

Part 6:

Blockchain

What started as a revolution in the finance industry is now extending its arms into almost every other industry—from retail to healthcare to advertising.

Digital Trends:

Predictions for 2019 and Beyond

A seven-part series brought to you by the Insight Lab at MNI Targeted Media Inc.

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Blockchain is Reshaping Ad Spend

Bitcoin took the world by storm when it hit the market, but not as much as the technology behind this digital currency—blockchain.

Blockchain and cryptocurrency were nearly interchangeable terms just months ago—this is no longer the case. What started as a revolution in finance is now extending its arms into almost every other industry—from retail to healthcare to advertising.

Blockchain carries with it many use cases and benefits, with its crowning jewel being security. The current and potential applications of this technology can bring about disruptive innovations and advances in nearly every field, including digital marketing. New uses for blockchain are expanding—including buying and selling digital or advanced TV ad inventory, white-listing authorized sellers of inventory, campaign reconciliation, use of smart contracts, and validating advertising assets.

As with any new entrant in the ad-technology space, a significant portion of the market is either cautious about embracing blockchain or is unprepared for it. However, larger players across industries have already begun experimenting with blockchain. The more

this technology is used and experimented with, the faster, more secure, and more standardized it becomes. In the immediate future, we will see blockchain being used as a new solution to address old advertising problems, such as ad fraud, payments, and transparency.



Why it Matters

Like the internet in its early years, blockchain technology is hard to understand and predict, but could become ubiquitous in the exchange of digital and physical goods, information, and online platforms. Get tuned into this tech now.



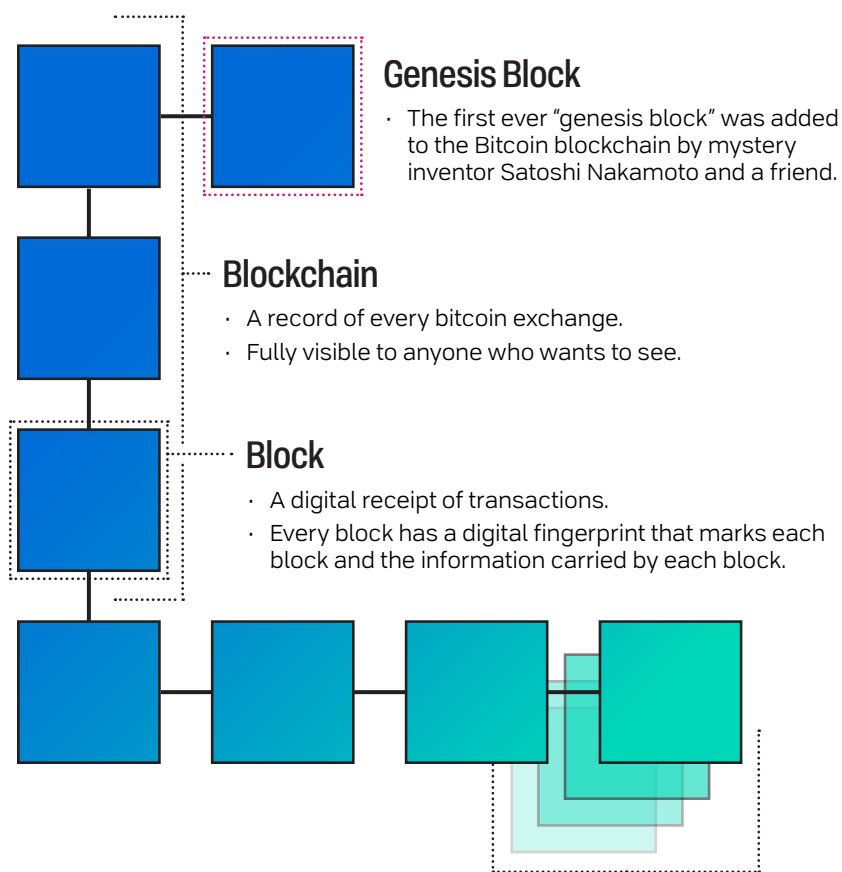
Blockchain Defined

Blockchain is a digital ledger in which transactions made in bitcoin or another cryptocurrency are recorded chronologically and publicly.

