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Is Blockchain in Our Future?

Most of you have likely heard about blockchain. Although it's been around for about a decade, blockchain is commonly associated with Bitcoin, the cryptocurrency. That's because the blockchain technology is all about providing security, stability, and scalability for a given transaction, all of which are critical when dealing with currency. However, blockchain as a technology is not limited to cryptocurrency. In fact, in today's business environment, nearly every industry imaginable is exploring blockchain. From finance to real estate, voting and medicine, many industry sectors are looking to see how blockchain can solve nagging security problems. What is it about this new technology that makes it so appealing?

Blockchain is, fundamentally, a public record of transactions, distributed across a worldwide network of computers. The idea is that no single entity controls everything. It is the network of computers working together that validate the transactions. The ledger keeps track of these valid transactions to trace them, one after another. Security is

built into the system since the network of computers are all working together; therefore, hacking becomes extremely difficult. In a more traditional system, hackers have to overcome a single database. In a blockchain environment, the hacker must overcome thousands of systems. Overlaying the blockchain is a system of smart contracts that consist of open code, visible to everyone in the system; it cannot be altered. The system is more easily auditable; therefore, the notion is that a blockchain environment can reduce the overall database management costs.¹

So, what does blockchain have to do with SMPTE? I'll be the first to admit that I don't know, but I've got to believe that it's going to find a home in the media environment. When I see the terms security and auditability, I immediately envision a place for blockchain within the distribution of content. According to Wikipedia, organizations like the American Society of Composers, Authors, and Publishers and PRS for Music are adopting the technology to give artists more control over the circulation of their music among fans and other musicians.² According

to MarTechSeries, blockchain offers promise for the digital advertising industry where inefficiencies from waste and fraudulent traffic are well-documented.³

It seems that the content distribution aspect of our business could benefit from blockchain technology. Because of high security demands, blockchain may prove to be a solution that puts an end to piracy.

In recent years, the SMPTE Annual Technical Conference (ATC) and HPA Tech Retreat have included presentations on the blockchain technology. We are all learning how this technology can be used to the greatest effect within this industry. This year's ATC program includes a track on security with at least six presentations on blockchain.

While a standard might be more long term, SMPTE is already involved in discussing this new technology. Look for future webcasts and wall charts on the topic, along with conference papers and journal articles. As the technology evolves, SMPTE will stay on top of it and report on how its use in our industry is making a significant impact.



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¹<https://medium.com/blockchain-education-network>
²<https://en.wikipedia.org/wiki/Blockchain#Uses>

³<https://martechseries.com/mts-insights/guest-authors/blockchain-advertising-implications-every-player-system/>