Book Review

The Truth Machine : The Blockchain and the Future of Everything, International Edition, Michael J. Casey and Paul Vigna, St. Martin's Press, New York, 2018, 320 pages, INR 1688.

The Internet and its digital revolution while connecting the masses have also exposed them to a problem: digital data replication. Any digital system can get hacked or compromised. Credit fraudulence enabled by digital data duplication has resulted in huge financial losses. Protecting financial data in digital world is a daunting task that financial institutions face. Internet as evidenced by the fiasco surrounding 2016 US Presidential Election is influenced by the monopoly of tech giants. The call of the hour is for a system that would on one hand, ensure digital privacy and on the other hand encourage open markets. In this book, the authors introduce a technology that when adopted can revolutionize the economy, reduce dependencies on institutions, and increase transparency: the block chain. Blockchain has the potential to eradicate the need for intermediaries/ institutions while transferring funds between a sender and receiver.

In this book, Michael J. Casey and Paul Vigna familiarises the blockchain technology and its potential to empower the user to control own data, assets, and identities; and provide billions with means to access global economy. The adaptation of this technology is expected to be viewed as disruptive innovation for financial, technological, legal and shipping industries. Authors' had previously collaborated on a widely read book about Bitcoins, which is one of the application of the technology under discussion here. Blockchain, according to the authors promotes decentralized processing. This book also goes on to detail the challenges in accepting blockchain in replacing the institutions that has been trusted for centuries. They also provide current snapshot of the industry and shows the need for 'permissionless' segment (like Bitcoin & Etherium) of the digital economy. They present blockchain as one that advances humanity forward despite the accompanying hurdles. They envisage blockchain as digital democracy with security protocols that can reduce consolidation of gatekeepers. This engrossing book.

This book is divided into eleven chapters including the introduction. Authors begin with an 'Introduction' in which they view blockchain as "A society- Building Tool". The choice of the chapter titles are indicative of the potential applications of the technology that forms the crux of discussion in this book. In the second chapter- The God Protocol, the authors points to the societal need for a "consensus on facts" and goes on to demonstrate the way in which blockchain can be viewed

as a truth machine. The second chapter titled 'Governing the Digital Technology' takes us through various instances to show the readers the privacy issues surrounding the digital technologies. The authors feel that the aspiration goal of Internet of "open data" can be made possible by blockchain. In the next chapter on "The Plumbing and the Politics" the authors surveys the 'frenetic pace of invention' seen in blockchain technologies. In this the authors familiarizes the readers with the 'Holy Grail for Cyberpunks'. This detailed chapter demonstrates how Blockchain, Etherium and Bitcoin operates. In the fourth chapter on 'The Token Economy', the book attempts to explain ways in which right design of this new economic system can help in the efficient use of our resources there by helping all prosper.

In the fifth chapter on 'Enabling the Fourth Industrial Revolution', authors dig deeply into how blockchain can reimagine the economic system. The chapter also details the challenges and opportunities in global economy supported by high tech systems and dynamic supply chains. Blockchain technology is being viewed as the catalyst for the fourth industrial revolution. The sixth chapter on 'The old Guard's new Makeover, the attempts made by financial and non-financial firms to explore blockchain technology while discovering their own place in a decentralized economy is detailed. The encouragement needed for the evolution of an open, interoperable permissible network guides discussion in the next chapter on 'Blockchains for Good'. The eighth chapter on ' A Self- Sovereign Identity' deals with the security risks and social tensions in the internet era and the way to deal with it by radical application of blockchain technology. The penultimate chapter on 'Everyone's A Creator' cautions the probability of the biggest employment shake over the world has ever seen. The chapter also notes the use of governance system, which is at the core of blockchain technology in enabling the governance of web and all its content. This book ends with a chapter aptly titled 'A New Constitution For the Digital Age'. The authors reiterates the need for 'Re-Decentarlising the Web' in this final chapter. They have also noted some of the projects undertaken at governmental levels about the application of this technology.

The book has no doubt succeeded in explaining various facets of blockchain technology. This book is an excellent research on the ways in which technology can regain the trust of digital transactions. This engrossing read also makes the readers feel a want for a liberal digital democracy with decentralized regulation. The world envisaged by the authors are so clearly demonstrated in this book. "Regardless of what tools are used to get there, we think society must move toward a more decentralized, digital, and ultimately self-sovereign model of identity." (p. 204)

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