Who or What is a Blockchain Miner?

As explained by Investopedia, bitcoin mining is the process of confirming transactions on the ledger and solving a challenging puzzle. Miners who complete a block receive the transaction fees and are rewarded with bitcoins, adding new coins to the system. Eventually, once 21 million bitcoins are created, miners will only receive transaction fees as an incentive.

Maintaining the Bitcoin Blockchain



Genesis Block

- The first ever “genesis block” was added to the Bitcoin blockchain by mystery inventor Satoshi Nakamoto and a friend.

Blockchain

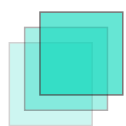
- A record of every bitcoin exchange.
- Fully visible to anyone who wants to see.

Block

- A digital receipt of transactions.
- Every block has a digital fingerprint that marks each block and the information carried by each block.

New Block

- A new transaction is initiated.
- New transactions are grouped into a block.
- New block is broadcast to the entire mining network for validations.
- Bitcoin miners compete to validate each new block using brute computational force in a race to solve the very difficult math associated with the block’s digital fingerprint.
- The fastest miner adds the next block to the chain.
- Slower miners lose the race and do not add their blocks.
- Solving the math and validation of the block earns a bitcoin reward.
- Each validated block is broadcast to everyone in the network.
- The mining network continues building on the updated blockchain.
- All miners always build on the longest chain, which carries the most up-to-date validated blocks.
- All updates are fully transparent.



- *These blocks did not get validated quickly enough.*
- *These blocks and their chains die.*



Blockchain Resists Fraud.

If a hacker tampers with the transaction record in one block, every subsequent block breaks.

- Built into the Bitcoin blockchain design are incentives that keep miners honest
- Miners get bitcoin payouts for accurately validating new blocks.
- Attempts to hack a long blockchain take too much time and computer power to be worthwhile.
- To date, long chains are extremely secure and hack resistant.
- The more blocks in the chain, the more work it takes to fake transactions.
- It’s easy for other miners in the network to spot the broken blocks.
- It’s easy to reject a broken blockchain.

What to Expect in 2019

Enhanced Privacy & Security

The year ahead will see market leaders experimenting with blockchain-based advertising platforms more than they did in 2018. So far, the technology has had a tough time keeping up with the speed of programmatic buying. There are also issues around sustainability and regulation that need to be addressed. Still, blockchain may be the best solution we have to combat ad fraud in the long term.

The who's who are all about blockchain! Big companies like Unilever have already invested in blockchain to futurize programmatic buying.

Transaction Standardization

Lack of standardization in programmatic payments has its own challenges. Parties request different billing terms, causing problems for agencies and programmatic ad tech companies, while publishers aren't thrilled about the lengthy payment cycles. Blockchain may be used to standardize transactions as well as payment periods. The speed of the technology may continue to increase to a point where digital ad transactions will be processed in real time, similar to cryptocurrencies.

Blockchain + Advertising = A Perfect Match

Developers on the Ethereum blockchain are currently developing smart contracts, which will bring greater transparency to transactions. Companies like IBM, MetaX, and Amino Payments are increasing investments in blockchain with a focus on advertising.

For more strategic predictions go to mni.com, or email janine.pollack@mni.com.



*By moving the money according to a ledger and doing it directly from brand or buying principal, **they know for a certainty that the money went where they were told it was going.** How do you know you bought thenewyorktimes.com? Because there's the wire to thenewyorktimes.com for the inventory. You know it didn't go to a spoofer, and you know exactly how much was paid to them, and you're not relying on an exchange, for example, to tell you that information."*

- Will Luttrell, Founder and CEO at blockchain startup Amino Payments



Sources

[1] Blockchain's Promise | eMarketer | 2018.