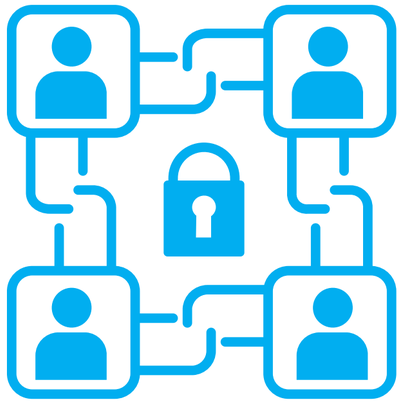
Adoption Trends

Blockchain



November 2021

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Introduction

IABM Adoption Trends reports annually track the adoption of specific emerging technologies within the broadcast and media sector. The purpose of these reports is to enable member companies to better understand what is driving the adoption of emerging technologies within customer organizations. This will provide member companies more insight to better address the challenges lying ahead, from new product development to marketing strategy. These reports contain a discussion on the state of adoption of a specific emerging technology in broadcast and media, as well as an analysis of significant customer deployments.

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Blockchain Essentials

Blockchain Essentials

Blockchain - What is it?

Blockchain

Blockchain is a digital, immutable and **decentralized ledger** chronologically **recording transactions** in near real-time. At first, a digital transaction is verified and validated by a public, hybrid or private **network of computers** (or nodes) and then added to an immutable ledger – the blockchain – as a new block of data, linked to others through timestamps.

Approval

Approval of all digital transactions **by all network participants** adds them to the ledger.

Decentralization

Immutability of the ledger – which is safeguarded by the encryption of each block – prevents participants from changing recorded transactions, boosting their **trust** in the network. Network participants are able to access all the records in the blockchain, eliminating the need for a centralized authority to manage the verification process.

Trust

The **decentralization** of the ledger means that there are multiple exact copies of it. This makes sure that, even if one node in the network fails or is hacked, the remainder of it can continue to operate seamlessly. In media industry, blockchain is a **trust enabler** due to its decentralized nature.

Sources: IABM

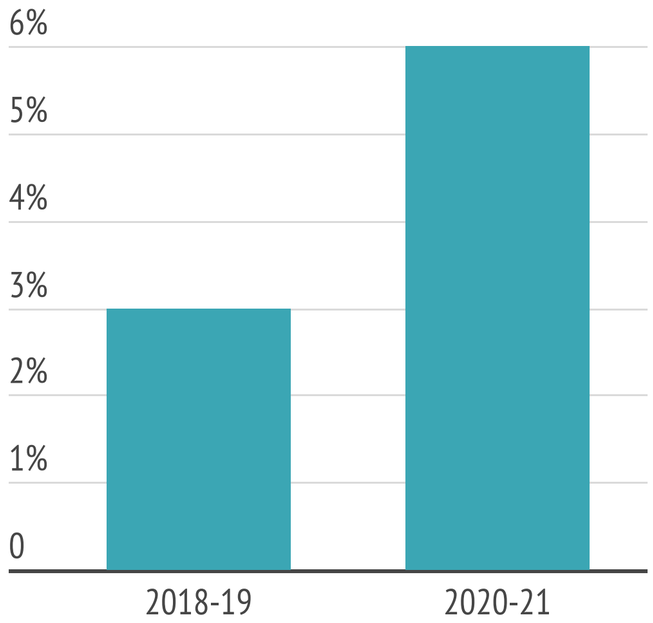
Blockchain Adoption Tracker

Blockchain Adoption Tracker

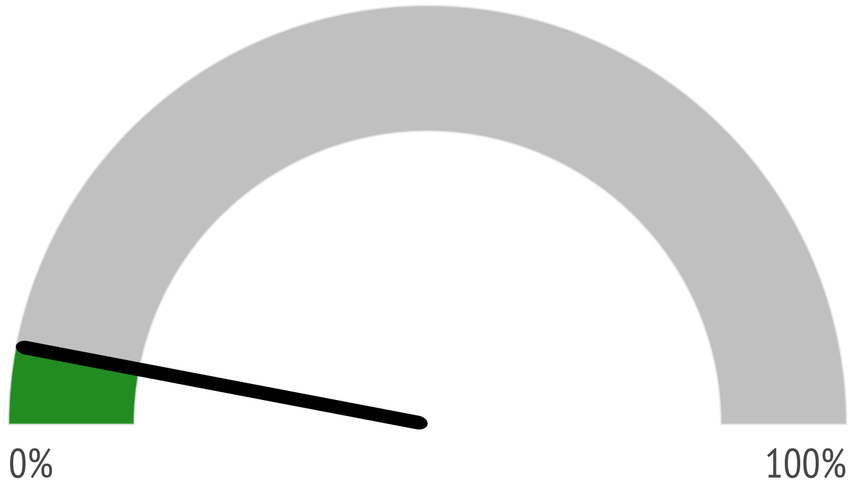
Adoption by Broadcast and Media Industry

According to IABM's Media Tech Business Tracker, only 6% of broadcast and media companies have already deployed some sort of blockchain technology as of 2021. While the number of companies that already deployed blockchain has risen slightly from 3% reported in 2018 and 2019, the overall outlook has become more pessimistic; 55% of companies are unlikely to deploy blockchain technology (versus 43% in 2018).

Historical adoption of Blockchain



The state of Blockchain adoption by broadcast and media industry



Share of companies that have already adopted Blockchain

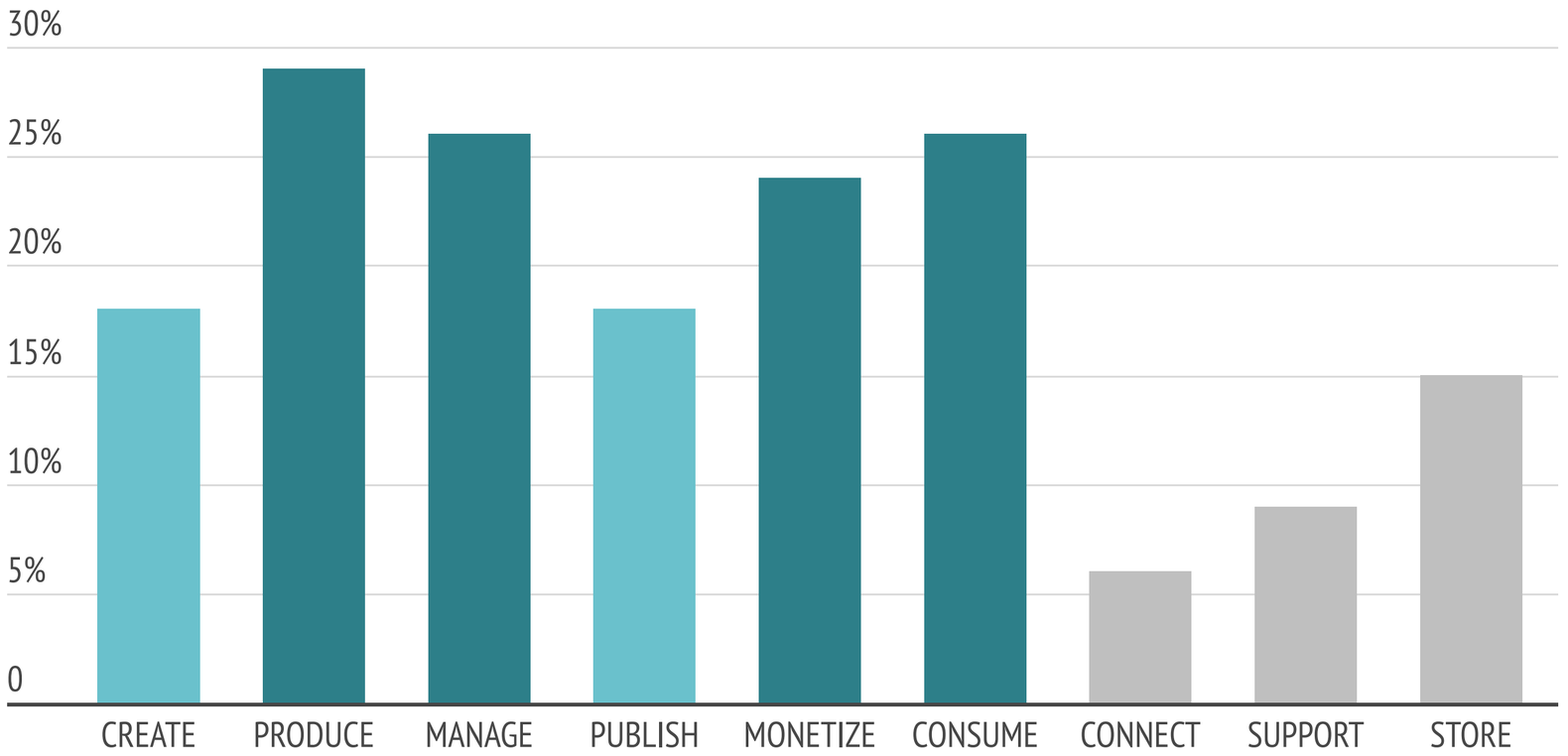
Source: IABM

Blockchain Adoption Tracker

Adoption by Broadcast and Media Industry

From the **BaM Content Chain®** perspective, end-users are most likely to deploy blockchain in Produce-related workflows, followed by Manage, Consume and Monetize.

