National strategy on blockchain

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About Blockchain Technology

- Abstract Blockchain is an innovative distributed ledger Technology which was first introduced in the design and development of cryptocurrency, Bitcoin in 2009 by Satoshi Nakamoto.
- Blockchain is an amalgamation of various inventions, with a clear business value.
- Blockchain enables a shared ledger between the various parties involved in business transactions, which is going to act as a single source of truth.
- Blockchain eliminates the need for a central entity to validate the transactions.
- As it is based on peer-to-peer networks, all nodes would involve in validating the transactions rather than depending on a central entity.
- The data structure used in Blockchain Technology helps to maintain an unchangeable record of transactions in a time sequenced manner.
- So, Blockchain Technology improves transparency, immutability and efficiency aspects, which make it unique and potential to use in various application domains.
- Blockchain can be used in Permissioned and Permission less models.
- Permissioned model has applications in various domains such as healthcare, cyber security, Governance, media, logistics & hospitality, education, legal, energy, smart cities and so on.
- Globally and nationally various efforts are being made in implementing Blockchain based applications.
- PoCs and pilot deployments are successfully carried

out.

National level Strategy in Blockchain Technology

- In order to reap the benefits of the technology, there is a need for National level Strategy in Blockchain Technology.
- This document provides an insight on the strategies for metamorphosing Indian Blockchain ecosystem to make India as one of the leading countries in terms of harnessing the benefits of this emerging technology

Focusing on following aspects:

Technological Aspects

- Evolving a National Blockchain Infrastructure for hosting regulatory sandbox that can be used for building and deploying Blockchain applications.
- Fostering Research & Development to solve challenges related to interoperability, faster development and security.
- Deploying Production Grade Applications of National interest focusing towards providing faster, secure, transparent and efficient delivery of services to the citizens.
- Awareness and Capacity Building to ramp-up technology insight across various stake-holders including students, practitioners, management / executives, decision makers and so on.

Administrative Aspects

- Implementing appropriate legal and regulatory architectures including formulation of standards.
- Formulating policies and incentive models for academic, start-ups and industry for promoting and adopting Blockchain technology.

A look at *blockchain technology*

What is it?

The blockchain is a decentralized ledger of all transactions across a peer-to-peer network. Using this technology, participants can confirm transactions without the need for a central certifying authority. Potential applications include fund transfers, settling trades, voting, and many other uses.

How it works: