Was leistet Blockchain für die Werbewirtschaft?

Aktuelle Entwicklungen und Ausblick
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Elke Kunde
Enterprise Technical Sales Blockchain Focalpoint DACH

IBM Blockchain
Enforcing accountability in media (excerpt)
How blockchain technology can work for media and entertainment

Download full report from IBM Institute for Business Value at http://www.ibm.biz/bcmedia
Blockchain technology includes components to permit effective collaboration among players in a business ecosystem.

<table>
<thead>
<tr>
<th>The key components of blockchains</th>
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<tbody>
<tr>
<td><strong>Shared Ledger</strong></td>
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<tr>
<td>An append-only distributed system of records shared across the business network that provides transaction visibility to all involved participants</td>
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<tr>
<td><strong>Smart contract</strong></td>
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<td>Business terms embedded in the transaction database and executed with transactions so that the appropriate contracts are executed</td>
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<tr>
<td><strong>Privacy</strong></td>
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<tr>
<td>Transactions are reliable, authenticated and verifiable.</td>
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<tr>
<td><strong>Trust</strong></td>
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<td>Transactions are endorsed by relevant participants.</td>
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<td><strong>Transparency</strong></td>
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<td>All participants in the network are aware of all transactions that impact them</td>
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Ledgers include:
- transactions: an asset (e.g. cell phone, advertising inventory, copyright) onto or off the ledger
- contracts: conditions for a transaction to occur
The simple example of how advertising messages are delivered to consumers provides some insight of the benefits of blockchain.

Consider a simplified digital advertising value chain composed of an advertiser, an ad agency, a demand-side provider, an ad-exchange, a supply-side provider and a publisher.

*Without blockchain*, each participant keeps one or more ledgers that are updated to represent business transactions as they occur.

- **Not cost effective nor efficient** due to duplication of effort and contracts, and intermediaries that add costs for services.
- **Vulnerable.** In case of incidents - such as fraud or simply mistakes that create inconsistencies - the entire business network could be effected.
The same example with blockchain, enabling participants to share a ledger that is updated every time a transaction occurs

With blockchain, every time a transaction occurs the ledger is updated through peer-to-peer replication.

- Cryptography helps ensure that network participants see only the parts of the ledger relevant to them and that transactions are **reliable, authenticated** and **verifiable**.
- The contract for asset transfer **determines the conditions** under which the transaction can occur.
- Network participants **agree** how transactions are verified through consensus or similar mechanisms.

A full blockchain deployment can eliminate unnecessary participants or transactions.
Blockchain support consensus, provenance, immutability and finality

**CONSENSUS**
All participants agree that a transaction is valid.

**PROVENANCE**
Participants know where the asset came from and how its ownership has changed over time.

**IMMUTABILITY**
No participant can tamper with a transaction once complete. If a transaction was in error, a new transaction must be used to reverse the error, with both visible.

**FINALITY**
There is one place to determine the ownership of an asset or completion of a transaction. This is the role of the shared ledger.
M&E companies will see the greatest impact from blockchain in the following three areas:

**Improving processes in the media supply chain**

Employing blockchain primarily for efficiency improvement in the supply chain, both internally and with external players.

**Creating blockchain-enabled services and revenue opportunities**

Enabling new functionality and value-added digital services based on blockchain.

**Developing a blockchain-based digital advertising platform**

Establishing an optimized advertising exchange and partner federation.

Source: IBM Institute for Business Value
Improving processes in the media supply chain
The current process for digital advertising is inefficient

- **Complexity of the value chain:** a variety of participants are involved, each one intermediating a task and getting a cut of the budget
- **Lack of a single system of records:** every player has a siloed system that does not communicate consistently with the others
- **Lack of evidence of value-add:** it is not always possible to demonstrate the added value of each participant and the actual completion of the intended activity
- **Lack of auditability:** the fragmentation of systems and records and the lack of evidence make auditability difficult or, in some cases, impossible
- **“Walled gardens” of the large online social networks and search engines:** these walled gardens are characterized by non-transparent and proprietary measurement processes
- **Evolving ad fraud:** the complexity and lack of control encourages fraudulent practices.
Using blockchain technology for digital rights tracking

The modularity provided by blockchain’s smart contracts enables various aspects of M&E companies’ operations to be streamlined, which helps make them more cost-efficient and faster, as well as more reliable, scalable and transparent.

Blockchain will likely have the greatest impact on the industry foundation processes, such as:
- audit
- payment settlements
- discrepancy management
- tax rules
- campaign-level reporting
- fraud mitigation
- rights clearance and royalty management.

Royalty collection agencies apply blockchain for digital rights tracking

Three royalty collection agencies (ASCAP, PRS, SACEM) built a blockchain network to manage authoritative music copyright information. The solution allows the companies to:

- Easily and more accurately track content life cycle and royalty payments.
- Automate costly reconciliation processes.
- Increase digital rights agency contractual power
- Solve disputes by using governance rules
- Facilitate engagement with digital music users.

Using blockchain technology, improvements in programmatic advertising (impressions) can be established in two key aspects:

• **financial transparency**, which tracks a media buy from a media insertion order through delivery to reduce discrepancies

• **supply chain transparency**, which tracks an impression’s delivery path from bid to fulfilment, including each vendor, charge and impact on performance.

Unilever aims to force more digital ad transparency

Unilever has started a pilot program that tracks the digital ad buying ecosystem via blockchain. Unilever executives believe the technology potentially enables increased efficiencies and a more trustworthy supply chain, as well as reducing cost and fraud.

The blockchain project has already begun to bear fruit by identifying discrepancies along the media supply chain while a campaign is in action.