Blockchain application by BaM Content Chain®



Source: IABM

Blockchain Adoption Tracker

Adoption by Broadcast and Media Industry

Produce

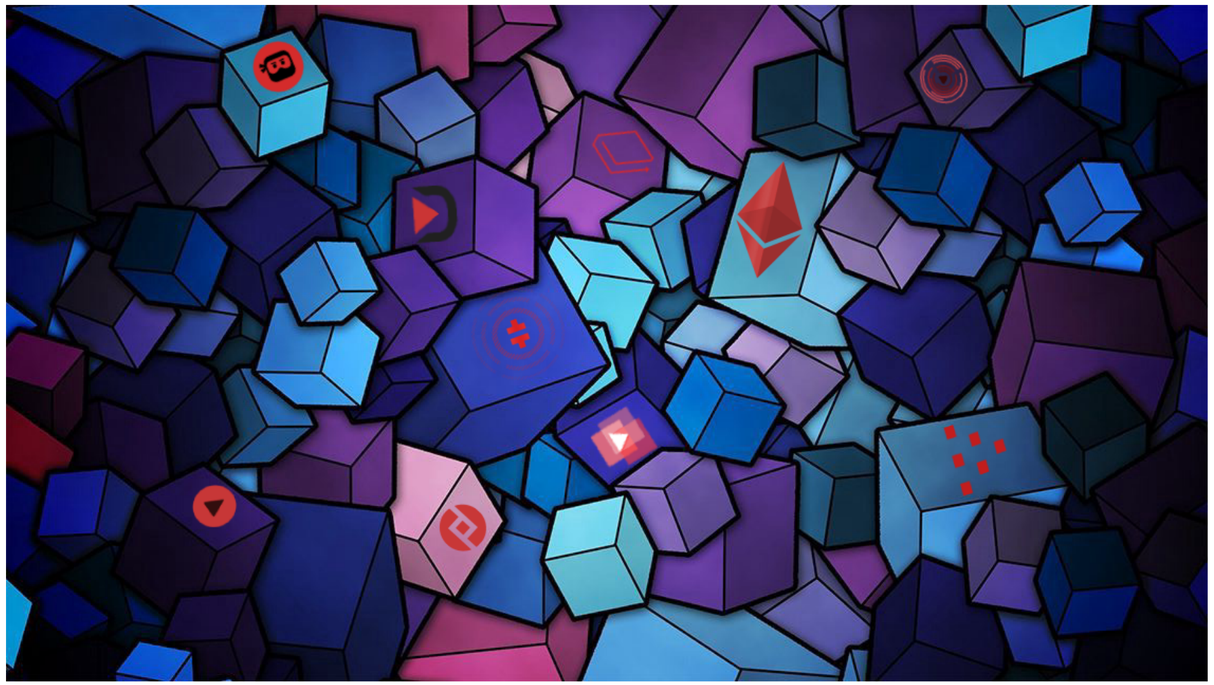
Most recent use cases of blockchain in content creation and production are **to enable independent production companies** to produce, sell and authenticate their content **directly** to consumers**.**

Manage

Most blockchain use cases in content management systems are **to improve metadata management,** when combined with **ML**. Blockchain can provide an **immutable record** for metadata management workflows, enabling **metadata verification** and **validation.**

Consume / Monetize

Blockchain is increasingly used in **advertising** as well as by **content owners** selling their content directly to viewers through **micro payments** and **smart contracts**.



Source: IABM, Medium

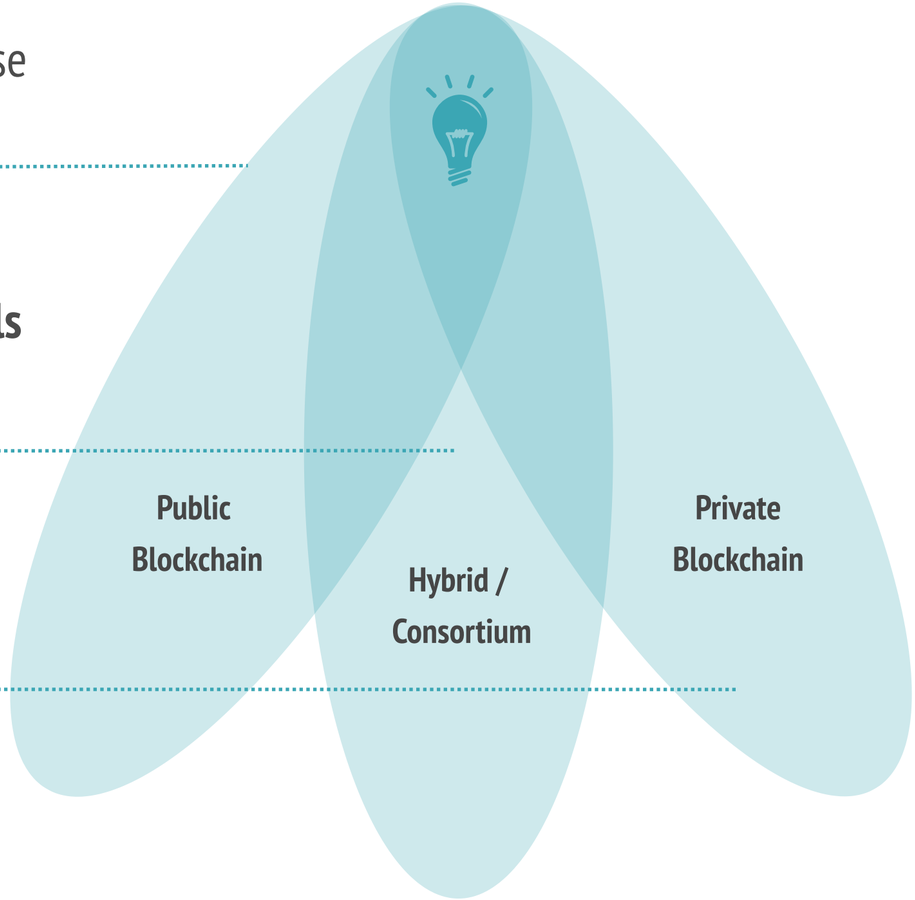
Blockchain Adoption Tracker

Blockchain deployment types

A **public** blockchain is **accessible to everyone** and does not require a permission to use (e.g., Bitcoin). All **data and transactions are public** in this model.

A **hybrid** or **consortium** blockchain is **accessible to an authorized group of individuals or companies** sharing a common interest.

A **private** blockchain is **accessible to only authorized users**, who can be individuals or a group (e.g., a company, a government institution).



