

Chapter 6

Blockchain Technology Is Changing the Innovation Aspect in the Digital Economy

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ABSTRACT

In the digital era, banks are moving from their traditional methods of innovation to high-tech technologies. They have been working hard to provide a secure platform to their customers. With their continuous efforts and hard work, the concept of Blockchain technology came into notice. Blockchain technology is popularly known for Bitcoins. Nearly every third person or organization either knows about blockchain technology or uses it. Blockchain technology can address most of the issues related to Digital Transactions, Double Spending, and Currency Reproduction. The chapter will discuss the basic concept of Blockchain, its history, how its networks and technology work, and how its primary technologies evolved. By the end of the chapter, the technical design and expected outcomes will be clearly understood. The chapter also tries to review other research done in this domain.

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INTRODUCTION

Blockchain is the most popular technology these days. All big organizations are working with blockchain. Blockchain is a chain of block that contains information. This technique was described in 1991 by the group of researchers and its purpose at that time was to digitally timestamp the documents in order to avoid backdating of the document or to make any kind of alteration in them. Till then this technology was unused until it was adopted by Satoshi Nakamoto in 2009 to create Bitcoin (a digital crypto currency). It is a distributed ledger that is open to anyone. The property of this blockchain is that once a data is recorded in them it becomes extremely difficult to make changes in the block. (Steen, 2007)

Blockchain has brought up opportunities for various industries and banking sector is one of them. It is believed that the technology will bring lot of changes in the services of banking sector. International trade will move one step ahead. Checking the internal and external transactions will become easier. It is the best method to avoid frauds, money laundering and to insure commitments. In the coming years Blockchain will exponentially spread with in the banking system. So the industry is exploring the exponential use cases of Blockchain. Blockchain is just not about Bitcoin but there lies much more of it which is yet to be discovered.(Drescher)

In Germany the banks are looking forward to use IBM's Blockchain. The ongoing project of IBM is to build Blockchain that can be used by several European banks. Reports say the Blockchain that has been the building component of Bitcoin will become the base for global financial system. World Economic Forum released a report that 4 out of 5 banks are going to use the Blockchain technology by next year. This year Indian also discussed about using Blockchain technology in the banking sector during the budget announcements.

To ensure the safety and security the banks will running some pilot projects. Though the technology has caught the attention of many banks, people also have to look for all possibilities. More than 25 banks see the potential in this technology. Blockchain records transaction and keep the data secure. (Steenis, 2016) The purpose of this paper is to provide insight of Blockchain and its applicability.

The paper classifies the role of this technology in various fields. The paper is structured in section where Section II reflects the overview of Blockchain technology, whereas Section III is the detailed description of practical implementation of Blockchain. The paper reflects some of the technical design, expected outcomes in Section IV whereas Section V will contain the remarks and conclusions.

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