

STRATEGIC
SPOTLIGHT

NOT SO NEW KID ON THE BLOCK: BLOCKCHAIN

NOVEMBER 2018

BLOCKCHAIN

Buzzword or Building the Future?

If you ask your coworkers to provide a list of all the tech buzzwords they've heard this year, blockchain is bound to top nearly all of them.

While it's not as easily digestible or widely recognized as other major buzzwords such as VR or AR, blockchain already underpins many common technologies and is poised to become much more widely used in the coming years. In this Wavemaker/GroupM Strategic Spotlight collaboration, we provide an overview of blockchain, the ways in which it can be used and how Wavemaker and GroupM will utilize it in the coming year, which hopefully will inspire you to think about what blockchain could mean for your business.





WHAT IS BLOCKCHAIN?

A digital ledger of transactions

Put simply, a blockchain is created and validated by a network of computers to ensure the trustworthiness of each and every block.

If a block of data on one computer doesn't match the ledger on a separate computer, said block is rejected. The process is very similar to how credit card companies verify financial transactions every time you use your credit card to make a purchase. However, spreading the ledger of transactions across a network of computers makes it nearly impossible for one bad actor to change or hack a specific transaction. Once a block becomes part of the blockchain, it cannot be modified or copied, resulting in a permanent record of an ever-growing number of validated transactions.

KEY COMPONENTS OF BLOCKCHAIN

Blockchain can only exist with a number of interconnected but separate parts:

CRYPTOGRAPHY:

Encryption and decryption arm of the process to keep all parts honest.

PEER-TO-PEER (P2P) NETWORK:

Network for discovery and data sharing.

CONSENSUS MECHANISM:

Determining algorithm that orders the transactions under the assumption that not every participant is trustworthy.

LEDGER:

List of bundled transactions in cryptographically linked 'blocks'.

VALIDATION RULES:

Common set of network rules the entire blockchain follows.

CURRENT USE CASES

How some people use Blockchain

Financial Security: Due to blockchain ensuring trustworthy digital transactions, many financial institutions are investing to ensure security across networks and exchanges.

Record-Keeping: Because blockchain is extremely difficult to subvert, it is an obvious solution for companies trying to improve data security. While personal health and insurance records are obvious examples, blockchain could even be used to improve the integrity of our nation's voting systems.

Smart Contracts: Eliminating the need for a middle third party, blockchain would enable contracts or commitments that enable money/digital goods to be automatically exchanged based on specific conditions. This would allow homebuyers to sign a lease and car dealers to simply send a deed directly to buyers with guarantee that the large sums of money would be safely transferred.