Source: IABM

Blockchain Deployments by Content Chain

Blockchain Deployments by Content Chain

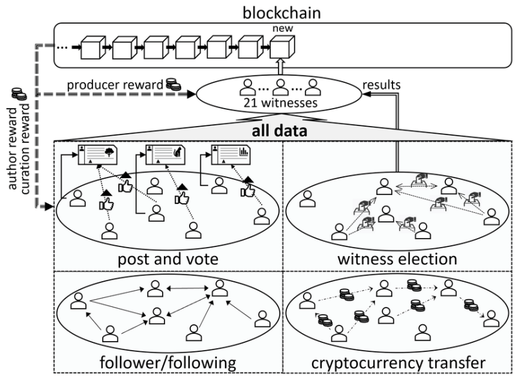
Blockchain in Creating & Producing Content

Blockchain can be used to vet content sourced from users or social media. This offers opportunities to user generated content (UGC) contributors as well as small, independent production houses with limited infrastructure - the profits from the content rights sold to a larger studio can be distributed on the blockchain. As blockchain allows the setting up of virtual entities to fund projects, content creators can directly deal with global investors and use smart contracts enabling automated revenue distribution. This is particularly useful given the increasing complexity of digital distribution and streaming.

Steem, Token-Based Content Trade

Steem, a blockchain-backed social media platform, uses tokens as incentives to encourage its users to create original content. As of 2021, Steem has paid over US$40 million in tokens to creators globally. The amount of tokens earned by a content creator is based on the number of up-votes each piece of content receives from other users. Hence, the "price" of a piece of content is actually determined by other users voting or providing feedback to the content creator on the quality of the content. As a social blockchain by nature, Steem keeps a piece of content editable for 7 days on the platform, after which the content is frozen and its "price" is computed.

STEEM



Sources: IABM, ResearchGate, Journal of Mobile Networks and Applications (Guidi et al., March 2021), builtin.com

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

News broadcasters are increasingly threatened by fake news and disinformation campaigns, as they leverage user generated content - a trend accelerated by the COVID-19 pandemic. Blockchain's ability to provide decentralized validation makes it an effective tool to track unwanted content; users/viewers can simply vote on trustworthy information. These votes can then be added to the blockchain's ledger – which is immutable – to have a record on what is trustworthy and what is not. For example, in the US, the House of Representatives is currently evaluating the use of blockchain to verify sources, watermarks and content creators' identity as a part of the DEEP FAKES Accountability Act introduced in 2019.

Blockchain in Detection of Fake News -Applications

Content Verification: Blockchain can track and verify sources and other critical information on digital media platforms.

Proof of Identity: Blockchain can prove and verify the identity of a content creator preserving the reputation of a publisher.

Incentivizing Content Accuracy: Blockchain-enabled smart contracts can be used as rewards for publishing accurate information.

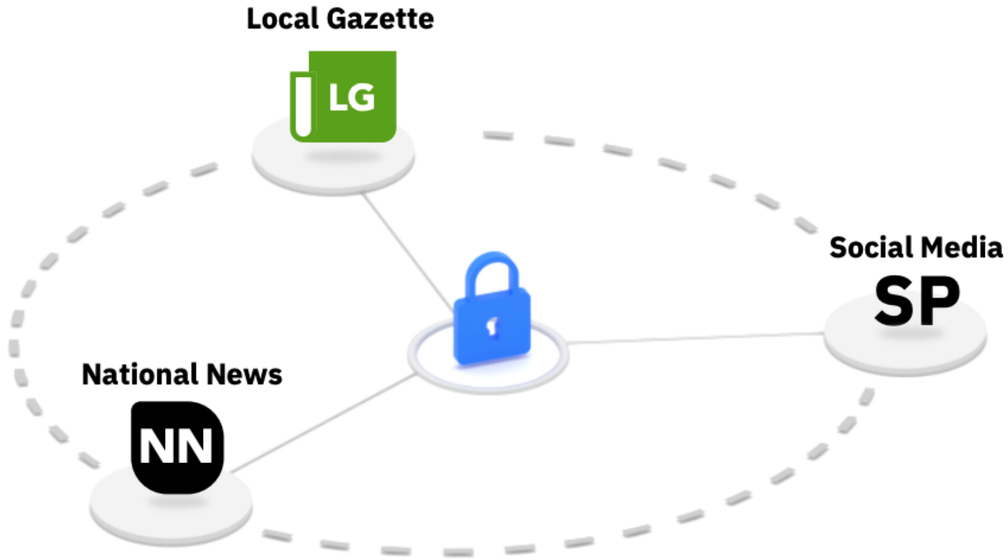
Sources: IABM, Harvard Business Review, SMPTE

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

The New York Times, Blockchain in Tracking Changes in Photo Metadata

The Research & Development team at The New York Times is currently testing blockchain to surface a news photo's metadata on a simulated social media feed. While prototyping, the team wants to see if visible contextual information (e.g., the photographer's name and the location depicted in the photo) enables subscribers to better discern the credibility of news photos they share in their social feeds. By tracking photo metadata with blockchain, the team can see in detail what happens to a news photo (or a video clip) from capture to publication and which parties make changes to photo metadata in the database. In commercial use, the solution could allow a social media user to verify whether an incident depicted by a posted photo actually happened in the claimed context, time and place.



Sources: IABM, The New York Times

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

To improve viewer engagement and retention, blockchain technology is increasingly used by content creators for data analytics and content optimization. Connecting content creators with their viewers, blockchain enables them to directly access viewers' behavioral analytics in real-time without having a streaming platform as an intermediate controlling that data. When content creators are in a direct relationship with viewers, they can customize content to a specific target group.

The decentralized nature of blockchain-backed streaming platforms enables viewers to become partial owners of content, transparently monitor their investments and be involved in content production.

Binge, Blockchain VOD Platform Extends to Gaming

Initially launched in 2018 by Slate Entertainment Group, but now being its own company, Binge is a blockchain-backed streaming platform for original content inspired by content creators and video games. Preparing for its official launch in 2022, Binge uses blockchain technology to provide transparent data analytics for its own content creators on the platform. Next year, the on-demand platform will enable fans to experience original retro, indie and blockbuster content together, which is co-produced by content creators, studios and game publishers. Gamers and viewers will collaborate and actively contribute to content production on the platform.

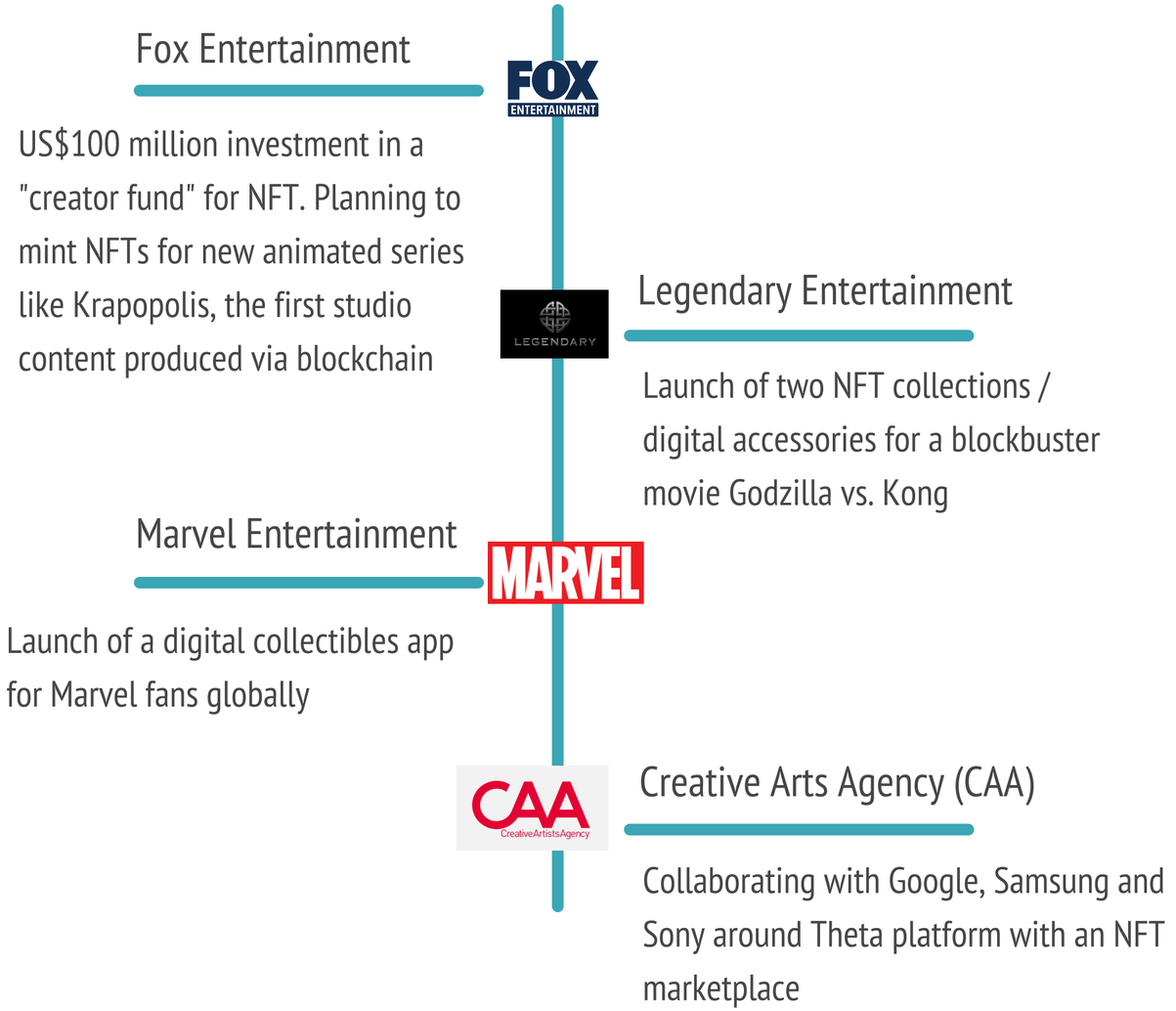
Sources: IABM, C21 Media, Screendaily.com

