

## **Team Prajjawala's Achievement at "Grand India Internet of Things (IoT) Innovation Challenge"**

The "Team Prajjawala", a students' team of IITBBS have developed a prototype after a tireless effort of 1.5 years by the help of Design Innovation Center (DIC). Initially, this Prototype has been presented before the Ministry of Petroleum and Natural Gas and a joint team of Oil Marketing Companies (IOC, BPCL, HPCL) and is being further developed for security and compatibility requirements as per the Ministry's feedback and suggestions. A paper on the topic is published in International Journal of Computer Science and Engineering by few members of this team.

Recently, the prototype has won the first prize out of 757 competitive teams in the prestigious "**Grand India Internet of Things (IoT) Innovation Challenge**" hosted by TATA-Communications and Confederation of Indian Industry (CII) where the evaluation of participating ideas and prototype were assessed by Industry experts on stringent evaluation criteria. The members of Team Prajjawala Mr. Rahul Mahanot and Mr. Rahul Kumar have received the honor on behalf of their team and are awarded with a cash prize of INR 5 lakhs in a grand event organized in Pune.

Some clicks of the lordly moments are here:



Jury Member of GIOTIC (From Left: Arvind Tiwary, Rajendre Shende, Anita Rajan, VS Shridhar, Rohit Srivastwa)



Team Prajjawala showcasing the Prototype



Team Prajjawala (From Left : Rahul Mahanot, Rahul Kumar)



Prize Receiving Moment



● Soumika M Das

A year back, six students from IIT Bhubaneswar had visited various slums in and around Bhubaneswar and other cities, including New Delhi, Chandigarh, Patna and Bengaluru. The visits had a purpose. They were talking to members of Below Poverty Level (BPL) households to ascertain whether the ambitious Pradhan Mantri Ujjwala Yojana was a hit or a miss! And, they learnt that most of the beneficiaries were not going for the subsequent refills after exhaustion of the free LPG cylinders. They weren't able to pay ₹800 at one time to get the cylinder refilled.

Besides, they had also gathered the CRISIL report which apparently present-

ed a similar picture. These students, thus, decided to solve the affordability and accessibility issues related to the free LPG cylinder scheme with the help of Big Data and Internet of Things (IoT). They designed a LPG tracker that would measure and track its consumption, helping the beneficiary to follow a pay-as-you-use system. They named this tracker Prajjawala.

Recently, Prajjawala was adjudged as the winner of India's first Grand IoT Innovation Challenge, hosted by Tata Communications and Confederation of Indian Industry (CII). The four month-long contest had 757 entries. Out of which, nine projects made it to the final contest at Pune.

The students who have made the prototype of the

## For a smart kitchen



LPG tracker are Niteesh Kumar, Rahul Kumar, Rahul Mahanot, Rishwant, Deepak, Mohinesh, Abhishek and Biswas. The prototype of the tracker is actually a trolley, fitted with sensors. "Only 60 per cent beneficiaries come back for refill at the rate of 3.6 cylinder refills per year. The BPL families spend ₹10 to ₹20 per day for fuel. Due to unavailability of LPG at smaller prices, these families opt for alternative cooking fuel like solid biomass," said Niteesh.

The students claimed that the problem unavailability of the LPG cylinders could also be solved using the tracker. "In most of the privileged households, the members keep an extra cylinder in the stock. If a tracker is made available to them, the users will re-

**“ Only 60 per cent beneficiaries come back for refill at the rate of 3.6 cylinder refills per year. The BPL families spend ₹10 to ₹20 per day for fuel**

— Niteesh, Student

ceive notifications on their mobile phones for refills on time. There is no need to keep two cylinders at home," explained Rahul.

Their biggest challenge in the project is to keep the price of the trolley low. The project was approved by Union Ministry of Petroleum and Natural Gas. A team of experts from the three major oil companies, IOCL, HPCL and BPCL had also reviewed the project. It will now undergo safety and compliance test.