**“ The Blockchain
space is predicted
to expand by
42.8% by 2020. ”**

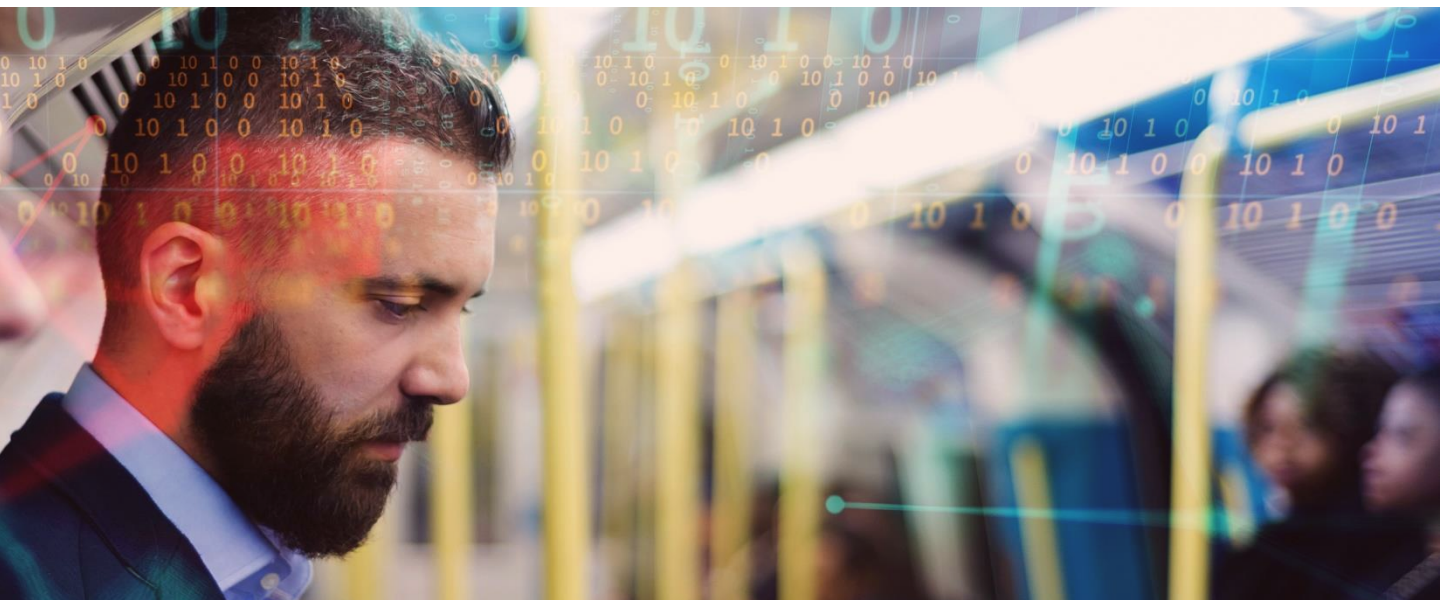
- The Blockchain Evolution (2018)¹

ITS POTENTIAL TO TRANSFORM BUSINESS

Is Blockchain the new Internet?

Many have drawn parallels between this new technology and the Internet.

The Internet has revolutionized every facet of life and business, from communications to government, changing the way the world progresses. Many view blockchain similarly, having the potential ability to disrupt and impact the way many industries work today. The opportunity that lies in disruption is quite alluring to industries looking to future-proof their businesses, most notable marketing and find new ways to provide security, transparency and efficiencies in both B2B and B2C spaces.





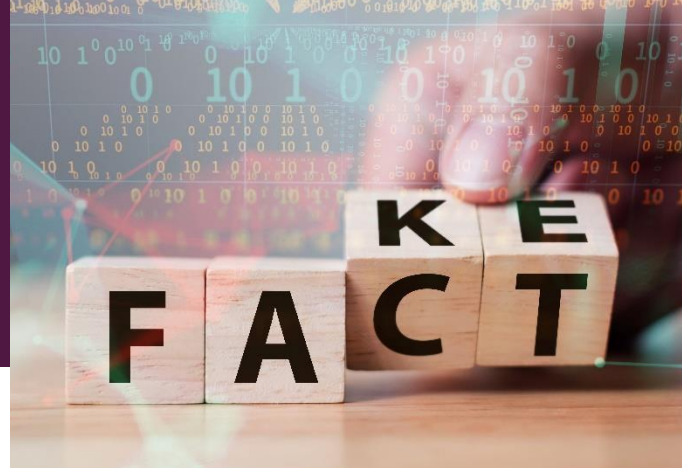
MAKING A MARK IN MEDIA & ADVERTISING

Where we currently stand

We are now in the heart of blockchain's 'hype cycle', with the term being thrown around by nearly everyone, and in many ways resulting in its incorrect use and confusion.

Many media players and other technology partners are already beginning to push opportunities to marketers for use of blockchain, thus creating in some instances a sense of urgency to sell proposed solutions, some of which may not even exist. Wavemaker and GroupM do expect some form of blockchain backlash in early 2019 as many brands and companies who were convinced to invest in 'solutions' realize it was a waste.

80% of the general public is blissfully unaware of blockchain.²



CLAIMS VS REALITIES

Transparency:

Claim: Participants in a blockchain can view the assets logged on the chain or component costs of media on the chain itself.

Reality: Like all data storage, blockchain is garbage in/garbage out. Functional components, like ad servers, in the existing ad tech ecosystem store data in isolated databases and log files that often prove difficult to obtain and reconcile. Distributed ledgers and blockchains could make reconciliation of the different data nearly seamless. In some trials, ad server or other logs are also stored on the blockchain, though no provenance checks are done to ensure that contract terms, for example, are adhered to.

What you need to know: The agreed upon rules for what data is recorded on the chain as well as who can see this data determine the level of transparency. Understand the degree to which component costs will be made transparent by publishers. If publishers are unwilling to make this information available to the blockchain, no additional transparency will be available. This could potentially impact billing, reconciliation and reporting.

Fraud Detection:

Claim: Blockchain can help detect fraud in the ad supply chain

Reality: While records stored on a blockchain can't be changed, the presence of blockchain doesn't mean that fraud isn't occurring. If an ad impression is delivered on a fraudulent site by a legitimate ad server and written to a blockchain record, that record may not be tampered with. However, the blockchain must use other data to verify that the original impression was invalid, similar to how 3rd party validation providers are used today.

What you need to know: Blockchain itself doesn't know what is and isn't fraudulent. You still need a system of records to determine which URLs or inventory are fraudulent.

Compliance:

Claim: Blockchain can help audit compliance.