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

Over the past year, NFT (non-fungible token) on the blockchain has emerged as a new format of content production, consumption and distribution. An NFT refers to a digital certificate of ownership of an object such as an image, video or audio clip. The idea of an NFT is that blockchain technology can guarantee and authenticate ownership of a digital asset; the token cannot be copied. NFTs can be traded on an NFT marketplace for example through an auction. Such token trade empowers fan communities as new partial owners of a specific piece of content and/or its related digital accessories.

NFT Initiatives in Content Production in 2021



Sources: IABM, IBC365, coindesk.com

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

The introduction of tradable digital assets related to a specific piece of content connects viewers with other passionate viewers, driving fan engagement through gamification. As the content sold at an NFT marketplace is exclusively available to view by NFT holders, its scarcity increases the value of its related tokens. Moreover, crowd sourcing through NFTs makes fan communities more influential in having their say on what goes into the production. Hence, NFTs bring the gaming element into streaming, as their value is speculative and depends on other fans. By collecting tokens, a fan of a TV series may find the whole experience of watching content more exciting and become a superfan to influence others. For example, in 2021, Fox Entertainment invested US$100 million in a "creator fund" for NFTs to commercialize characters, background art and other GIFs of Fox's film

Sources: IABM, IBC365, Yahoo News

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

Fox Entertainment and Eluvio, Gamified NFT Experience

In August 2021, Fox Corporation announced a strategic investment in a blockchain media startup, Eluvio, to distribute and monetize premium content on Fox's new Blockchain Creative Labs platform, based on NFTs. In the deal worth US$100 million, Eluvio provided technology for the new NFT platform. Eluvio's technology platform, Eluvio Content Fabric, is an open-protocol blockchain network providing file-based and live content publishing, transcoding, packaging, sequencing, dynamic distribution and trade on NFTs. Interestingly, Fox highlighted that it selected Eluvio's technology for Blockchain Creative Labs, because Eluvio Content Fabric is an environmentally-friendly choice; it does not make file copies, reducing storage and network requirements compared to a traditional digital distribution system. The first piece of content specifically created for the Blockchain Creative Labs platform will be an animated comedy "Krapopolis" by Dan Harmon. It will be the first animated series that is entirely curated on blockchain. Digital Krapopolis goods (or digital accessories) will be traded on the platform to "engage and reward superfans".

> *At Fox, we believe that the blockchain, and the overall shift towards a more decentralized web, is providing creators with a wealth of opportunities to reach consumers with exciting new experiences. Our investment will help this technology [with scalable infrastructure required to power live, decentralized experiences across the blockchain] to a wider market of content creators, media partners and advertising clients.*
>
> Paul Cheesbrough, CTO, Fox Corporation

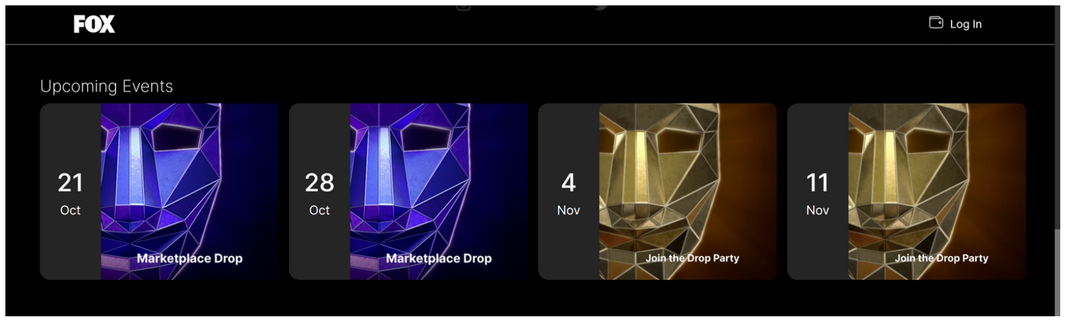
Sources: IABM, IBC365, Variety

Blockchain Deployments by Content Chain

Blockchain in Creating & Producing Content

Fox Entertainment, Excess Demand For The Masked Singer NFTs

In October 2021, Fox Entertainment launched its first line of NFTs based on the hit singing competition, The Masked Singer, on its new Blockchain Creative Labs platform run by technology from Eluvio. Fox's new strategy to move toward gamified crypto marketing around selected original content seems to work - Fox gave away 20,000 NFTs in less than 24 hours as a result of massive demand for the Masked Singer featured collectibles. Instead of paying for the NFTs, users had to register their digital wallets on MaskVerse.com, Fox's own NFT marketplace for the Masked Singer-related tokens. In November, Fox will release Mask Packs of Mask Singer NFTs and organize a voting game for fans and collectors allowing them to guess which characters will be eliminated in the Masked Singer's final six episodes.



Sources: IABM, IBC365, decrypt.co, maskverse.com

Blockchain Deployments by Content Chain

Blockchain in Managing Content

Given the fact that blockchain maintains the history of every action (transaction) in the ledger, it can be used for metadata management to track any changes that have been made to any digital asset. For example, changes to metadata can trigger alerts to interested parties and create records in the ledger to verify (or validate) who did what to ensure that the metadata is correct. Blockchain can also be combined with ML to automate workflows in Manage (e.g., tidying up newly created metadata, tracking duplications).

Verifi Media, Blockchain-Based Music Metadata Management

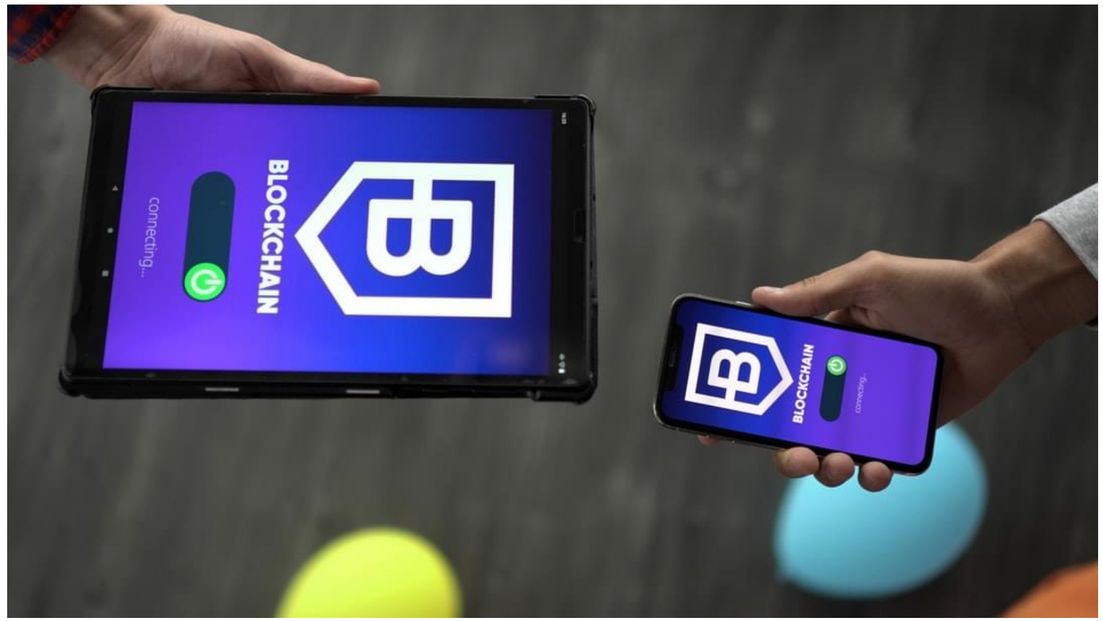
In 2020, Verifi Media, a provider of media rights management services, introduced a blockchain-based music metadata tracking and management service for the clients of FUGA, a B2B music distributor for international rightsholders. Verifi's new blockchain-based SaaS solution is designed for music rights owners and creators seeking to increase transparency, streamline operations and save time (and cost). Combined with AI, the new blockchain solution can accelerate the process of verifying music metadata; companies and users can get accurate metadata for purposes of licensing, catalogue management and royalty payments. In July 2021, Verifi Media raised US$4 million from a group of strategic investors to develop its blockchain-based services further.

