includes the total round trip travel time (for the vehicle) form the collection route to the (waste) disposal site.

Three alternatives are normally considered for solid waste disposal:

a) Direct Shipment from municipalities to a sanitary landfill.

b) Direct Shipment from municipalities to a transfer station where solid waste is transferred to larger vehicles and then shipped for ultimate disposal.

c) Direct Shipment from municipalities to an incinerator where the solid waste is burned and the residue is shipped for ultimate disposal.

Solid waste management requires an assessment of many complex interactions among transport systems, land use patterns, urban growth and development, and public health considerations.

2. Method of Handling Solid Waste:

a) Solids, semi-solids, some wet materials, sticky, or tarry substances may be handled by front end loaders or buckets.

b) Viscous liquids may be pumped by special pumps.

c) Liquids are handled by normal pumping equipment.

d) Packages may be handled in cartoons.

e) Some materials are handled in fiber-pack drums.

3. Salvage and Recovery of Solid Waste:

Many experts feel that only lasting solution for the solid waste disposal problem lies in recycling and reuse of waste:

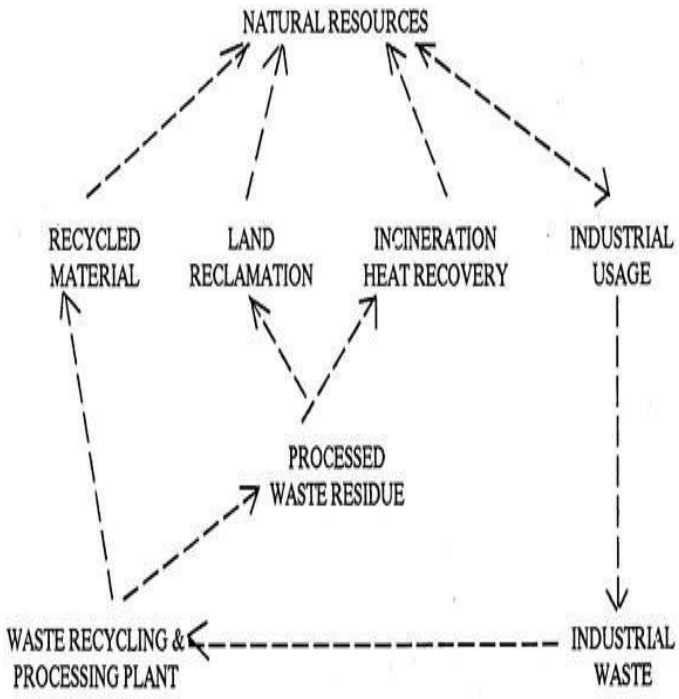


Fig. 33.3. Recycling industrial waste.

Waste processing has the following advantages:

i. Added revenue

ii. Less waste to disposed of.

iii. Less transport costs of waste.

iv. Processed residue waste is put into a form which make it suitable for land reclamation.

Steps involved in salvaging and recovery:

i. Receiving the raw industrial waste and conveying it to a salvage separation area.

ii. Separating the salvageable materials from waste materials to be further processed.

Ferrous and non-ferrous materials can be separated using magnets, cardboard and paper products can also be removed and placed onto the paper salvage conveyor for entry into the paper processing system.

iii. Unsalvaged waste residue is conveyed to the main pulverizer unit.

iv. Compaction system is employed to compact the pulverized residue for disposal.

4. Process of Solid Waste Management:

a) Solid Waste Utilisation:

The developing world cannot afford to waste money. By making good use of solid waste a developing country like India can reap many benefits, for instance

i. The direct or indirect use of waste contributes to economic development.

ii. Waste use creates job opportunities.

iii. Integrated waste poses environmental hazards by transmitting disease and creates air and water pollution.

iv. Waste utilization helps to produce many useful products that are basic necessities of life.

