# Session Topic- Technologies to Accelerate Cost Effective Grid Modernisation

- Smart Metering
- Next Generation Distribution Automation
- Communication- How will it evolve?
- Technology for Loss (T&D) reduction
- Distribution Assets with communication facilities
- Use of technology for enhancing safety of Installations and Operations
- Block Chain for Utilities

### WHAT IS SMART GRID??

It is an electric grid that uses information and communication technology to gather data and act on information about the behaviour of suppliers and consumers in an automated fashion. Hence Smart Grid is a generic label for the application of computer, intelligence and networking abilities to the existing dumb electricity distribution systems.

## Utility of Two Layers

Control Room

Field Personnel for :

- Corrective Management of Network (Defect Management)
- Preventive Management of Network

#### Stakeholders - Aspirations

• 1. Distribution Utility. - Reliable and Efficient Operations

- Data Acquisition, Analysis

• 2. Consumers.

- Analysed Data

• 3. Regulators and

- Analysed Data

**Policy Makers** 

Value Streams – At the end of day, every data analytics project must stand on its own feet, based on value it brings to the enterprise.

#### **Business Characteristics**

Elements for Standardisation Decision:

- Long Life Cycles
- Network Diversity
- Adaptability to changes in technology
- Scalability

# Standardisation — When and Why????



n. kishor narang • 2nd

Technology Philanthropist; Innovation & Standardization Evangelist.... 11h

Smart City STANDARDIZATION- ICT perspective, the Curtain Raiser Event for The First International Conference on Smart Cities STANDARDIZATION in VARANASI on 10th December 2018. co-hosted by BIS & IEC



#### **Business Needs**

- Define Need
- Design and Deploy:
- Build Intelligence at Lowest Level in network for Defined objective
- Robust two way Communication can be a shared Service Provider
- Data Acquisition and Analytics can be a shared Service Provider

Deployment can be in phased manner specific to each Utility