Sources: IABM, broadwayworld.com, martechseries.com

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Recently, both academia and private sectors have started to develop solutions, which use blockchain to preserve intellectual copyrights. Some research teams have proposed that blockchain could be used to guarantee copyright compliance of media assets by smart contracts. Another research group has suggested an Ethereum cryptocurrency-based digital copyright management system, in which content owners and viewers could deal directly without any centralized authorities. In one model, blockchain is used to assist content creators to manage DRM through an UHD video copyright management system, in which the headers of UHD (i.e, 4K and 8K) video content are encrypted and decrypted to decrease cryptographic costs.

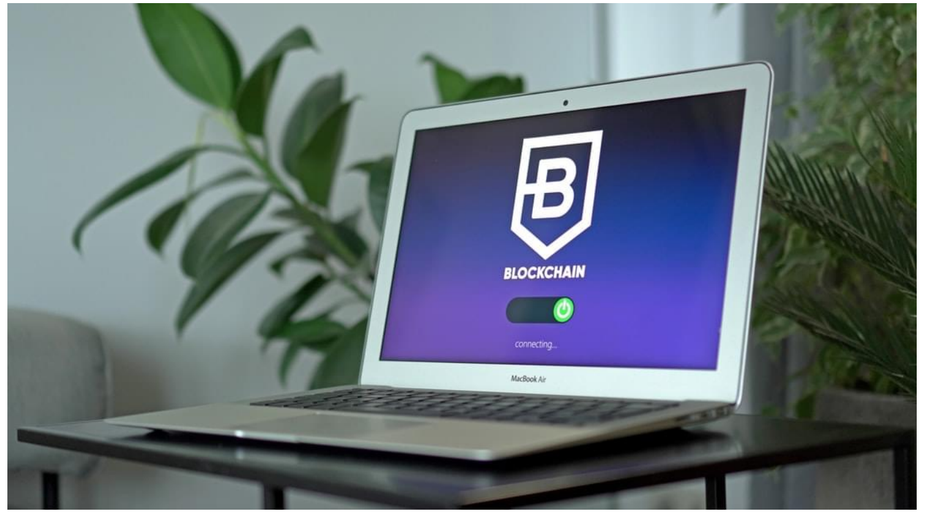


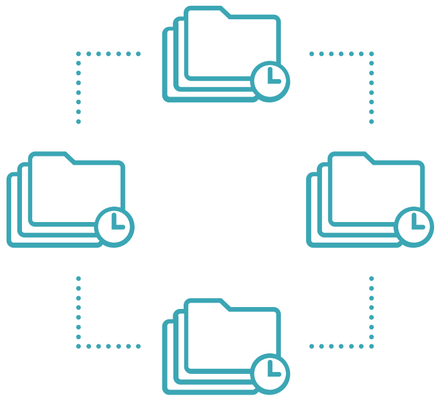
Sources: IABM, Qureshi et al. (Blockchain-Based Multimedia Content Protection: Review and Open Challenges. Appl. Sci. 2021, 11:1)

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Another recently published research paper introduces the Blockchain as a Service (BaaS) model, in which a DRM platform is built to provide core content rights information storage on the blockchain. Interestingly, in this model, content viewers use blockchain-based digital currency to pay for the requested content. Moreover, one enticing model proposed by academic researchers refers to blockchain technology used to store the watermark of digital assets and to provide timestamp authentication for multiple watermarks. In terms of audio, one research group has introduced a blockchain-based copyright protection system for audio content, using content-based fingerprints and smart contracts, which - when combined - can track whether a similar fingerprint exists on the Ethereum blockchain. If a similar fingerprint is found, the system warns the copyright shareholder about it to prevent potential copyright violation.





Sources: IABM, Medium, Qureshi et al. (Blockchain-Based Multimedia Content Protection: Review and Open Challenges. Appl. Sci. 2021, 11:1)

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

All major public cloud service providers already offer BaaS-based solutions. The majority of public cloud providers' BaaS solutions support HyperLedger Fabric and Ethereum (e.g, IBM Cloud, Microsoft Azure, AWS) and they charge customers only for the resources used including storage, compute and networking.
As media companies move to the cloud, automated BaaS solutions offered by major public cloud service providers may become an interesting, secure way to test blockchain technology for different media workflows like DRM.

Sources: IABM, Medium, Qureshi et al. (Blockchain-Based Multimedia Content Protection: Review and Open Challenges. Appl. Sci. 2021, 11:1)

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Blockchain can be used by content owners to track assets. In terms of music rights, Blokur offers artists a rights management platform, through which they can be paid fairly when their songs are used by third parties. According to the company, its customers include Universal, Warner and BMG.
At NAB 2019, PBS announced that it was working with Eluvio and GrayMeta on a platform that relies on blockchain to enable PBS stations to optimize the use of their resources in a new initiative. The services that could rely on this platform include transcoding, datamining and excess resource sharing, according to PBS.
Flixxo, Treeti and LiveTree have also launched related content delivery platforms, which provide content creators with real-time analytics based on blockchain transaction data.

Sources: IABM

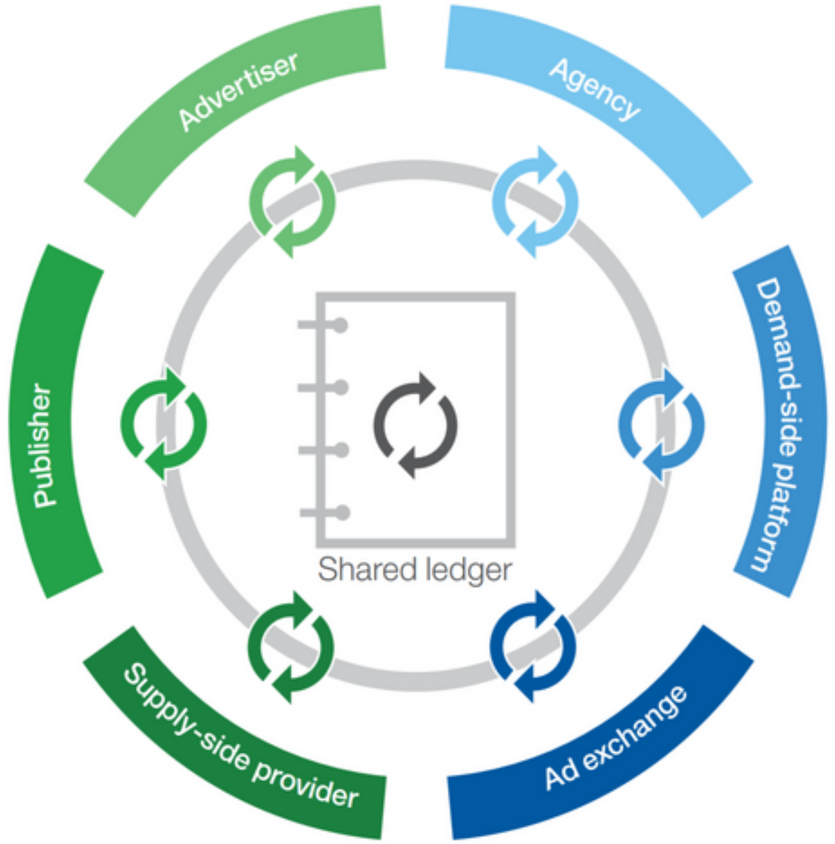
Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Monetizing Content

One of the most important features of blockchain is decentralization, which enables content owners to bypass intermediaries and sell their content direct to consumers. In the video business, aggregators such as Pay-TV companies could be bypassed by content owners. Making micro payments efficient in DTC space, blockchain can also help publishers and advertisers challenge the current hegemony of global internet giants in advertising; in 2020, Google and Facebook formed a duopoly that accounted for 73% of US' digital advertising market, according to IBM. These platforms have non-transparent media supply chains and closed measurement systems, which make it difficult to estimate the real value of their transactions, suppressing the margins of advertisers and publishers.

