

SPRINT DELIVERY 3:

- **FUNCTIONAL REQUIREMENTS**
- **CUSTOMER JOURNEY**
- **DATA FLOW DIAGRAM**
- **TECHNOLOGY ARCHITECTURE**

Smart Waste Management System for Metropolitan Cities

IBM PROJECT ID : [IBM-Project-27774-1660065289](#)

IBM TEAM ID: PNT2022TMID28453

Functional Requirements

Objectives :

The main objective of the smart waste management system is to develop a new type of waste management in government and individual waste treatment industries to gather waste material for the purpose of recycling and disposal of human waste products, electronics, medical to be disposed safely with usage of multiple modern developed web based user management and IOT devices based on the garbage bin

End result :

The garbage bin consists of IOT devices at the top and bottom of the garbage bin which helps to analyze the weight and the amount of space in the dustbin which helps the worker and the waste management to acquire data of waste products dropped by people at individual location in order to maintain and collect and cover a vast area of the city with the report given by the garbage bins .

Focus :

The customer or the person who proceeds to drop waste in the dustbin must notify the type of waste that was dropped , The method will help prevention of liquid matter which is dropped which may cause damage to the IOT Devices in bottom , Since the specification is known only to the Smart city management team , they must advise the worker to conduct a journey to analyze how people drop their waste based on their activities which help the worker to advise the customer to be aware of the device inside the dustbin.

Essentiality :

The IOT device must send data to the Smart city waste management team in order to check the level of the dustbin space and the area location where it currently moves , it must send indication level time to time for filling of the waste products ,the localized dustbin may vary from small dustbin to bigger truck as the IOT devices may be eligible for both of them

Types :

The dustbin distributed in all areas of region of the city and , the dustbin will minimize the amount taken to manage by the customer , it varies from individual dustbin to Business development area manageable area dustbin where raw materials calculated and disposed easily and safely and , service will be in both customer and to medicals units in allowance of the customer . The dustbin manages all types of units and waste products which the IOT helps the manage the space and indication of another in case of full of the one's dustbin which customer allocate another dustbin to provide service to area within the fraction of seconds.

