Chapter 13
Blockchain Technology Is a Boost to Cyber Security: Block Chain

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ABSTRACT

The information in any real-time application is needed to be digitalized across the world. Since digitalization of data happens, there comes the role of privacy. Blockchain could address the security challenge that happens in the any real sector. There are a few more challenges that prevail in the industry such as integrity in data, traceability of stored records, and interoperability among organizations that share information. This chapter says what blockchain is and applications in which blockchain technology could solve the existing challenges where they lack security, privacy, integrity, and interoperability.

INTRODUCTION

In the last few years, the major concern is about moving to the online world safely. The unauthorized access of data, program among the network is quite common. In spite of using various conventional ways of protecting online data, still, hackers are smart to intrude into the network. Figure 1 shows the traditional way of protecting online data against the cyber-attacks.

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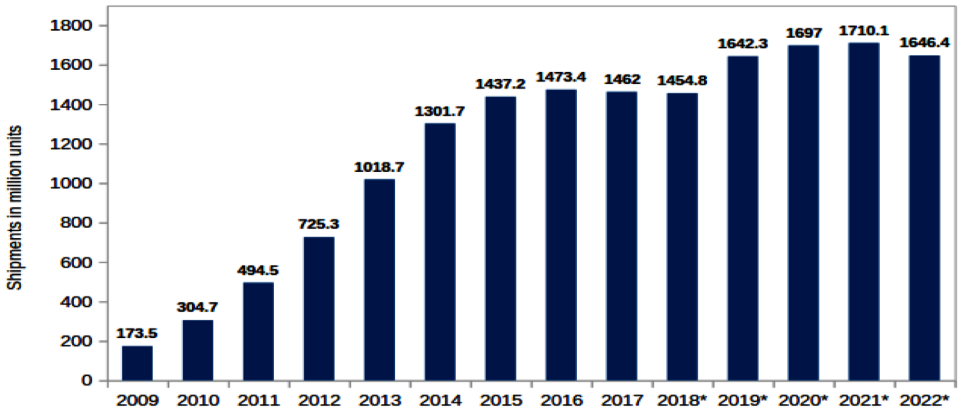
Figure 1. Traditional Techniques used against the cyber threat



By looking at some of the recent cyber-attacks it seems like things get only worse day by day around the world.

BACKGROUND

Massive Cyber Security Attacks Of 2018

- A massive DOS attack with 1.35TB per second of traffic hitting the popular website 'Github'.
- On a single day, 3 billion yahoo email address got affected.
- 150 million people personal information was hacked by gaining access to certain files in a U.S. website application.

A very high level of dependency on the internet platform only leads to these types of cyber-attacks. Centralization of control, lack of integrity information that we are getting, the trust of quality in data is also some of the problems that need to be addressed.

So to answer all these problems an impenetrable technology called "BLOCKCHAIN" can be used to protect personal information data from attacks and improve cybersecurity across platforms.

The reason for the existing cyber-attacks is because they are partially decentralized. Implementing blockchain technology would fully decentralized DNS; the contents