Blockchain in Asset Management Across Ad Tech Market



Sources: IABM, IBM Institute for Business Value

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

One initiative bringing transparency and data security to the advertising technology supply chain is AdLedger, a blockchain-backed peer-to-peer consortium formed by advertisers, publishers and other related parties. AdLedger uses blockchain to lock up data with cryptographic keys providing transparency and data security facilitating a more fair programmatic advertising market.

adledger

Media members of AdLedger:

LIBERTY GLOBAL

VIACOM

PREMION™

OMG Omnicom MediaGroup

HEARST television inc

IBM

Sources: IABM, IBM, AdLedger

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Seeing their linear ad revenues declining, broadcasters are seeking new ad tech solutions to take advantage of rapid growth of digital advertising globally. Some big media companies have already started to use blockchain as a part of their ad tech strategy. For example, Comcast is collaborating with NBC Universal, Channel 4 and Disney to match audience datasets - without sharing data - to improve planning, targeting, executing and measuring advertising. Comcast's Blockchain Insights Platform launched in 2018 was rebranded as Blockgraph in 2019. Blockgraph is a peer-to-peer ad tech platform designed for digital, broadcast and streaming. Viacom and Charter Communications (Spectrum Reach) recently joined the initiative. Using Blockgraph, the partners of the initiative can share data more directly with each other, while the data remains secured via encryption and blockchain protocols.

BLOCKGRAPH

When scaled, non-personably identifiable data becomes available to all, the focus shifts to what a provider is able to do with that data and how it can be used to drive outcomes. We believe that when advanced data capabilities are paired with TV and premium video's awareness and engagement advantages, results will be difficult to beat

Marcien Jenckes, President, Comcast Cable Advertising

Sources: IABM, IBM, ledgerinsights.com

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Smart contracts represent a potential tool to enable enforcement (and automation) in rights management. Smart contracts automatically enforce the terms of a relationship through code stored on the blockchain, without relying on third parties (like law enforcement agencies) to do so. When it comes to rights management, a content licensor can monitor its licences via smart contracts that automatically enforce some of the contract terms such as geographical exclusivity or termination dates. AdChain - launched by MetaX and the Data Marketing Association in 2017 - is an example of blockchain-based rights management solution using an open protocol. This enables users to track who views a certain media asset and what actions he/she takes after having viewed it.

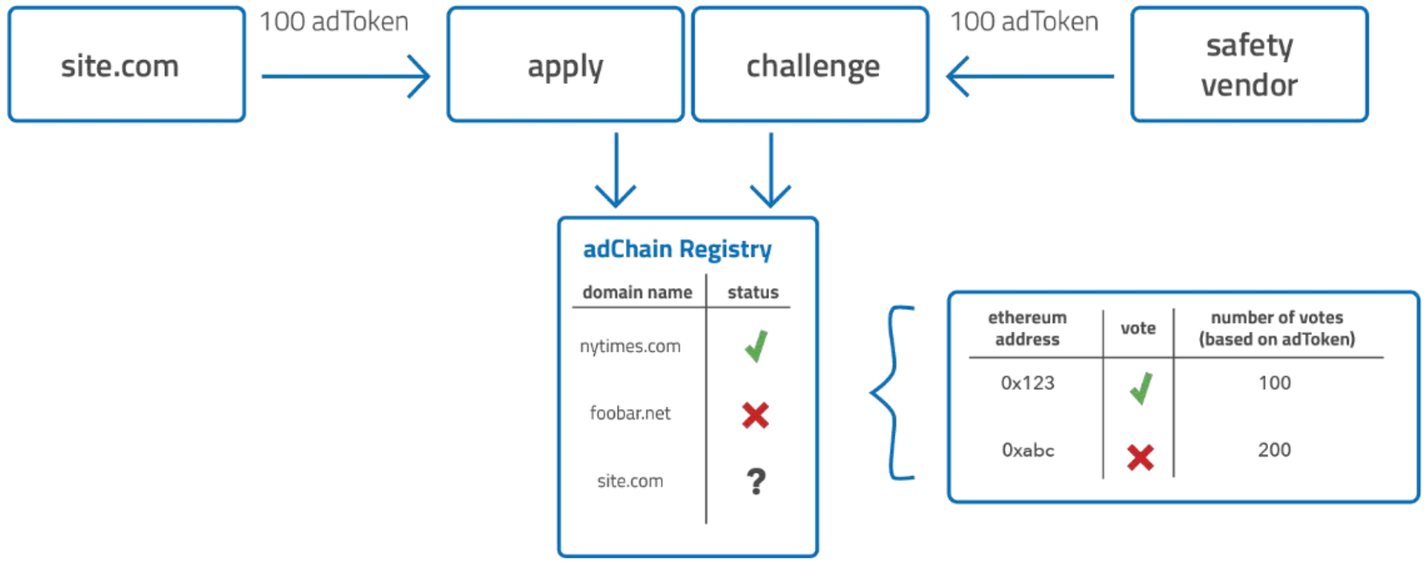
Sources: IABM, IBM, ledgerinsights.com

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

AdChain Registry - a solution that creates a list of trusted online publisher domains - is a token-curated registry relying on a community of token holders maintaining it. It uses Ethereum-based smart contracts, which employ tokens called adTokens. All participants on AdChain Registry platform vote for a trusted list of publishers and are then rewarded with adTokens. Developed by MetaX, AdChain Registry is the first token-curated registry in digital advertising space.

The adChain Registry



Sources: IABM, altoros.com

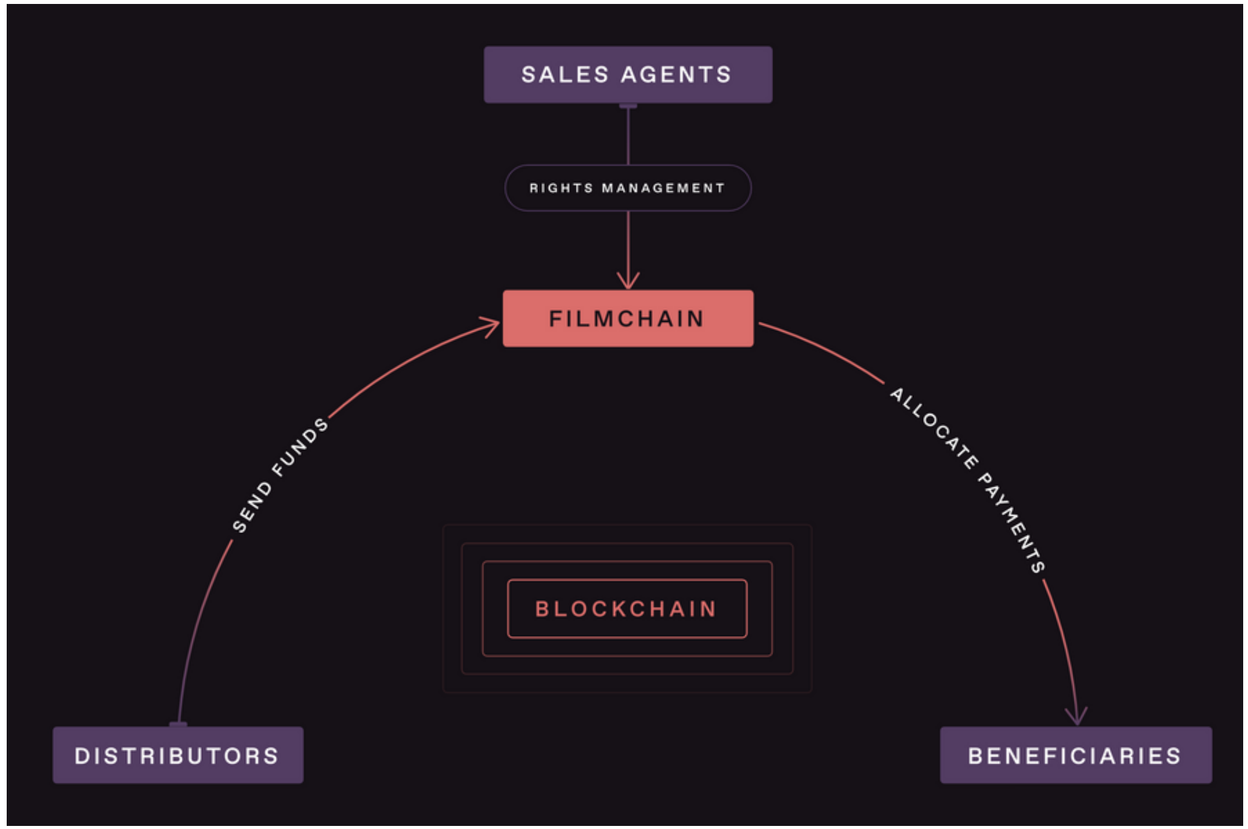
Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

