

Chapter 9

Cryptocurrency and Blockchain: The Future of a Global Banking System

Namrata Dhanda

Amity University, Lucknow, India

ABSTRACT

As the technologies are evolving day by day, they are able to rejuvenate any sector either individually or by incorporating other technologies. There are many prominent sectors in the market such as healthcare, education, entertainment, business, information technology, retail, etc. Every sector has its own set of profits and consequences, but apart from all, the banking or finance sector is the only sector that provides dynamicity to all other sectors and helps them to generate maximum revenue from their principal investment. In this chapter, the authors are focusing on the traditional and modern ways of banking, currencies such as cryptocurrency like Bitcoin, Ethereum, Litecoin, and how the modern currency will change the transaction procedure in the global banking system, creating an amalgamation of such currency with a current transaction system with the role of technology such as Blockchain in the betterment of the global banking system making the system fully decentralized, distributed, transparent, fast, immutable, and efficient.

INTRODUCTION

With the advancements in technology in almost every area, things are much better now as compared to the previous time. There are many prominent sectors such as education, healthcare, retail, manufacturing industry, finance, transportation, supply chain, food and beverages, travel, defence, entertainment etc, which have benefitted and grown substantially in the global market. To determine the efficiency of each sector, it is important to evaluate individual sectors based on some standard parameters like target audience, approach and strategies followed, workflow, inputs and outputs, profits and consequences, various types of impacts, and financial flow, etc. Among these parameters, financial flow is one of the key parameters and plays a major role in every sector. It is used to provide dynamicity to any sector because it is directly related to the finance system that deals with transactions and is used to forecast the revenue of the sector. By understanding the importance of financial flow, every sector is looking for

DOI: 10.4018/978-1-7998-7927-5.ch009

the safest and secure environment and is ready to adopt new technologies that will provide a safe and efficient environment for transactions to take place. In 2021, the financial system is adopting modern ways of banking by introducing new types of currencies and banks such as cryptocurrency and crypto banks and also utilizing emerging technologies such as Blockchain, IoT, cloud computing, etc.

To understand how Blockchain and cryptocurrency will give an impact on the global banking system, one needs to have a thorough idea of the banking system and how the traditional and modern banking system work. Also one must identify the need of using Blockchain technology in banking sector and how cryptocurrencies are rejuvenating the entire banking system. The bank is the financial institution run by centralized governing bodies in any country. The bank is responsible for any transaction between two or more parties whether they are directly connected or independent to each other. In the Indian banking system, there are five types of banks available such as a central bank, commercial bank, investment bank, cooperative bank and postal bank. The services provided by the banks are retail banking, personal banking, commercial banking, investment banking, credit or debit, online banking, loan provider, insurance handler, mutual funds, etc. There are three key components of the banking system such as capital, deposit, and loans. Initially, when the idea of the banking system was introduced, people were transferring money from one account to the other. This idea is then growing with some prominent features such as cash deposit, flexibility as per the users, convenience, providing better options as per the customers, one governing body, zero interruption, etc. As the population is growing so rapidly, these advantageous features became drawbacks of the traditional banking system because of lack of resources, poor customer service, failure in management, poor interest rate, a wide range of banking charges, and connectivity issues, etc. These are the reason for the transformation of the banking system and a new type of banking system was introduced that came to be known as digital banking or Crypto banking. Crypto banking is based on Blockchain technology and from this originated a new type of currency called cryptocurrency that spanned the market. Figure 1 depicts the countries where Blockchain utilization is the highest. These countries are the USA, UK, Singapore, Switzerland, Japan, China, UAE, Sweden, Estonia, and Malta.

Figure 1. Countries using blockchain technology



In this chapter, we intend to give a brief understanding of the banking system and its structure, the role of Blockchain in the banking sector, facts and figures associated with Blockchain, recent work in Blockchain, profits, and consequences of the digital banking system, Blockchain consensus mechanism,

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/cryptocurrency-and-blockchain/287691

Related Content

Assessing the Relationship Between Retention Factors and Organizational Commitment of University Faculty

Gerald Dapaah Gyamfi (2019). *International Journal of Sustainable Entrepreneurship and Corporate Social Responsibility* (pp. 23-40).

www.irma-international.org/article/assessing-the-relationship-between-retention-factors-and-organizational-commitment-of-university-faculty/233633

Mixed Methods Research Online: Problems and Potential in Business Ethics Research

Theodora Issaand David Pick (2015). *Business Law and Ethics: Concepts, Methodologies, Tools, and Applications* (pp. 411-432).

www.irma-international.org/chapter/mixed-methods-research-online/125744

The Code of Ethics and Workplace Behaviors: Implications for Leadership and Cultivating Ethical Leaders for Tomorrow's Academic Libraries

Kaetrena Davis Kendrickand Echo Leaver (2015). *Human Rights and Ethics: Concepts, Methodologies, Tools, and Applications* (pp. 1063-1093).

www.irma-international.org/chapter/the-code-of-ethics-and-workplace-behaviors/117077

Ethical CSR Leadership: Passion or Fashion

Linda Lee-Davies (2017). *International Journal of Sustainable Entrepreneurship and Corporate Social Responsibility* (pp. 1-22).

www.irma-international.org/article/ethical-csr-leadership/209679

Practical Issues in Human and Artificial Intelligence Interaction

Arthur Kordon (2021). *Responsible AI and Ethical Issues for Businesses and Governments* (pp. 35-53).

www.irma-international.org/chapter/practical-issues-in-human-and-artificial-intelligence-interaction/268485