IOT - SMART GRID

**PROBLEM STATEMENT:**

High consumption of electricity is one of the major problems faced in every household. They are faced with high electricity bills. Due to negligence of individuals in every household, a lot of money is being wasted by the government for the generation of electricity.

**SOLUTION:**

It is important to make people aware of where the electricity is being wasted. Smart sensors can be employed at households to monitor the consumption of electricity by individual devices on a real time basis. This will help the users understand which devices are consuming the highest power and allow them to monitor and prevent unnecessary usage. This can also be implemented in all public places like parks, temples etc. Sensors can be used to prevent lights from switching on when people are not present at home. Monthly bill statements will have information on the wastage of electricity.

Business intelligence solutions:

* Public places will have monitors where people will be able to see how much energy is being wasted in the city and which devices are causing maximum electricity consumption.
* Making people aware will help them realize the mistake and use electricity with caution.

**ROLES**

* Household (Individual)
* Network of households
* Public places networks
* City wise electricity monitoring board
* Nationwide monitoring of electricity consumption

**CHALLENGES**

* City wide implementation of sensors in each household
* Monitoring of excess electricity consumption from feedback of sensors should be uniformly scaled.
* Performance of sensors is critical to the data being collected and monitored.