FilmChain, Smart Contracts Platform

FilmChain – established in 2018 – is a smart contracts platform which uses the Ethereum blockchain to automatically create and execute payment schedules of license fees and royalties. At the same time, content creators – like its existing clients including Film Fund Hamburg, Eurimages Council of Europe and Bulgarian Film Centre – can get real-time data about different territories and distribution channels, showing which are the most responsive to their content.

FilmChain



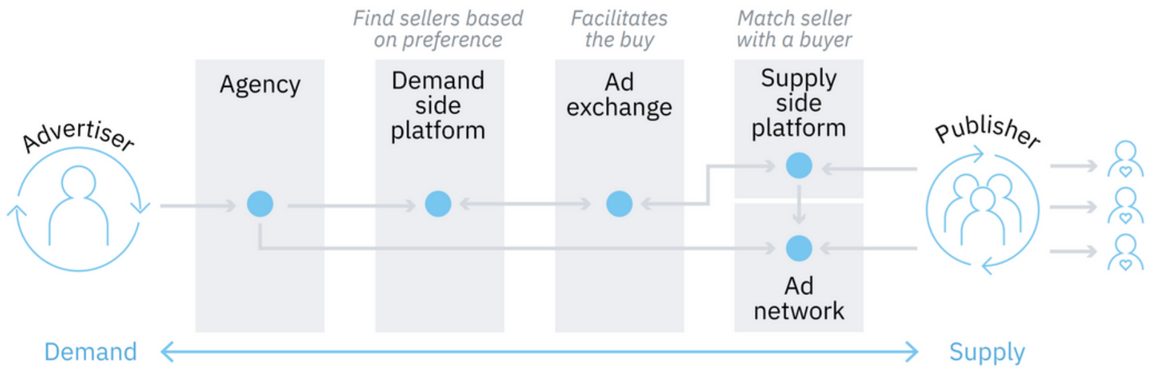
Sources: IABM, filmchain.co

Blockchain Deployments by Content Chain

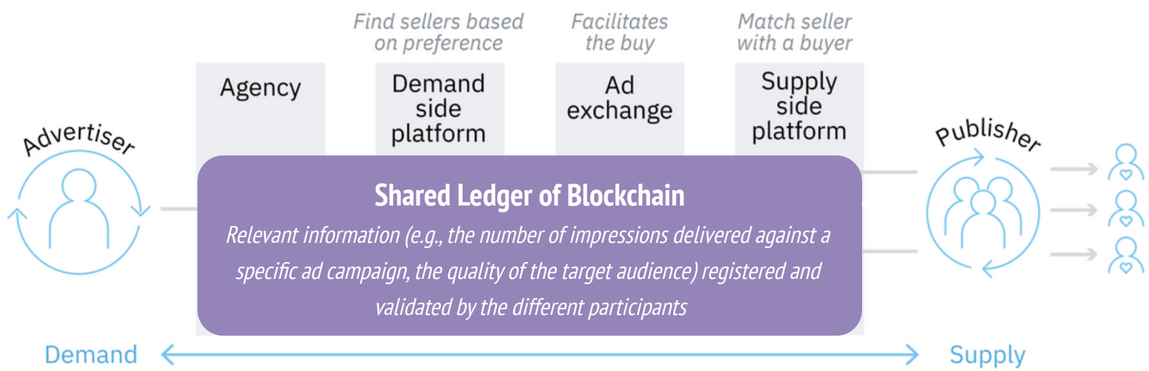
Blockchain in Distributing & Monetizing Content

Programmatic advertising - characterized by a complex value chain and lack of transparency on transactions - is the fastest growing segment in the digital advertising space. By combining blockchain technology with AI, advertisers can exclude multiple middlemen from the supply chain and improve ad targeting accuracy, which translates into better return on investment. For example, blockchain and AI combined can be used to optimize an ad campaign delivery so that the blockchain is used to capture identity-related data, while AI ranks the delivery paths, which are most suited to desired ad campaign outcomes.

Programmatic Advertising Value Chain



Programmatic Advertising Value Chain - Blockchain and AI Applied



Sources: IABM, IBM Institute for Business Value

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

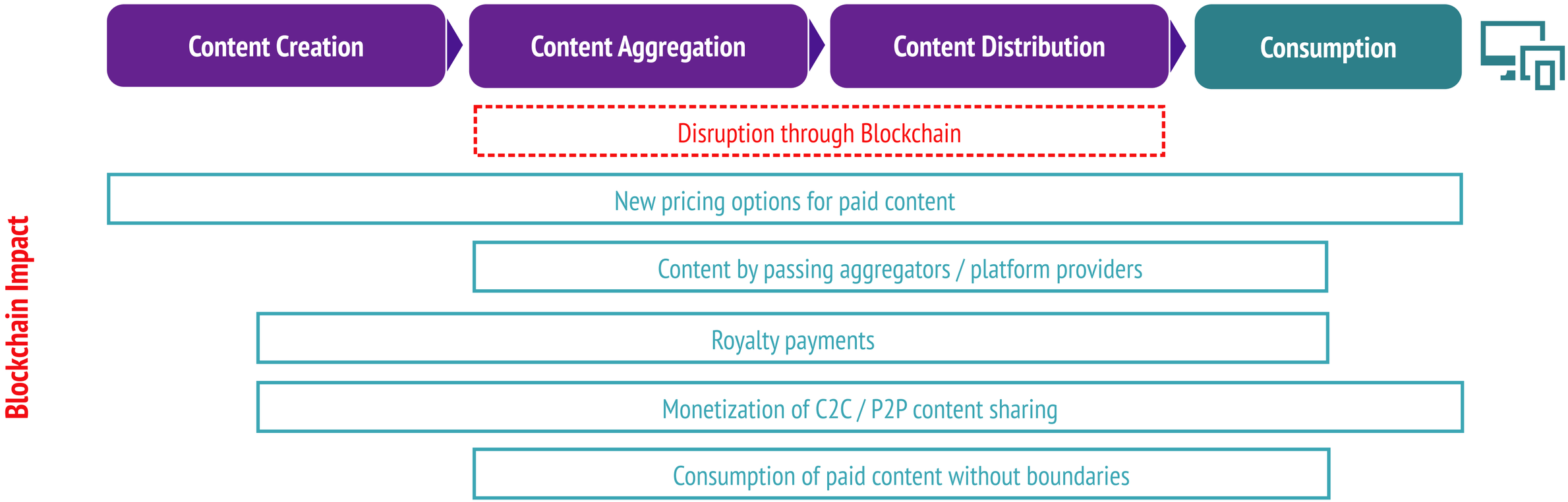
Blockchain-based payment and contract options are expected to affect fundamentally certain parts of the media value chain in the coming years. In streaming space, blockchain shifts the power to copyright owners, bypassing content aggregators, platform providers and associations collecting royalties. Based on predefined smart contracts, payment transactions are projected to become cheaper and the distribution of ad revenues fully automated (when they are no longer centrally collected). This creates new pricing options for paid content, when micro-payments become efficient and copying digital content illegally gets very difficult.

