SAP Leonardo IoT for the Intelligent Enterprise

IDEATION CHALLENGE (Energy and Resources)

Dear Bob Caswell

Mr Phillip Solar once conceived to setup 50MW solar project in his available 100Hectares of land. He planned to buy 200W panels of 5000 numbers each for 1MW of power production totalling around 250000 Panels.

He appointed an organization to setup the solar production unit in his 100 hectares of land spread over 5 different places with the required 25000 panels in total and also adequately required tens of tonnes of batteries.

But his project was not intelligent enough. He appointed hundreds of man power to maintain the plants, hundreds of thousands of solar panels and tonnes of batteries.

But he did not achieve the profitability as much as promised to him by the project advisors.

Now his total team of professionals had to go to each panel and each battery to check the performance almost every day.

This process killed almost all his profit of power generation and even touched bank balance sometimes.

He was worried that he did not plan efficaciously and he started to looking for advice.

Fortunately, he met an SAP Leonardo IoT architect, Mr Manyam who changed Mr Phillip Solar's life from then on.

How he managed to change Mr Phillip Solar's life is the actual story which follows.

Mr Manyam with his expertise in IoT, SAP Leonardo and started his resolution without wasting time and came with a modifications to the plants with the technologies like SAP Cloud Platform, Sensor to be installed with each panel which collects information from the surroundings which detects changes,

records, indicates otherwise responds, and sensor which were installed with batteries. The sensors are efficient enough to communicate with the gateway, and backend systems.

Mr Manyam worked with Kaiserwetter who are already experts in renewable energy ecosystem to collect the data from sensors and analyse them.

The sensors will send different signals about Battery health, how much energy arrives at intervals and the quality of it. Also, the sensors installed with each panel also will transmit information like how much energy a panel produces in intervals.

All data from the sensors transmitted through the local gateways to the SAP IoT Platform, and SAP Cloud Platform.

This has been possible with the Device Management, Data Management

The special applications using ready to run SAP Leonardo IoT solutions analysed data and sent reports to adequate sites with required solutions like which panel doesn't perform up to the promised mark and battery information which is not efficient in storing energy.

Then the limited to a few number of professionals at each site managed to repair, change the panels and batteries asap so that the system produces maximum returns.

Hence Mr Phillip Solar finally cut costs by reducing his workforce to just about 10% and maximized his profit from just 10% up to 95%.

Now Mr Phillip Solar is a happy person thinking to utilize another 100 hectares of his land to produce solar energy and to help the ecosystem and green environment and his enterprise has become one of the most intelligent!

THANK YOU SAP LEONARDO IoT intelligent Enterprise!