BLOCKCHAIN AND FINANCE: HOW THE INDUSTRY IS CHANGING

Blockchain is one of those terms that comes up time and time again in banking, investing, and cryptocurrency. Unless you've kept a close eye on the latest trends in fintech, you might not know the first thing about blockchain and why it matters.

The truth is that blockchain is changing the finance industry in a number of ways that matter to wealth management firms and financial advisors. It's making transactions faster, easier, and more secure, and this has huge ramifications for the future. In this guide, we'll take a closer look not only at what blockchain is but also how it will affect finance in the future.

WHAT IS BLOCKCHAIN?

To begin, let's break down what blockchain really is. As the name implies, blockchain is really just a chain of blocks. However, we're referring to digital information (the "block") that is stored in a public database (the "chain").

The blocks store information like purchase information, the date/time, etc. They know which individuals are participating in transactions, though they don't use names or other identifiers. Instead, blockchain uses what's known as a "digital signature." You could think of this as a unique username. Each block has a unique code known as a "hash" which helps identify it from other blocks.

Let's consider an example to make sense of all of these terms. If you make a purchase from your favorite online clothing retailer, for instance, your transaction will be stored in its own block using your digital signature. If you decide to make a second purchase within minutes of the first with the exact same items, each transaction will be identifiable by their unique hash despite containing nearly identical information.

The thing that makes blockchain different from other transaction processes is the way it's verified. Each transaction has to be verified by a network of computers spread across the globe. Depending on the system, this could be millions of computers. This massive network confirms the transaction, verifying everything as accurate. From there, it joins hundreds just like it in a block with a unique hash.

WHY BLOCKCHAIN MATTERS TO FINANCE

There are two key reasons why blockchain is making such a big impact in the financial industry.

- **Publicly Distributed –** First, public blockchains are published and copied in numerous places. They're essentially broadcasted throughout a network of participants, making these transactions relatively accessible to anyone interested in seeking them out. No single computer is in control of the public ledger. It's shared with identical information across a large computer network.
- **Accurate –** Second, blockchain maintains an accurate history of transactions. It's hard to alter, delete, or falsify transaction history since there are multiple copies across the network. Essentially, it's very secure.

WHAT CHANGES DOES BLOCKCHAIN BRING?

Finally, let's address the changes this technology might potentially bring to the table in the next few years. The world of finance has been rapidly changing since the dawn of civilization, so it should come as no surprise that a secure transaction process such as blockchain will make such an impressive impact.

While there is no way to know for certain just what changes we'll see in the near future, these are our biggest predictions:

- **Inexpensive Payment Systems –** When businesses or individuals transfer money when sending a payment, this has traditionally been a lengthy process. The funds typically are processed through credit card networks, banks, and other middle-men. The average credit card processing fee is between 2.87% – 4.25% per transaction. With blockchain, we'll likely see a reduction in the number of processing fees.
- **International Money Transfers –** Banks are beginning to use blockchain to help consumers and businesses send money internationally. In the past, this process has been costly and complicated, but blockchain enables mobile, fast payments without the high cost.
- **Data Management –** As more data becomes necessary and available, there will be a greater need for data management and data analytics in finance.
- **Smart Contracts –** The term smart contracts refers to a way to monitor when a buyer makes a payment or when a seller delivers on his/her end of the deal. These act as a third-party between buyer and seller, and they're very secure thanks to the blockchain network.
- **Reduced Fraud –** Since a hacker would have to gain access to hundreds or thousands of computers at the same time, blockchain is highly resistant to hacking and fraud. This will likely lower the cost associated with financial security.
- **Digital Assets –** Finally, blockchain and the rise of cryptocurrency has introduced a new idea of digital assets being considered property. These virtual coins can act as stock in a company and fund projects and gain financial support.

THE UNKNOWN FUTURE OF BLOCKCHAIN IN FINANCE

Because blockchain is still a relatively new technology, there's not much that can be said for certain about how this technology will be applied in the future. Banks and financial institutions are beginning to innovate with this new tool, but even that raises new questions.

It's still unclear how blockchain will affect data privacy, regulations, governing institutions, and other risks. These are all issues that will need to be defined and solved as we continue to see blockchain become a long-term pillar in finance.