Sources: IABM

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Expected Relevance of Blockchain in the Media Value Chain



Media value chain turning into 1:1 relationships - and transactions!

Sources: IABM, Deloitte

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

As mentioned earlier, NFTs (non-fungible tokens) will drive disintermediation in the media value chain. According to Michelle Munson, the CEO at Eluvio, NFTs open up a new type of distribution window meaning that as soon as viewers can directly consume the content they want by actually owning it they will do so, making it a new form of rights. Today, NFTs are used for content premiers, but in the future there will likely be more content creators who want to have deeper control over their content and distribute it natively (by themselves) instead of giving it away for big content aggregators/providers like Netflix, Amazon and Roku that rely on licencing content to fill their online libraries.

> *More aggressive than collectibles is the curation and distribution of content on the blockchain so a series is streamed to users who have bought NFTs. This could be by giving exclusive access to the content before it is released. It also enables a re-tradeable marketplace for fans to collect and demonstrate their community support*

Michelle Munson, Founder and CEO at Eluvio

eluvio

Sources: IABM, IBC365

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Lotawana - an indie film directed by Trevor Hawkins - premiered in March 2021 as the first NFT sale of a feature film on OpenSea.io, an NFT marketplace. Another recent NFT release, Zero Contact, was filmed entirely via Zoom during the COVID-19 pandemic. Enderby Entertainment, the producer of Zero Contact, used Vuele - a company (and Enderby's JV with CurrencyWorks) operating FinTech platforms for digital currencies, assets and security tokens - to sell and market NFTs of the film. On Vuele, viewers can trade NFTs with their crypto wallets and interact with other fans as well as buy exclusive NFT-backed content like cast interviews. The producers are also boosting fan engagement by holding an auction, where the winner gets to appear on screen in the actual film (with Anthony Hopkins).

OpenSea

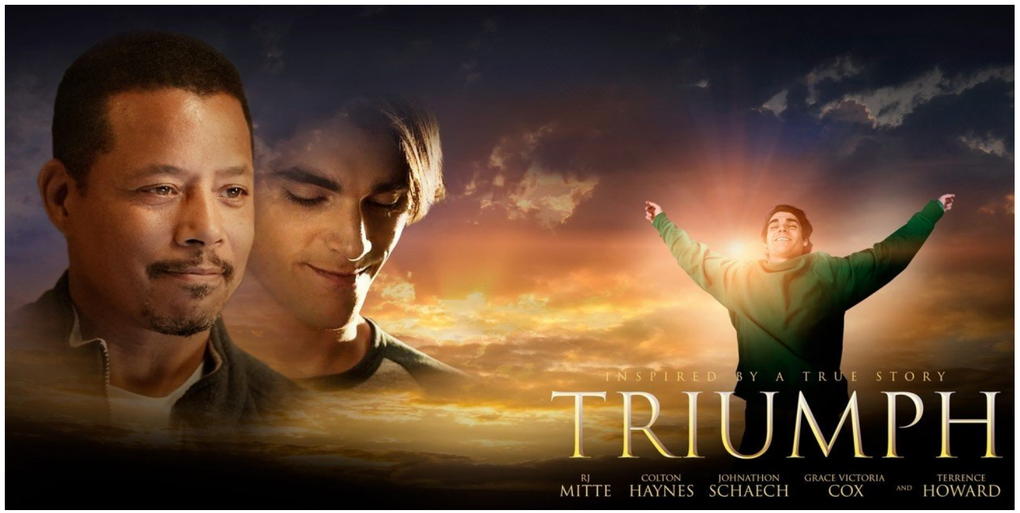
VUELE

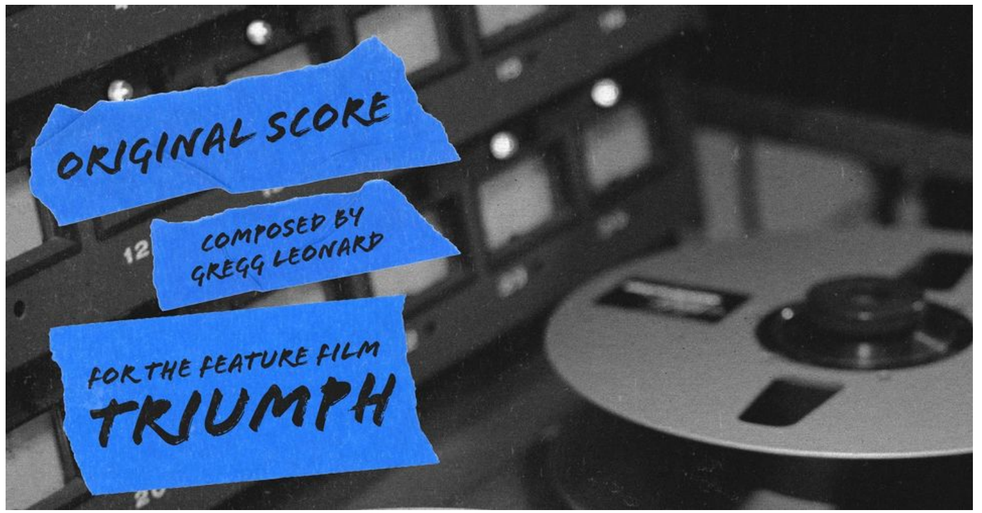
Sources: IABM, IBC365

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

Recently, the security of digital assets has been explored with NFTs - they offer the ability to lock in the IP of any creator through unique serial numbers encrypted on blockchain. NFTs also enable artists to receive a certain percentage of royalties each time their music is sold and resold. For example, Gregg Leonard, a LA-based composer, sold his original score for the 2021 feature release Triumph as an NFT, showcasing how an artist can control the rights, distribution and the monetization of his own contribution to a movie.





Sources: IABM, IBC365, screenrant.com

Blockchain Deployments by Content Chain

Blockchain in Distributing & Monetizing Content

In September 2021, Microsoft was awarded a patent for a ledger-independent custom token creation system. The new patent enables Microsoft to develop an interface for creating custom tokens that are independent of the underlying blockchain technology. Many existing distributed ledger technologies (e.g., Ethereum) allow developers to create custom tokens using their specific blockchain technology. However, each distributed ledger technology has different requirements and processes, making the existing ledger technologies sort of siloed. Microsoft's new patent will address that by introducing a uniform process of creating and accepting custom tokens across multiple different blockchain technologies. A uniform process will help users to create crypto tokens for different distributed ledgers more easily and efficiently. For the media value chain, this could mean more affordable NFTs for viewers, making NFT marketplaces more attractive for the mass market. This could potentially translate into more crowd-funded films and NFT direct-to-consumer distribution, offering an alternative to streaming.

Microsoft

Sources: IABM, DLA Piper. IBC365

Blockchain Deployments by Content Chain

Blockchain in Supporting and Storing Content

At the end of the Content Chain, blockchain has mainly been leveraged in trials to streamline resources and protect content. At NAB 2019, IBM Aspera showcased a new layer of cloud transfer security achieved through blockchain. In this solution, blockchain enables media organizations to establish a network of partners to augment the security of their digital assets and avoid content leakages.

Blockchain could also be leveraged to optimize resources such as bandwidth in an automated way – telcos are looking at this as they launch their 5G networks – through smart contracts. For example, Nokia is currently testing blockchain-based smart contracts used in 5G networks for High Frequency Charging (HFC), roaming settlements with partners and digital payments allowing consumers to buy new services with crypto assets across the Communications Services Providers' (CSPs) wider partner ecosystem.

In terms of file storage, blockchain can offer the same level of global redundancy and access as DAM software and thus some companies are already testing blockchain to decentralize the control of Content Delivery Networks (CDNs). This guarantees that downtime risk is not only spread across network nodes, but across the independent companies running the nodes.

Sources: IABM, Nokia, aprimo.com