Customer Journey Map



OTHERS

LARGE HOUSEHOLD APPLICATION



SMART WASTE MANAGEMENT SYSTEM

PHASE 1



CONSUMER DROPS OFFICE AND IT WASTE

PHASE 2



TRANSPORT TO RECYCLING PLANT

PHASE 3



REPAIR, REFURBISH

PHASE 4



5% TSDF- AFTER RECYCLING AS PER GOVT. NORMS

PHASE 5



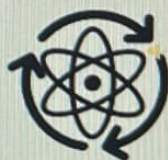
COMODITY MARKET



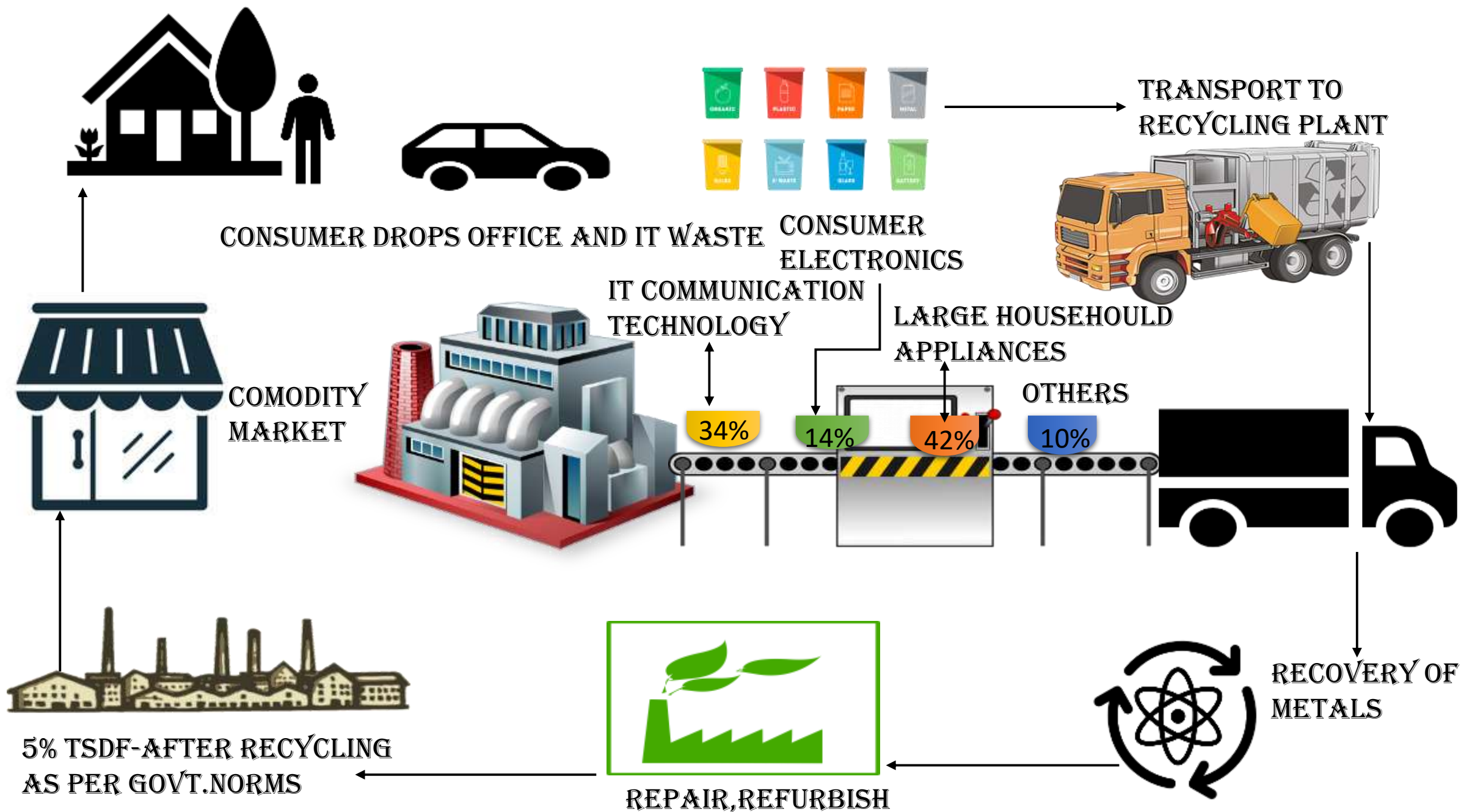
IT COMMUNICATION TECHNOLOGY



CONSUMER ELECTRONICS



RECOVERY OF MATERIALS

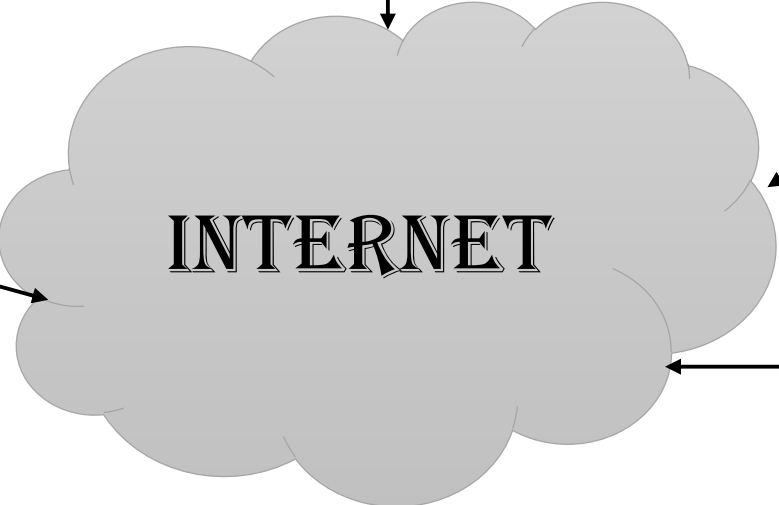


**DESKTOP APPLICATION FOR JUDO MATCH
PROCESSING AND SYNCHRONIZATION**

**CLOUD STORAGE AND
PROCESSING**



**MOBILE APPLICATION FOR
RECORDING JUDO MATCH DATA**



WEB SERVER STORAGE