



INSIGHTS FROM THE BDO TECHNOLOGY PRACTICE

# WHY BLOCKCHAIN WON'T FIX DIGITAL ADVERTISING'S BIGGEST PROBLEMS – YET

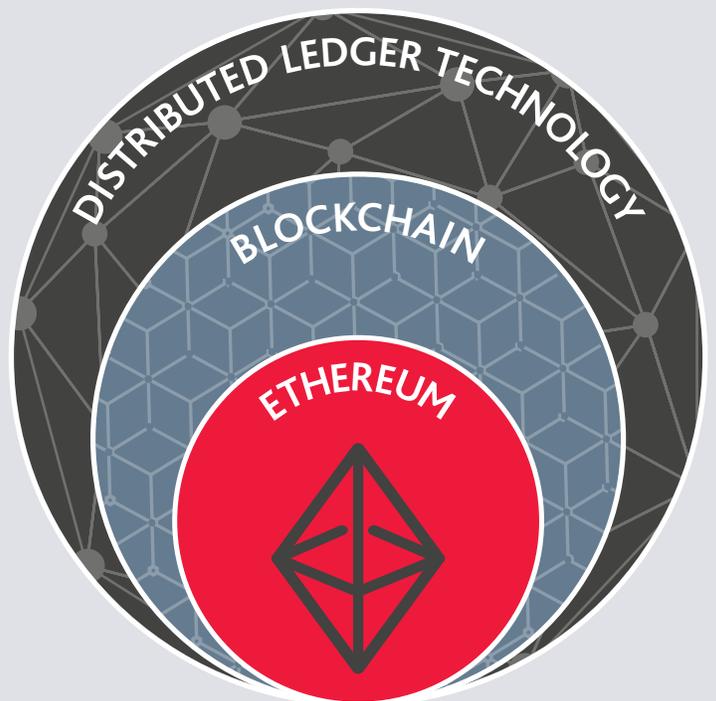
By Dan Harris and Demetrios Frangiskatos

In some circles, blockchain has been heralded as the foundation of [Web 3.0](#), and as a result, companies are experimenting with its applications in a variety of industries. In fact, worldwide expenditure on blockchain technology is forecasted to reach \$12.4 billion by 2022, according to the [International Data Corporation](#).

## BLOCKCHAIN VS. DLT

Though they are often used interchangeably in common parlance, blockchain and digital ledger technology (DLT) are not synonymous. Blockchain is just one form of DLT, just like Ethereum is one of many blockchain platforms. Blockchain is distinguished from other types of DLT by the way data is organized. Information is stored in a succession of timestamped "blocks" made up of a predetermined number of tracked data points (such as transactions, coordinates or temperatures). Each block is linked together chronologically using a cryptographic signature called a "hash" to form a secure chain of records, which continues to grow as new blocks are verified by the network.

Blockchain purists will tell you that for DLT to qualify as a blockchain, its governance—not just its technological underpinnings—must be totally decentralized and egalitarian, meaning there is no network "owner" who can dictate the structure and rules. If you take that view, any distributed ledger run or maintained by an enterprise wouldn't qualify as a blockchain. For the purposes of this article, the term blockchain will be inclusive of enterprise-run platforms and applications.



The advertising industry is no exception. While at this stage, its potential as a massive disruptor to the advertising agency is unclear, ask just about any group of executives, creatives or technical staff about the future of the industry, and the conversation is likely to gravitate toward blockchain technology. Here is a framework for thinking about the impact of blockchain technology on the digital media industry:

## DIGITAL ADVERTISING'S BIGGEST CHALLENGES:

- ▶ More than two-thirds of total U.S. digital advertising revenue stems from Google, Amazon and Facebook, the market makers when it comes to online advertising. Many other markets see a similar dominance by “the big three.”

These huge, siloed platforms dictate how advertisers and agencies can engage with potential customers. These companies also have control over the user data that could potentially enable more targeted and relevant advertising.

- ▶ An increase in “ad fatigue” by users has led to [the rise of ad blockers](#) across the world.
- ▶ General Data Protection Regulation (GDPR), launched in 2018 by the European Union, also makes it harder for the advertising industry to [target ads](#) to specific customer segments. The California Consumer Protection Act (CCPA), which took effect January 1, 2020, and sweeping privacy reform being enacted across all 50 states, means advertisers will need to rethink their customer targeting approach.
- ▶ Fraud is a prevalent problem for digital advertising. Advertisers lost roughly \$19 billion of net expenditures to ad fraud in 2018, according to Juniper Research.

To mitigate the impact of these challenges, the digital advertising industry is keen to explore the potential of blockchain.

