Blockchain Technology for Energy Management

Boost productivity and exert more control over energy resources

Introduction

Distributed ledgers, or blockchains, are a type of technology that are seen to be disruptive and capable of upending established industrial paradigms. Distributed ledger technology, which was first applied to cryptocurrencies, is becoming more and more popular in the energy supply industry. This is because companies are realising that blockchains offer transparent, secure, and tamper-proof systems that can allow for adequate speed, security, and the potential to develop and implement smart contracts.

The energy management and smart contracts for micro grids, as well as the execution of energy supplies for electric cars without the need for a central authority, are the primary sectors where blockchain technology is either already in use or in the pilot project stage.

Objectives

This Blockchain for Energy Management training course's goal is to get participants ready for the cutting-edge technologies that are already upending a number of sectors and industries and are starting to enter others where they were either not anticipated to exist at all or were not being used to their fullest extent.

Participants in this Course N Carry training course will be capable of the following by the end:

- Utilise the current Blockchain infrastructure.
- Make good use of distributed ledger
- Determine whether smart contract and blockchain components are applicable to the energy industry.
- Recognise the takeaways from the case studies.
- Utilise Blockchain architecture to improve Energy Management security and transparency.

Training Methodology

We use multiple methods to equip students with the skills and knowledge. This includes online lectures, self-paced assignments, and exploration of case studies. Further, to help simplify the understanding of the principles, we use visual presentation. We also

conduct role-playing sessions to help students apply the knowledge to the real world.

Organizational impacts

Teaching the principles of Interactive Economics to your employees can help drive organizational growth and seamless operations:

- A short course that equips employees with skills for the real world
- Employees receive enhanced and economically driven decision-making skills
- Helps create better marketing strategies for higher sales
- Provides a competitive advantage by helping make calculated risks

Personal Imapct

Enrolling in this course can benefit you in the following ways:

- Gain a deep understanding of the relation between human behavior and finances
- Learn modern techniques to estimate market demand and prediction
- Attain leadership, adaptability, and decision-making skills
- Analyze and understand successful market strategies

Who should attend?

This training programme on Blockchain for Energy Management is intended for industry experts, however the following will be of great use to you:

- Managers, Section Heads, Supervisors, and Team Leaders
- Workers with a passion for blockchain technology
- Technical experts in the fields of engineering, production, and maintenance
- Supervisors of Projects
- CIOs, CTOs, and CESs

Course Outline

Day 1

Blockchain

- Overview
- Uses for Cryptocurrency
- Buildings
- Sites
- Domains of Utilisation

Day 2

Blockchain Characteristics

- Decentralisation and Blockchain
- Dispersed Ledgers
- A broad byzantine problem and consensus procedure
- Blockchain Block Configuration
- Security and Anonymity

Day 3

Smart Contracts

- Definition
- Transactions
- Code that is automatically enforced
- Features of an Intelligent Contract
- Energy Sector Smart Contracts

Day 4

Creating Applications for Blockchain

- Energy and Industry Digitization
- Blockchain Application
- Keepsake
- Calculation
- Interaction
- Patterns in Blockchain
- Code Creation for Smart Contracts

Day 5

Performance and Security of Blockchain

- Authenticity, integrity, and confidentiality
- How Blockchain Transactions Can Be Aborted
- Blockchain Latency Systems
- Modelling Performance
- Variations in Blockchain Transactions Included