Project Title:

Development of smart office functionality for sustainable office facilities

Project Manager:

Project Description:

To integrate IoT physical devices (devices, sensors, actuators) through implementation of gateway connection for data analyzing and processing that will be stored in cloud or database so that every employee gets access

Objectives:

To ensure a smart office environment by assuring less energy consumption via monitoring and controlling, by creating healthy atmosphere, by meeting cost savings goals and fostering company's efficiency, by enhancing employee's productivity and lastly by reducing excessive man power on site through integration of IoT technology along with installations of HVAC, Raw power systems

Product Description:

- Devices and lights in areas of the facility with no staff present are automatically switched off.
- To not interfere with the staff's needs, the system should know whether staff is present by using data from the card based access system and employee presence data.
- Test equipment must have shut down routines where applicable
- Employees must be able to make use of exceptions (e.g. for test runs over night or updates)
- Past data must be used for shutdown decision (e.g. regular updates or overnight test runs)
- A process to make future expansions work with the system must be implemented
- Monitoring and controlling of average power consumption will be accessible through a personal dashboard from off-site
- Integrate HVAC systems in central equipment room having temperature changing option which will give fresh air and comfort by providing remote access

Constraints:

sudden change in product requirements
higher operational costs

Assumptions:

The facility is equipped with an ID-card based access system
The project has access to employees' presence data
Usage of UPS system when RAW energy source gets failed
or As an alternative, DES (distributed energy systems) will be used as a power supply source during daily electrical overloads

Country of deployment is Germany.