Problem - Performance Monitoring of Septage Management in municipal areas.

Only one-third of the waste water generated by households is collected safely and only a third of it is treated. Households rely on septic tanks wherever a sewer network does not exist. These tanks need to be emptied once in 1-2 years. The septage is collected mostly by private contractors who are not regulated at the moment. Additionally, as there are very few operating sewage treatment plants (restricted to large towns), the collected septage is mostly disposed of in low lying areas leading to deterioration of health and environment. Even when some of the tankers actually reach the Sewerage Treatment Plants (STPs), sometimes they do not get emptied since STPs are not in a position to handle these additional volumes.

Description of the envisioned Solution:
The solution calls for safe and foolproof disposal of the septage in STP with accountability. The vehicles with the suction tankers need to have a tracking system. An example could be an electronic key to open the gate valve for the discharge of the collected septage to be operated by the STP Supervisor. It can be a simple mobile call based digital lock system. The mobile is dedicated and will have some voice command control of 1-2 Supervisors. The tracker then gets connected to the central control room of the STP and records the arrival and discharge of the transported septage.

Data needed to create the solution:
The GIS based information for the mapping of the septic tanks in the city and the frequency of emptying the tanks. The data base of the tanker operators, their vehicle details and mechanism to track the collection and disposal of septage. The mobile applications for the gate valve control discharging the tanker. An MIS to monitor the septic tanks in the city, their frequency of emptying and the collection and disposal by the contractors.

Intended audience and Device:
Municipal Corporation staff, which is responsible for this function; Tanker operators and Pollution Control officials.
Smart phone

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