

# MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC - AUTONOMOUS)

## Report on Blockchain Technologies 9<sup>th</sup> April 2018



*Submitted by: Dr.R.Kalpana, Associate Professor, Department of CSE*

We the department of Computer Science & Engineering organized guest lecture on "**Blockchain Technologies**" for 3<sup>rd</sup> year CSE students. The resource person for the guest lecture is Mr.Krishna Kumar Director & Chief Technology officer- APJ Custom Development at SAPLABS INDIA.

The programme is organized in ME seminar Hall on 09.04.2018. The Programme started at 11.00 AM. Dr.R.Kalpana Asso. Prof/CSE introduced the guest to the students and then guest continued his session up to 3.00 PM.

The blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value.

Information held on a block-chain exists as a shared and continually reconciled database. This is a way of using the network that has obvious benefits. The block-chain database isn't stored in any single location, meaning the records it keeps are truly public and easily verifiable. No centralized version of this information exists for a hacker to corrupt. Hosted by millions of computers simultaneously, its data is accessible to anyone on the internet.

Blockchain technology is like the internet in that it has a built-in robustness. By storing blocks of information that are identical across its network, the blockchain cannot:

1. Be controlled by any single entity.
2. Has no single point of failure.

Bitcoin was invented in 2008. Since that time, the Bitcoin blockchain has operated without significant disruption. (To date, any of problems associated with Bitcoin have been due to hacking or mismanagement. In other words, these problems come from bad intention and human error, not flaws in the underlying concepts.)

The internet itself has proven to be durable for almost 30 years. It's a track record that bodes well for blockchain technology as it continues to be developed.

The blockchain network lives in a state of consensus, one that automatically checks in with itself every ten minutes. A kind of self-auditing ecosystem of a digital value, the network reconciles every transaction that happens in ten-minute intervals. Each group of these transactions is referred to as a "block". Two important properties result from this:

1. Transparency data is embedded within the network as a whole, by definition it is public.
2. It cannot be corrupted altering any unit of information on the blockchain would mean using a huge amount of computing power to override the entire network.