# **IOT: SOCITAL APPLICATION**

<sup>1</sup>Priyanka Gajjalwar, <sup>2</sup>Dr.D.V. Rojatkar <sup>1</sup>Student, <sup>2</sup>professor <sup>1</sup>Department of Electronics and Telecommunication Engineering chandrapur Government College of engineering Chandrapur, maharashrta.

Absract- Internet of Things (IOT), which is creating a huge network of billions or trillions of "Things" communicating with one another, they are facing many application and technical challenges. This paper are introduces the status and development in china, including policies, R and D plans applications etc. according to increasing demand of environment protection and management, a basic framework of the environment and internet of thing are presented. The structure of environment containing three main layer they are data collection and process layer, network layer and application layer.

Keywords-Internet of things, RFID, Cloud computing, Smart environment

#### 1. INTRODUCTION

The internet of thing contains the concept of ability of network devices to sense and collect the data from the world around us, and share the data across the internet where it can be processed and utilize for various interesting purposes.

Some also use the term industrial internet are interchange with IOT. This refers the primary to cumercial technology in the world of manufacturing.

The term internet of thing was containing by the industry researchers but has emerged into main stream public view only more recently.

# 2. APPLICATION FOR ENERGY MANAGEMENT

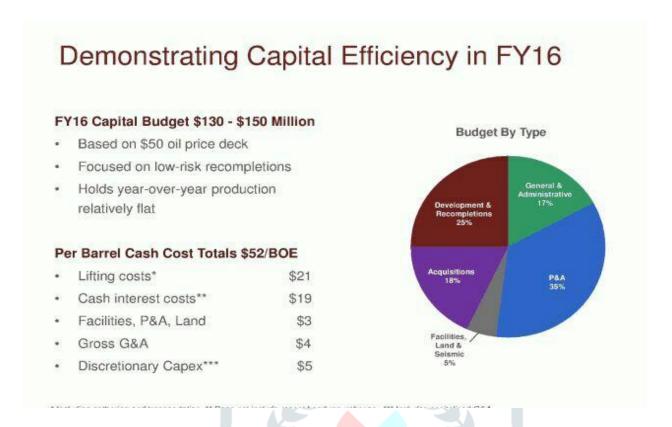
The power grid of the future will not only the smart enough but also highly reliable. The smart grid cThoncept is the very popular concept the basic idea of smart grid is collecting the automated fashion and analyzes the behavior. Analog signal for volume/mass flow rate X20AI analog input module for the analog measurement. The metering pulses for volume/mass flow rate are X20DC digital counter model for digital measurement pulses.

The meter reading for volume/mass flow rate X20CS interfaces the module with the integrated bus master for connecting up to 250 M-Bus slaves. Call us to know more about IOT enable energy management solution that integrated asset monitoring, tracking and maintaining. The features and benefits of IOT energy management: The all of this consumed energy is recorded using impact or compact X20 I/O modules. The following lists some of these modules as well as their features. The energy management module for electrical power X20AP energy measurement module for the reactive power, active power and apparent power. The current over natural lines. Records frequency and harmonics. The analog signal for volume/mass flows are X20AI analog input module for analog measurement signals that is flow rate.

# 3. ISO 50001 ENERGY MANAGEMENT STANDARD

The ISO 50001 energy management standard containing to the industrial facilities entire organization to managing the energy, commercial facilities. It including the all types of energy in ISO 50001 this system is establish the structure and discipline to implimenting the strategies that significantly cut energy costs and greenhouse gas emission. The saving can come from no-to lowcost operational improvements.

The digramaticaly representation of energy management system is given below:



## 4.SMART GRID MANAGEMENT

The power conditioning and control of the production and distribution of the electricity are important aspects of the smart grid [2]. The smart grid policity is containing the organization in Europe as smart grid european technology platform [3]. The roll of smart grid technology also implies a fundamental re-engineering of the electricity services industry although typical usage of the term is focused on the technical in structure.

A "smart grid" is an electrical grid which includes a variety of the operational and energy resources smart appliances and the energy resources etc [1]. The electronic power conditioning and the control of the production and the distribution of the electricity and important aspects of the smart grid [2]. The figure of grid management is given below:

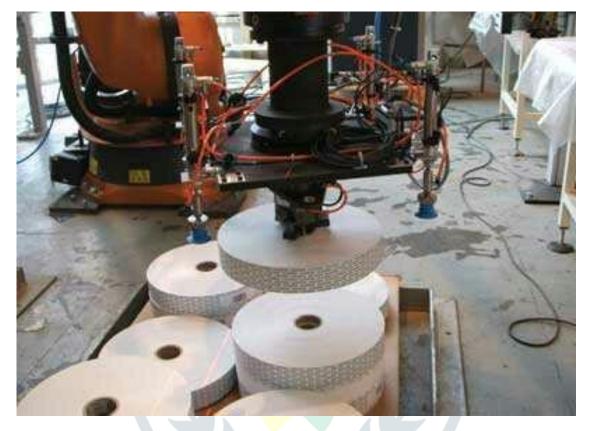
FIGURE 2. GRID MANAGEMENT



#### 5. IOT APPLICATION FOR INDUSTRIAL AUTOMATION

The Google's self driving cars are known to all the IOT is making connected cars a possibility but slowly. It is well established fact and any two technologies take at least a couple of years to propagate the mainstream automotive industry. This is way there is not such hype around the connected internet of things examples. The companies and startups all are announcing innovative technologies to support connected or platform. The figure of industrial automation is given below:

#### FIGURE 3. INDUSTRIAL AUTOMATION



# 6. SMART EMBEDDED DATA COLLECTOR

An EDC or Embedded Data Collector is at the heart of smart structures smart pile surety and structural management system.

The ultra rugged wireless design allows the sensor to be embedded into concrete during the pouring and curing process where is becomes a permanent part of the structure.

The smart piles EDC communicates wirelessly to the smart structures work station were data is collected aggregated and processed on site.

The smart pile sensor are use to measure the quality of concrete during curing. Transport and installation since the process is automated, it saves downtime during construction for surity, checking, and dramatically reduces pile damaged due to overdriving, and allows engineers reduce.

## 7. CONCLUSION

In this paper we introduced the novel concept of Social Internet of Things (SIoT), based on a sort of social relation-ship among objects, analogically to what happen for human beings. Currently, we are statically analyzing the structure of the SIoT network through simulations that model to the mobility of objects and their relationship. Preliminary result show that most of SIoT features are similar to those observed in social networks of humans. Based on the results of this analysis, we will investigate whether network navigability can be achieved in SIoT and we will identify techniques in the set up of social links that can improve navigability.

# REFERENCE

- [1] "Internet of Things Global Standards Initiative". ITU. Retrieved 26 June 2015. http://www.itu.int/en/ITU-T/gsi/iot/Pages/default.aspx
- [2] Santucci Gérald (2010). The Internet of Things: Between the Revolution of the Internet and the Metamorphosis of Objects. Forum American Bar Association.
- [3]https://hbr.org/resources/pdfs/comm/verizon/18980\_HBR\_Verizon\_IoT\_Nov\_14.pdf
- [4]http://www.internet-of-things-research.eu/pdf/Converging\_Technologies\_for\_Smart\_
- Environments\_and\_Integrated\_Ecosystems\_IERC\_Book\_Open\_Access\_2013.pdf
- [5]http://www.cisco.com/web/solutions/trends/iot/introduction\_to\_IoT\_november.pdf
- [6] http://cordis.europa.eu/fp7/ict/enet/documents/publications/iot-between-the-internet-revolution.pdf

