

Chapter 33

Reliable (Secure, Trusted, and Privacy Preserved) Cross-Blockchain Ecosystems for Developing and Non-Developing Countries


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ABSTRACT

The chapter suggests an iterative social system in which individuals and totals use a development, watch its arranged and unintended outcomes, and after that, build new improvements. Blockchain development has the potential to construct productivity, capability, straight imposition, and disintermediation in shared worth or information exchange. This chapter proposes how the blockchain will be implemented in developing and non-developing countries. These countries can use the blockchain for financial services, transportation, healthcare, e-marketplace, etc. And what is the risk and danger of using blockchain in non-developed countries?

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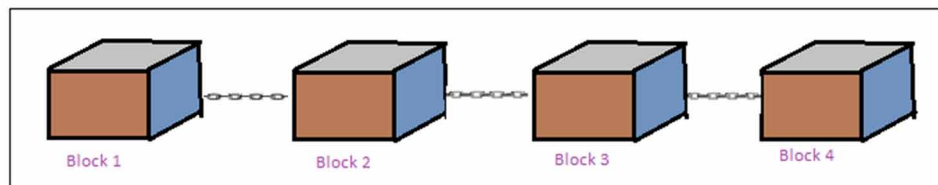
INTRODUCTION

Every once in a while an innovation goes along that makes a huge difference. To most observers, the most recent to pursue that trend is blockchain. It can possibly revolutionize everything from money to supply chains. Also, blockchain can possibly cross over any barrier between the developed countries and undeveloped countries.

Many people consider of blockchain as the innovation that forces Bitcoin. While this was its unique reason, blockchain is prepared to do a lot more. Despite the sound of the word, there's not only one blockchain. Blockchain is shorthand for an entire suite of distributed record advancements that can be modified to record and track anything of significant worth, from money related transactions, to medical records or even land titles. What's so unique about blockchain? How about we separate the reasons why blockchain technology stands to revolutionize the way in which we cooperate with one another.

First reason is; the way blockchain tracks and store data, blockchain stores information in batches, called blocks, that are linked to each other in a chronological manner to form a continuous line, a chain of blocks.

Figure 1. Blockchain



If any person wants to change the existing data of any block, they can't change or rewrite it. Instead the rewritten data is stored in a new block, showing that a changed to b at a particular time and date. It's a non-destructive way to track data changes over time. Presently, here's where things get really interesting. Unlike the traditional record technique initially a book, at that point a database document put away on a network, blockchain was intended to be decentralized and distributed across a large network of computers.

This decentralizing of data minimizes the ability of information tempering and carries us to the **second** factor that makes blockchain one of a kind: it makes trust in the information. Before a block can be added to the chain, few of things need to occur. Initial, a cryptographic puzzle must to be solved, accordingly making the block. Second, the computer that solves the puzzle shares the solution to all the different computers. On the network, this is called proof-of-work (POW). Third, the network will at that point verify and validate this proof-of-work, and if right, the block will be added to the chain. This work will guarantee that we can confide in every single block on the chain. Since the network does the trust working, presently have the chance to interface directly with information in real-time. What's more, that carries us to the **third** reason blockchain innovation is such a distinct advantage: no more mid people (intermediaries). At present, when working with each other, we don't demonstrate the other individual, our money related record or business records. Rather, we depend on trusted intermediaries, for example, a bank or a lawyer, to see our records, and keep that data secret. These intermediaries built trust between the parties and can confirm. This methodology limits risk and hazard, yet additionally adds

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