Resources recovery or waste management is available through three strategies:

i. Reuse i.e., the given item has multiple uses.

ii. A recycling that is part of the waste is found to be used in a different way than it was originally used.

iii. Recycling which means to separate the materials from which a given product is made and to return to the production cycle of the same product.

b) Recycling and reuse of solid waste:

Recycling helps reduce the risk of waste disposal. Recycling is a way of using waste into resources that get used products - both material and energy. As waste costs are expected to rise steadily as a result of rising land prices, and pollution control, resource recovery has become more common and gaining greater favor.

About 70% of the weight of municipal waste from domestic and commercial areas burns. However, only a small percentage of resources are still available.

In some municipal solid waste treatment plants, combustible materials are separated from non-combustible materials. Flammable substances are burned and burned in auxiliary boilers or industrial boilers as a primary fuel or as a supplement to fossil fuel. This type of solid waste processing operation is known as a waste-based fuel system (RDF), RDF is used to add other fuel sources at a rate of 20% RDF to 80% soils fuels.

It was reported that 29 RDF systems were operated in the USA to generate electricity in 1983. It processes 1250 tons to 18,000 tons of litter per week. Incineration and RDF technology seem to be at odds over cost. Plastic waste or garbage should be

collected from consumers or picked up on the way from customers to municipal refuse site

5. Consideration for solid waste management:

The major considerations for solid waste management are:

a. Public health,

b. Waste disposal for recycling, and

c. Restoration of power.

A. Public Health:

Under warm and humid conditions, and especially with the help of vectors (carriers) such as water, air, food, rats, mosquitoes and flies, solid living debris is an ideal breeding ground for pathogenic organisms.

Hazardous substances such as solvent and pesticide cans, medical waste and asbestos debris present in solid waste, air pollution from gaseous gases and particles from landfill sites and municipal burns, etc.

In addition, solid waste management strategies should also address groundwater quality degradation due to landfill of solid waste, residues from incinerators and leachates from decomposing refuse.

B. Waste Separation for Recovery and Recycling:

Recovery and recycling of resources in solid waste, even if the attractive concept is very difficult to practice. Expensive materials such as other metals have been found to be cost-effective for industrial use. Recyclable bottles and recyclable cans can be recycled from municipal waste.

The separation of waste source is allowed and only occurs when recycled items find a suitable market. However, this concept of resource allocation is gaining increasing attention in other developed countries due to declining waste disposal, economic incentives, improved recycling markets, environmental concerns and political will.

C. Energy Recovery:

Energy recovery from municipal waste can be achieved in the following two ways:

(i) Solid waste can be burned directly in a incinerator or converted into efficient “refused drive fuel” (RDF). The decomposition of pyrolysis and organic anaerobic in solid waste is another available method of recovering solid fuel waste.

(ii) Reusing of solid waste is another major energy saving method. Clearly, mining and the manufacture of stainless steel from the use of iron ore have so much power that the use of these metals is certainly appropriate from the energy conservation area.

6. Recycling of Waste Materials:

Crushing of materials:

- Thermal decomposition of waste organic in the form of gas and oil getting food sources such as livestock from organic waste.
- Melting plastic and moulding.
- Melting blast furnace slag for making artificial jewelry converting waste in solid fuel.
- Compositing garbage and using as manure.
- Using refuse for landfill

Materials products made from waste:

- Water work silt.
- Red mud from Aluminum industries.
- Sugar industry waste
- Agricultural waste: Paper, paper board, coconut, arece-nut, cashew-nut, fly-ash.
- A tonne of solid waste processed by pyrolysis is believed to produce as much energy as one barrel of oil. The city of Baltimore reportedly used a commercial site in 1975 to produce 4.8 million kilograms of steam daily from low BTU electricity generated by the municipal solid waste pyrolysis.
- As many as 357,000 barrels of oil were stored annually, in addition to the proceeds from the metalworking and the adjoining glass for sale and for the construction of canoe racing and street construction. The economic viability of a complete commercial pyrolysis site is still undoubtedly proven. The advantage of pyrolysis is that it produces energy that is easy to use and mobile.

