Smart Waste Management System for Metropolitan Cities

Customer Journey

Team id:PNT2022TMID04566

SCENARIO	Entice	Enter	Engage	Exit	Extend
Browsing, booking, attending, and rating a local city tour	How does someone initially become aware of this process?	What do people experience as they begin the process?	In the core moments in the process, what happens?	What do people typically experience as the process finishes?	What happens after the experience is over?
Steps — What do the person (or group) typically experience?	Collect garbage; Separate Waste; Alert message send to control room; View details on trashcans; Download or login the web application; Monitor the filled level of bins; Update the sensed data to database; Workers are send to clear the bins	Separate collection and sorting; Expanding the recycling industry; Reliable collection and better landfill sites	Extensive Uncontrolled dumping; Prevention; Preparation of reuse; Recycling	Fully digital and easy infrastructure	They feel clean management system; Clean India
Interactions — What interactions do they have at each step along the way? ■ **People:** Who do they see or talk to? ■ **Places:** Where are they? ■ **Things:** What digital touchpoints or physical objects would they use?	All human produce solid waste; garbage bin overflows monitoring by the ultrasonic sensor	checking the status of sensor; sensing the level of bins	Website to monitor the trashcan; analyze status of dustbin	internet is necessary to use the web app; The device may send wrong information; feel easy to monitor the waste	it reduces the fuel cost for travelling; sensor can be damaged when collecting garbage
Goals & motivations — At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")	clean India; make waste free environment; protection of public health	development and improvement of clean technology; reduce recycle and to REUSE; create pollution free environment	the environment to support the economic development and superior quality of life; waste can be liquid or gases; each type has different methods of disposal	each type has different types of management; industrial, biological waste or organic and biomedical waste; its reduce the dangerous effect	a big part of waste management deals with municipal solid waste; well maintained area
Positive moments — What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?	become a smart city; enhance safety; reduce man power	effective way to keep the clean city; optimization of resources	quality control improvement and monitoring; exchange of waste; shipping to the point of use	reduce harm full waste water; zero waste; reduce the use of packaging material	protect the environment; increase the fertility of the soil
Negative moments — What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?	Jobless; increasing cost of the dustbin	soil contamination; water contamination; air contamination	human damage; harm towards animal and marine life	loss of habitats; in case of any short circuit; sensor affect by water	In case of any malfunction; some cloud warning issue
Areas of opportunity — How might we make each step better? What ideas do we have? What have others suggested?	smart waste bins; waste level sensor	AI recycling robots; garbage truck weighing mechanism	pneumatic waste pipes; solar powered trash compacters	E-waste kiosk; recycling apps	waste management program; sustainability development