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# Disruption and Anti-disruption in the Streaming Economy



By Noah Askin , INSEAD, and Benjamin Kessler , INSEAD Knowledge, with Andrew Batey , Beatdapp

**For established industry players in entertainment and elsewhere, the ascent of blockchain is a double-edged sword.**

Blockchain’s promise is to be a compulsively honest technology. On public blockchains, a real-time, indelible record of transactions is generated within a decentralised database (a.k.a. the “distributed ledger”), essentially automating trust while minimising security risks.

From a business perspective, then, the potential uses of blockchain are double-sided. On the one hand, it threatens to displace middlemen who serve only to vet, verify or certify activity in a system. For example, blockchain-enabled self-executing or “smart” contracts could significantly reduce the role of lawyers and notaries in the deal-making process. Ironically, even “sharing economy” disruptors such as Uber and Airbnb could someday find themselves disrupted by peer-to-peer networks powered by blockchain.

On the other hand, blockchain can just as easily play a stabilising role instead of a disruptive one. Rather than unseating established players, the technology may create openings or opportunities for them within a reinvented ecosystem, renewing their relevance. When trust is introduced into a system where it was previously lacking, all sorts of creative solutions can be found to stave off disruption.

## **The streaming economy**

The music business presents a great example of blockchain's duality. Caught flat-footed by the rise of digital, the industry saw global revenues drop by US\$4 billion between 1999 and 2003, amid a proliferation of online music piracy and the transition from physical product to downloading songs. Industry revenue continued to decline – effectively cut in half – until 2014, when the international rise of streaming services presented a viable future. Now, streaming is responsible for **about half of total industry revenue**.

However, it's not entirely certain that this story will end on a happy note. Profitability famously eluded leading platform Spotify for most of its first decade. Though several of the major streaming players are fortunate enough to be owned by companies with deep pockets (e.g. Apple Music, Amazon Music), all the streaming services (including Tidal and Deezer) face similarly difficult economic headwinds. The culprit seems to be lurking in the licensing deals with record labels on which Spotify and its streaming peers depend for their content. This may stem from structural challenges inherent in the streaming model itself: though profitable on paper, Netflix (over 158 million subscribers and counting) maintains **negative cash flow** in the billions of dollars due to generous content investments of its own. As competition between the major streaming services grows more intense, their bargaining position relative to content providers seems unlikely to improve.

Meanwhile, blockchain-driven streaming alternatives are starting to make some disruptive noise in the music industry. Under the dominant Spotify model, artists are paid slivers of a penny per stream of their songs. Peer-to-peer streaming via blockchain would allow artists to offer their music directly to consumers on much more financially favourable terms. They can also employ smart contracts to exert tighter controls over how their work is used for commercial purposes (e.g. television rights) and, ideally, to clarify the critical issue of ownership.

That is part of the concept behind [Ujo Music](#), which utilises the Ethereum blockchain, and is perhaps best known for its partnership with Grammy-winning singer-songwriter Imogen Heap. A blockchain pioneer, Heap launched her 2015 single “Tiny Human” as a \$.60 download through Ujo.

Another example is [Musicoin](#), a combination streaming service/cryptocurrency which enables engagement between independent musicians and fans.

While these would-be disruptors are nowhere near Spotify-level adoption, their early attempts at a blockchain-based streaming model may foretell the industry’s future. If so, it would spell bad news for the big entertainment companies, which could end up side-lined within the marketplace they helped build. Before writing their epitaph, however, it is worth remembering that history has shown them to be quite resilient.

### **“Anti-disruption” with Beatdapp**

Andrew Batey, co-founder and co-CEO of blockchain start-up [Beatdapp](#), envisions a diametrically opposite scenario for the music business. Batey’s goal is to tame the Wild West-like tendencies of the streaming economy – starting with the numbers. In an interview at last year’s Blockshow at Marina Bay Sands in Singapore, Batey explained that digital service providers often undercount streams by as much as 15 percent. As stream count figures are used to calculate royalty payments, labels and artists ultimately receive less than they should.

“I don’t think the discrepancies are really nefarious,” Batey said. “There’s a lot of human error. How much [streaming services] spend on trying to get accurate data is really just an extra cost for them with no real economic upside.”

Using blockchain-enabled technology, Beatdapp has developed algorithmic solutions for auditing streaming data. Among their 22 current pilot projects is a partnership with Canadian company Entertainment One, whose rights library of 40,000 tracks includes the catalogue of seminal rap label Death Row Records (Tupac, Snoop Dogg, Dr. Dre).

To be sure, cleaner streaming data does not directly address the power dynamic that leaves artists feeling they are last in line at the streaming goldmine. Nor does it disentangle the messy web of royalty rights, which are

divided between publishing and recording; who is owed what for each song streamed remains a particularly thorny issue in the industry. However, if Beatdapp can prevent millions of streams from falling through the accounting cracks, at least there will be a bigger pot to pass around.

But what's in it for the streaming services? After all, counting every stream might require them to pay more in royalties. "The realisation now from most streaming companies is that there's more money to be made on the top of the table than under it," Batey said. "With correct analytics and insights, that helps everybody. The content companies know better which types of content to release and when, and for what markets, and how to prioritise it. They better understand how to monetise it with advertisers."

For streaming services, in other words, blockchain auditing tools provide long-term competitive benefit, in exchange for some potential short-term pain. For example, the sort of detailed data-driven insights Batey describes could be highly useful for Spotify in its ambition to become a **major podcasting player**.

Batey's comments suggest that by injecting trust into a system of mutually wary stakeholders, blockchain may help ease the digital transformation of massive industries. "We started this with the intention of anti-disruption," he said. "I think that's probably what separates us. We understand the music industry, we aren't trying to cut people out of it, we want to help them put food on their tables and help everyone along the value chain."

#### **Find article at**

<https://knowledge.insead.edu/entrepreneurship/disruption-and-anti-disruption-streaming-economy>

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## About the research

The case study "[Digital Music Disrupted? Beatdapp, Blockchain, and the Delicate Dance of Entering the Music Industry](#)" is available via INSEAD publishing.