7. The Need for an Appropriate Waste Management Program:

In order to successfully implement an effective waste management plan, it is necessary to have a comprehensive approach to this problem. This could mean conducting a public awareness campaign, setting up a series of recycled plastic waste, heaters or recycling units.

Instead of launching campaigns like “Ban Plastics” or “Use No Plastics” we should educate people to spread the word to avoid bad waste disposal practices in the community. We must have "Ban Littering" campaigns and "punishment for the Litters".

In any of these campaigns or the establishment of disposal schemes, the participation of Government, industry and civil society is of paramount importance. In this case, it would be good to consider the establishment of model cities for the garbage disposal system in large areas of plastic use.

The plan must include waste disposal, collection, segregation, processing and recycling, in addition to public awareness campaigns on waste disposal practices and compliance with scientific disposal programs. The plastics industry has to contend with this concept in order to give it a final say. These cities will serve as role models for others. We can also take an idea from the Western world about mechanical management and disposal systems.

Another thing that needs to be considered is the establishment of a recycling product development center and a scientific waste management system, which can be a center for recycling and recycling of plastics. Because once we have shown the way to people in the industry how to create a profit to make a different product from waste, the magnitude of the problem can be greatly reduced. Polymer manufacturers including GAIL can extend their industry support to this.

Another important issue for the industry to consider is the destruction of plastics. This is going to be a real challenge for the scientific community and any breakthrough in this field could be of great help to the plastic industry.

It is appropriate here to quote an interesting fact from a report in a study published by the International Energy Agency, in Paris on the release of carbon di oxide. According to the study, CO per capita, emissions are 0.91 MT in India. It is 20.46 MT in the USA and surprisingly high at 63.11 MT in Qatar, a small country.

The global average is 3.88 MT. indeed, we are far ahead, compared to other countries. There is a tremendous amount of protection in our environment when we take precautionary measures in place. Environmental issues must be addressed with the right perspective by bringing technology to our Environmental Management Strategy. It wants as much attention as our business.

8. Solid Waste Management in Developing Countries:

The protection of health and the environment through the proper management of solid municipal waste is beginning to gain importance in developing economies (DCs). Unregulated and improper management and disposal of solid municipal waste and wastewater sources are major threats to public health and environmental quality in DCs.

While these risks are very real, pollution control and environmental improvements have historically been marginalized at most DCs, while government policies emphasize industrial development.

Recently, however, environmental quality in many DCs has declined to the point where it can no longer be ignored. The result has been a great deal of concern and intensification in efforts to find and implement ways to reverse the deterioration and to enhance the quality of the environment to an acceptable level.

9. Disposal of Hazardous Waste:

Important sources of commercial hazardous waste such as:

(i) Hospital injections or anatomic waste, harsh chemicals, such as liquid or synthetic chemicals, outdated and contaminated drugs or other substances,

(ii) Industry - Typices of treatment options and

(a) Chemical and physical therapies - the distinction of amazing alcoholic beverages, detoxification, natural reactions.

(b) Therapeutic therapies include physiolysis and incineration pyrolysis used infrequently. The main advantage is that the volume of the smelling particle that has to be cleaned badly so that the time it passes the decomposing gas and the lungs is a great experience for the residue to continue. Competing in the effort is a gas used as a gasoline gas where in most cases a direct fire ion is prepared.

(c) Disposal is the only disposal method in which an item cannot be damaged by fire. Soil disposal is done by underground dumping or underground sealing system should be the mainstay to prevent rainwater infiltration into the depths and contamination of groundwater by planting plants C snatching combined with layers of water pipes and mineral layers and melance surface and bar.

RESULT & CONCLUSION

- By this activity we would see a change in our social life's, the environment around us will be clean and we can use that hygienic places for different useful purposes.
- This app will go to the many section of the society, small to big everywhere, where people would like to check whether they get their requirements met near them.
- This will help them to save their time and cost.
- This app will rank different workers/companies according to the reviews and ratings given by the users, this will motivate them to provide good service.

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