

Project Design Phase-I - Solution Fit Template

Project Title: smart waste management in metropolitan
Team ID: PNT2022TMID45392

Explore AS, differentiate		
1. CUSTOMER SEGMENT(S) <div>CS</div> Government and corporates managing the public	6. CUSTOMER CONSTRAINTS <div>CC</div> <div><div>✓</div> Indicating the waste level</div> <div><div>✓</div> Alerting through buzzer system</div> <div><div>✓</div> Low power requirement</div> <div><div>✓</div> User portable</div>	5. AVAILABLE SOLUTIONS: <div>AS</div> <div><div>•</div> Recycling - it has economic and environmental advantages.</div> <div><div>•</div> Incineration - This disposal process can be a source of air pollution.</div> <div><div>•</div> Landfill - significant cause of health and environmental problem Example: gas from these landfills is often incredibly dangerous</div> <div><div>•</div> Biological Reprocessing- the ends of the stock is natural gas, which is used to produce heat an electricity.</div> <div><div>•</div> Animal Feed - one of the ecological types of waste</div>

Identify

<p>3. TRIGGERS</p> <p>The amount of waste generated by an incident affects decisions regarding how to manage the waste, including the storage, treatment and disposal of the waste.</p> <p>Available capacity is further limited if facilities still accept waste from daily activities during the incident response or choose not to accept incident-generated waste at all.</p> <p>TR</p>		<p>10. YOUR SOLUTION:</p> <p>SL</p> <p>To implement a smart bin built on a microcontroller based platform Arduino Uno board which is interfaced with GSM modem and Ultrasonic sensor which can gives the status of the waste present in the dustbin to the municipal authority.</p>	<p>8. CHANNELS of BEHAVIOUR</p> <p>CH</p> <p>ONLINE: Information about the level of trashes filled is indicated and the data is transferred to the control room for each bin including its specifications(GSM module).</p> <p>OFFLINE: Placement of bins in the main hubs of the cities, taking necessary action of discharging wastes by the municipals.</p>
<p>4. EMOTIONS: BEFORE / AFTER</p> <p>BEFORE:</p> <ol style="list-style-type: none"> 1. Improper management of wastes 2. Less control of public in waste disposal <p>AFTER:</p> <ol style="list-style-type: none"> 1. Efficient way of trash monitoring 2. Improvement in cleanliness and public hygiene 3. Quick action of emptying and refilling of bin <p>EM</p>			