Running historical ad data through the system, the company found discrepancies immediately, rather than having to wait the duration of a campaign. Now, the blockchain finds discrepancies daily, which Unilever demands to be fixed before an ad buy can go through.


IBM iX + Unilever | Restoring Trust in Advertising
https://www.youtube.com/watch?v=N2ZTBeIzvGM
### Mediaocean solution

https://www.mediaocean.com/products/blockchain-for-media

<table>
<thead>
<tr>
<th>Current Supply Chain</th>
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<tbody>
<tr>
<td><strong>Advertiser</strong></td>
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<tr>
<td>Budget</td>
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<tr>
<td>PO</td>
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<tr>
<td>Payment</td>
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### CURRENT CHALLENGES

- Lack of transaction visibility in the supply chain
- Reconciliations are either manual or rely on error prone EDI processes
- Audits are expensive and time consuming

### ENHANCEMENTS & ADVANTAGES

- Captures all media finance transactions starting from the advertiser
- Provides artifacts and actions for all media transactions
- Security to manage the scope of transaction visibility
- Provides audit reporting for all transactions

https://www.mediaocean.com/blog/can-blockchain-rebuild-marketer-agency-trust
https://www.ledgerinsights.com/mediaocean-ibm-advertising-blockchain/
# Pilot Participants & Stats

<table>
<thead>
<tr>
<th>Advertisers</th>
<th>Agencies</th>
<th>Tech</th>
<th>Budget</th>
<th>Spend Authorized</th>
<th>Ordered</th>
<th>Supplier invoices</th>
<th>Agency invoices</th>
<th>Suppliers</th>
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<tbody>
<tr>
<td>Kellogg's</td>
<td>&amp; Hearts &amp; Science</td>
<td>MediaMath</td>
<td>$670MM</td>
<td>$270MM</td>
<td>$100MM</td>
<td>$40MM</td>
<td>$20MM</td>
<td>80+</td>
</tr>
<tr>
<td>IBM</td>
<td>Starcom</td>
<td>Integral Ad Science</td>
<td>50+ budgets</td>
<td>125+ authorizations</td>
<td>500+ orders</td>
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<tr>
<td>ABInBev</td>
<td>Starcom</td>
<td>MOAT</td>
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<td>Pfizer</td>
<td>CARAT</td>
<td>IDV</td>
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<tr>
<td>Johnson &amp; Johnson</td>
<td>CARAT</td>
<td>UM</td>
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<tr>
<td>Kimberly-Clark</td>
<td>CARAT</td>
<td>MINDSHARE</td>
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<td>AT&amp;T</td>
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<td>Unilever</td>
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The New York Times, IBM explore blockchain as a means to verify trustworthiness in digital media

While digital content might not seem like the most obvious application for this technology, the News Provenance Project will operate under the same principles as a classic blockchain.

Initially, the platform will focus on photojournalism from established news organizations. Leveraging The Linux Foundation’s, open source Hyperledger Fabric and built on the IBM Blockchain Platform, it will build an immutable record of each image that includes metadata, as well as a detailed, tamper-evident history, tracking the photo as it’s republished and shared across the internet.

A visual signal will travel with the photo, and anyone can click to see the original source, context and full journey of the image. Armed with this information, readers can make more informed decisions about the content’s trustworthiness.

The News Provenance Project is still in early stages, but the Times eventually hopes to use blockchain not only to validate the images we see, but also the stories we read.

Creating blockchain-enabled services and revenue opportunities
Developing new functionality and value-added digital services

Examples:

- Using blockchain-enabled *micropayments* for low-priced content, such as individual song tracks, articles or pictures
- Leveraging the *synergies of blockchain and AI* to better targeting audiences by delivering fewer, but more timely and relevant, content and ads to the consumer. Also helping in *optimizing the cost of the campaign outcome* (see right sidebar)
- Applying blockchain for *data protection*, in particular in the light of the far-reaching personal data privacy regulation introduced by GDPR.

Leveraging the synergies of blockchain and AI

**Optimizing campaign delivery**

Optimizing campaign delivery is a good example where synergies of blockchain and AI can be leveraged to get the best campaign outcome.

**Approach:**

- Use blockchains to capture data related to the identity and charges by each vendor at the impression-level
- Use artificial intelligence to rank the delivery paths that align best with desired campaign outcomes and shift budgets to those methods that optimize ROI.
Developing a blockchain-based digital advertising platform
Today’s advertising supply chains are dominated by many middlemen, at the expense of advertisers and publishers.

Potential roles/players in an advertising supply chain, each eligible to a cut of the ad budget.
AdLedger is a consortium made up primarily of publishers, advertisers and other industry stakeholders. Its mission is to help participants compete for ad dollars and reduce waste in the supply chain by facilitating a programmatic ad market.

AdLedger will be able to harness data from disparate sources and provide transparency, brand safety and data security by locking up data with cryptographic keys.
The way forward
The following questions can help determine if you are ready to move forward with blockchain:

- How much cost could you save if you realized a broad reduction of intermediaries?
- How effective are you in copyright tracking, and what is the complexity of copyright dispute resolution?
- What service or revenue opportunities could blockchain open for you?
- How much is the value add of each player in the supply chain and their cut of the ad budget?
- How much ad budget is lost due to ad fraud? How do you detect and mitigate fraudulent activities?
To move toward reaping the benefits of blockchains, we recommend the following first steps:

- **Spend time with a lead partner** in blockchain to understand the business models and technologies, as well as understand the early use cases, proof points and emerging solutions.

- **Evaluate** where the technology stands today, the various blockchain providers and differences between their technology approaches, and the extent to which standards and regulations are – or will become – effective across countries and types of business operations.

- **Invest in ideation** on potential opportunities such to uncover areas where blockchain could offer an advantage.