

## Blockchain applications in the media industry

“We are at an amazing point in history for artists. A revolution is going to happen, and next year it’s going to take over. It’s the ability of artists to have the control and the say of what they do with their music at large. The answer to this is in the blockchain.”<sup>1</sup>

Imogen Heap, British singer and songwriter

Digital technologies have transformed content production and distribution in the global entertainment and media industry over the last two decades. The market is forecast to continue to grow over the next five years, and is currently estimated to be worth just over \$2 trillion.<sup>2</sup>

Acute challenges remain, though, especially relating to the way in which digital content can be copied and freely distributed on the internet, and how artists are compensated when their materials are used or bought through legitimate channels.

In the news media, for example, several newspapers keep their digital content behind paywalls, charging fees to access articles and stories online, but they have had varying degrees of success. One of the latest experiments involves micropayments – payments by consumers of very small sums of money to read individual articles or even portions of articles – sufficient to make a difference to rights holders but not enough to put off consumers. Although this approach does not use a blockchain, it is a sign of the interest that now permeates the industry in finding commercial models that work for content creators, consumers and corporations alike.

Blockchain technology could help to resolve a number of these challenges by connecting authors, musicians and videographers directly with consumers, as well as by making the organisations at the heart of the industry operate more efficiently. The opportunity goes beyond simply enforcing payment for content, it could help digital rights to be identified and managed more effectively across the industry, and appropriate compensation paid to the right artists and content owners.

For example, in an industry that has already undergone significant digital disruption, many musicians are hopeful that blockchain technology can help them reinvent the music business.

### Example: Royalty payments in the music industry

#### What are the current bottlenecks or issues?

Despite the industry at large being in rude health, the inner workings of the music business are struggling to keep up with digital technologies. The industry has traditionally been highly intermediated: artists’ contracts written years ago do not necessarily reflect the way that music is now consumed, and royalty payments depend upon airplay statistics gathered by music labels and copyright databases maintained by licensing bodies.<sup>4</sup> Streaming services are also shaking up the traditional business model since many earn their revenues through advertising rather than from selling music. The system works increasingly well for consumers, but such is its complexity and lack of transparency that earning money as an artist is fraught with difficulty.

#### How the blockchain could help

A blockchain could be used to store a cryptographic ‘hash’ of the original digital music file, associating it with the addresses – and, potentially, the identities – of the people involved in its creation. The blockchain could also store the instructions, in the form of a smart contract, for how the artists would be compensated for the song or music.

The British artist, Imogen Heap, who released her song, *Tiny Human*, using the blockchain, explains that the technology enables rules to be included that set out how and where the music could be used – putting artists in control of their content.<sup>6</sup>

A number of start-ups are beginning to explore this space. Ascribe, for instance, is a company using blockchain technology and machine learning – a form of artificial intelligence – to ensure artists and content producers are being paid fees for the use of their intellectual property.<sup>7</sup> Ujo is a service that uses Ethereum's blockchain platform to allow musicians and other artists to record and publish rules on how they want their music to be used, which aims to solve global royalty payment and licensing problems across the industry.<sup>8</sup> And Bittunes is using blockchain technology to help independent artists flourish.<sup>9</sup>

### Implications

Widespread adoption of blockchain platforms could trigger a new wave of transformation in the music business yet remain compatible with contemporary models of digital music distribution, such as downloads and streaming.

From the consumers' perspective, very little would change, potentially, except that a blockchain would ensure that copyright theft and illegal file-sharing become all but impossible. The main shift, though, occurs in the way that artists are able to manage their intellectual property, ensuring that the way their content is used and paid for is controlled.

For music labels and licensing bodies, there is an opportunity to be on the leading edge of change by working with artists and distributors to establish new standards and ways of working that reach right across the industry. A common blockchain platform, employing identity management and smart contracts, locks in rules for how revenue flows from consumer to artist every time a piece of content is played or streamed, reducing the costs associated with collecting and managing statistics, maintaining copyright databases and distributing royalty payments. It could also enable new business models, such as micropayments, being considered elsewhere in the media industry.

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### Endnotes

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6. *Ibid.*
7. "Three Startups Trying to Transform the Music Industry Using the Blockchain", *Bitcoin Magazine*, November 2015. See also: <https://Bitcoinmagazine.com/articles/three-startups-trying-to-transform-the-music-industry-using-the-blockchain-1447444594>
8. *Ibid.*
9. *Ibid.*

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