## BUILDING THE BLOCKCHAIN BUSINESS CASE

One argument for blockchain's ability to “save” digital advertising is that it can efficiently connect advertisers and publishers with their desired target audiences while simultaneously lowering costs. The rapidly growing number of [start-ups](#) in the space is a testament to blockchain's potential in this area. Blockchain start-ups are:

- ▶ Infusing the advertising space with greater transparency. Advertisers and agencies can track which ads are shown, when and to whom [more accurately](#) than they do today.
- ▶ Sharing ads with individuals and customer segments that are actively interested in viewing and have [opted into](#).
- ▶ Reducing the dependency on intermediate ad exchanges, making middlemen less relevant by enabling advertisers to directly connect to the end consumer.
- ▶ Giving users control over what data they share with advertisers, as well as insight into what this data is used for. As a result, ad blockers become less of an issue. As a further incentive, some blockchain companies are looking [to compensate users](#) for the time they spend looking at ads.
- ▶ [Combatting fraud](#) and administrative challenges such as double-spending issues where digital resources are sold more than once.
- ▶ [Streamlining payments](#) and settlements in an industry that struggles with long payment terms.

In short, blockchain-based digital advertising platforms can potentially increase transparency, efficiency and control over the entire advertising value chain.

There is **\$19B worth of revenue** just waiting to be saved by the companies who find ways to **eliminate online ad fraud**.



## EARLY SUCCESSES FOR BLOCKCHAIN

Both companies and advertising agencies are adopting blockchain-based systems. For example:

- ▶ [Toyota](#) has invested in blockchain-based advertising by partnering with the blockchain advertising analytics firm, Lucidity. Toyota's goal is to minimize the impact of fraud on its digital ad purchases.
- ▶ IBM is working on a version of its enterprise blockchain solution, Hyperledger Fabric, with digital advertising firm [Mediaocean](#), as well as firms like Kimberly-Clark, Kellogg's and Unilever. The goal is to record impression level data as well as related transactional data, such as purchase orders and payments, to better understand the customer journey and impressions.
- ▶ Advertising giant [Havas](#) is developing blockchain technology.
- ▶ [Nasdaq](#) has launched an advertising exchange based on blockchain.
- ▶ [Fenestra](#), a UK company that uses blockchain as the foundation for its independent advertising and media platform, has partnered with [several leading media agencies](#) to provide clients with greater transparency for, and thereby increased trust in, their ad and media spending.

## WHY BLOCKCHAIN ISN'T READY – YET

With so many available solutions and obvious upsides, it appears that blockchain is on the fast track to be the foundation of future digital media platforms. In reality, blockchain adoption remains relatively low in the industry, as many agencies and advertisers—including those mentioned above—are doing the equivalent of dipping a toe in the water.

One reason is that the technology is still far from prepared to manage the vast amount of data that digital media generates. For example, Ethereum, one of the most popular blockchain platforms, can process relatively few transactions per second. Digital media involves millions of media impressions and related transactions every second, so the technology cannot currently keep up. Additionally, while there are many different platforms and start-ups in the space, they don't have a foothold on big advertising platforms.

## BLOCKCHAIN ADOPTION IN THE MEDIA INDUSTRY IS INEVITABLE – ONE DAY

While the advertising industry overall is taking a measured approach to blockchain adoption, its potential can be seen based on recent announcements from big tech. For example, Google is building [search tools](#) for blockchain while Facebook is readying a launch of its own cryptocurrency. Furthermore, Facebook's enhanced data privacy strategy could lay the foundation for the company to pursue blockchain-based advertising solutions.

The benefits of blockchain are obvious: There is \$19 billion worth of revenue just waiting to be saved by the companies who find ways to eliminate online ad fraud. Blockchain also holds great promise when it comes to one of the hottest ongoing debates in the media and advertising industries: how to increase transparency and increase trust among consumers, clients and the general population.

Blockchain technology is evolving at an incredible pace. The fact that blockchain could streamline both the interactions between advertisers and potential customers as well as payments means that it's definitely worth the time and capital investment to explore its applications in the advertising industry.



# People who know Technology, know BDO.

## CONTACT:

### AFTAB JAMIL

National Technology Industry Leader  
408-352-1999 / ajamil@bdo.com

### MAURICE LIDDELL

Principal, BDO Digital  
713-407-3265 / mliddell@bdo.com

### DAN HARRIS

Assurance Partner  
415-490-3188 / dharris@bdo.com

### DEMETRIOS FRANGISKATOS

Assurance Northeast Regional Managing Partner  
212-885-7397 / dfrangiskatos@bdo.com

## ABOUT THE TECHNOLOGY PRACTICE AT BDO USA, LLP

BDO has been a valued business advisor to technology companies for over 100 years. The firm works with a wide variety of technology clients, ranging from multinational Fortune 500 corporations to more entrepreneurial businesses, on myriad accounting, tax and other financial issues.

### ABOUT BDO

BDO is the brand name for BDO USA, LLP, a U.S. professional services firm providing assurance, tax, and advisory services to a wide range of publicly traded and privately held companies. For more than 100 years, BDO has provided quality service through the active involvement of experienced and committed professionals. The firm serves clients through more than 65 offices and over 700 independent alliance firm locations nationwide. As an independent Member Firm of BDO International Limited, BDO serves multi-national clients through a global network of more than 88,000 people working out of more than 1,600 offices across 167 countries and territories.

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms. BDO is the brand name for the BDO network and for each of the BDO Member Firms. For more information please visit: [www.bdo.com](http://www.bdo.com).

Material discussed is meant to provide general information and should not be acted on without professional advice tailored to your needs.

© 2020 BDO USA, LLP. All rights reserved