Reality: To a point, a blockchain is self-regulating, meaning ongoing compliance checks can be built-in to ensure security. This could be an advantage when managing complex regulatory environments or when an unchangeable audit trail is needed and human error could add to mistakes throughout the audit process.

What you need to know: While promising, agency and client compliance teams still determine whether blockchain will increase compliance. Compliance rules vary depending on the business area, geographic market and company. What works for one company may not work for another and client contracts add a further wrinkle to governance of processes and compliance.

Lower Costs:

Claim: Blockchain will lower your staffing, tech and/or 3rd party data costs.

Reality: Because all permitted parties can administer blockchain, there's no need to pay intermediaries...except those that provide the blockchain technology! Clients are being advised that total cost of ownership (TCO) with financial and business impact should be studied alongside technical capabilities in tests. Rules and best practices for data management and pruning are just now being formulated. Growth in data volumes must be considered along with staffing costs and skillset for ongoing management.

What you need to know: Blockchain itself does not inherently reduce costs. Blockchain could maybe reduce staffing costs, 3rd party technology costs or data technology costs in certain situations if those costs are replaced. As with other technologies, Total Cost of Ownership (TCO) must be calculated to determine if savings will actually occur over the long run. Cost impact should be judged use case by use case.





OUR POV ON BLOCKCHAIN

Where do we think we're going?

At Wavemaker and GroupM, we believe that there is something real when it comes to blockchain.

We are currently invested in trying to understand the best applications for our business and total costs, as well as how to educate our people and Clients about managing blockchain implementations.

It is worth a reminder that two other popular buzzwords, Machine Learning (ML) and Artificial Intelligence (AI), have been in development since the early 1980s. However, we're only now seeing large-scale AI & ML applications. This is because it took large-scale data sets, better (and cheaper) data management technologies and more powerful (and cheaper) on-demand processing before adoption started to take hold.

HOW WE THINK BLOCKCHAIN SHOULD BE USED FOR ADVANTAGE

As we continue to explore blockchain for Wavemaker and GroupM's clients, we have identified five potential media uses:

**MEDIA
SUPPLY CHAIN
MANAGEMENT**

FINANCE

**DATA
MANAGEMENT**

IDENTITY

**ASSET
PROVENANCE
& TRACKING**

We have found that most companies are currently focused on **Media Supply Chain Management** and **Reconciliation & Billing**, while the idea of **Data Management** is inherently wrapped in both of those. At time of publishing, Wavemaker and GroupM have yet to identify companies focused on **Identity** or **Asset Provenance & Tracking** that are seemingly viable. However, we continue to aggressively track, meet with and vet potential partners for all five of these potential media uses to best identify how we (and our clients) can test the potential of blockchain via these uses.

OUR 2019 CHALLENGES

Going into the coming year, we are preparing for some challenges on the horizon, including:

LACK OF UNDERSTANDING

Not enough is known about this technology to make implementation realistic.

INDUSTRY-WIDE SET OF RULES

Advertisers, agencies and publishers all employ and roll-out blockchain differently.

VOLUME & SPEED

Real-time solutions for recording all transactions is near impossible due to the high volume and speed of digital media.

SLOW ROLL-OUT

Adoption will occur at a rate that will never be as fast as the sellers would like.

PREPARING FOR BLOCKCHAIN'S FUTURE

Partnership is key

Education will help evaluate challenges, identify potential solutions and sift through the sea of vendors pushing their wares.

Wavemaker and GroupM are here to help you through the hype, the buzzwords and the unfamiliar technologies that can seem daunting and confusing. A team across Wavemaker and GroupM have been tracking blockchain technologies by cataloging tests, advising clients and participating in both trials and industry consortia (GroupM's Michael Palmer is the co-chair of the IAB Blockchain Working Group).

Currently we are testing markets with multiple vendors to determine viability, safety and the proper use cases before opening betas to Wavemaker and GroupM Clients (the first completed proof-of-concept (POC) for Unilever via IBM is the most public test). If blockchain is something that interests you and your brand, please reach out to your Client lead to discuss if one of GroupM's potential use cases could be relevant and valuable for your brand. We are continually monitoring and exploring the space to determine how our Clients can leverage blockchain's potential use cases to further their businesses and will be launching a slew of tests worldwide in 2019.



SOURCES:

- 1) NewGenApps. (2018, February 9). [The Blockchain Evolution](#)
- 2) HSBC. (2017, May 24). [Rise of the technophobe - education key to tech adoption, says HSBC](#)

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MORE INFORMATION:

Whitney Fishman Zember
Wavemaker US

Michael Palmer
GroupM

