The Impact of **Blockchain Technology** on Publishing Industry

KITABOO Whitepaper

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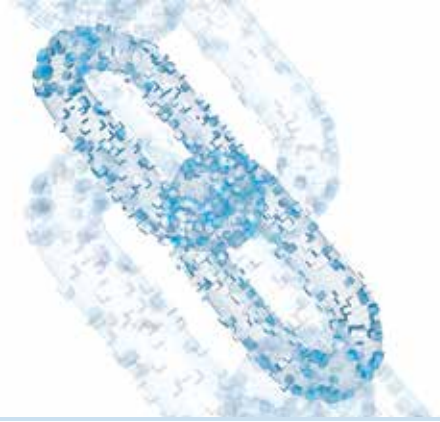

Executive Summary

Blockchain has the potential to transform every industry and business that deploys the technology. This whitepaper primarily focuses on how blockchain can transform the publishing industry by solving some key industry challenges with its technological advances. It explores how blockchain technology is innovatively disrupting the digital publishing industry.

Though it's early days for publishing industry to realise the full potential of blockchain technology, efforts are on to leverage the technology to drive positive outcomes. Innovative solutions such as Digital Rights Management (DRM), smart contracts, digital payments and revenue sharing can be effectively addressed by blockchain technology.

The benefits will transcend through the entire publishing value chain right from Authors, Agents, Publishers, Distributors and Retailers. The early-adopters have already begun dipping their toes in the water to experience the advantages of using blockchain technology. A few high potential projects in digital publishing which are using blockchain technology are showcased to highlight how it could be the next big thing. It's a good start and definitely a step in the right direction for the publishing industry. This whitepaper is the first step for publishers currently evaluating or considering blockchain technology.

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Introduction

The blockchain is a hot topic of discussion across all business and tech circles. Since 2008, the technology has gone through massive advancements and now stands ripe to transform businesses and services. It can solve different pain points in the publishing value chain and make processes efficient reducing the cost of transactions and time taken. In this whitepaper, we will discuss the history of blockchain and how it evolved to be one of the most important technologies of our times.

We will explore the nuances of the technology in the field of digital publishing and take a look at some promising projects using blockchain. The technology has the potential to be the next big thing as we show you how exactly that is possible.

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The Origins of Blockchain and its Future

The concept of blockchain was first introduced when Satoshi Nakamoto released his whitepaper called 'Bitcoin: A Peer to Peer Electronic Cash System'. That was back in 2008, and the whitepaper discussed a new technology based on a peer-to-peer system of transacting Bitcoin, the first ever cryptocurrency.

Blockchain and Bitcoin were inseparable at the time, and the technology was used purely to transact Bitcoins. In 2009, Nakamoto gave up his Bitcoin project to the open source community and opened the doors for its transformation. Blockchain brought with it the power of creating digital trust by registering crucial information in a public domain, which cannot be tampered with or manipulated. The technology brought transparency, decentralization and could timestamp entries.

A lot of projects started discovering the potential of blockchain for healthcare, transportation, insurance, contract management, publishing, supply chains and more.

Separation of Blockchain from Bitcoin

Blockchain and Bitcoin were referred to like the same thing, interchangeably in the initial days. But soon experts realised that blockchain has far more potential to be used for some critical applications, without being limited to cryptocurrencies. At its basic core, blockchain is a decentralized and open ledger that registered transactions between parties without the need of third-party authentication in an immutable way. This characteristic made blockchain favorable for a number of applications with reduced cost of transactions.

Many entrepreneurs realized the potential of blockchain around 2014 and started making investments in the field. A lot of projects started discovering the potential of blockchain for healthcare, transportation, insurance, contract management, publishing, supply chains and more.

The Rise of Ethereum and Smart Contracts

Amidst all these developments, Vitalik Buterin, who contributed to the original Bitcoin database, was not satisfied with the limitations of the blockchain. Soon in 2013, he started developing a second blockchain, based on Ethereum. The most innovative feature of Ethereum was that it could register transactions, such as loan and contracts which set it apart from Bitcoin. The platform was introduced in 2015 and was able to carry out smart contracts - automatic actions carried out according to predefined rules programmed on the Ethereum blockchain.

This was the turning point in the timeline of blockchain, and many leading corporations, such as UBS and Microsoft, got interested. Since then blockchain has made rapid progress, and we have use cases in different industries including fintech, finance, accounting, healthcare, publishing, music, real estate and more.

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Blockchain of the Future

Blockchain has the potential to disrupt and revolutionize any industry that it's deployed in. It has turned out to be a pathbreaking technology that can increase the efficiency of any business and also reduce costs and time involved in the process.

The blockchain is predicted to encompass all activities by 42.8% by 2020. The total estimate of the cryptocurrency market amounted to around $600 billion at the end of 2017. The global investments on blockchain in 2018 will amount to $2.1 billion and is expected to grow in the coming years. There are 2,191 startups on blockchain projects, and more are entering the market every day.

Blockchain and Publishing

Interestingly, blockchain can innovatively disrupt the digital publishing industry. It can solve the pain points that publishers and authors face and simplify the process of content distribution and make payments more effective. We already have some visionary projects in publishing utilizing the blockchain technology, which we will discuss in the next section.

Right now let us explore the scope of blockchain in the field of digital publishing.

The Implications of Blockchain Technology for Digital Publishing

Blockchain is a technology that has positively impacted every industry that has adapted it with varying degrees of success. The same technology can bring a lot of benefits to the publishing industry with its default features.

1. Sustainable Economic Way for Publishers and Authors

Authors always need to depend on a third party service provider for secure content distribution, payment gateways and safe online transactions. Distributors of digital content like Amazon and App Stores take a chunk of the revenues that otherwise would have gone to the authors. By using blockchain, publishers can eliminate the intermediaries or the big business houses from the equation and help the authors to retain their rightful share.

The technology will enable readers to create micro-payments and authors will be able to track their eBooks' distribution. Authors will transform into the first calling point and retain the ownership of the content created by them.

2. Effective Copyright

The problem of copyright infringement has plagued the publishing industry for a long time. With blockchain, you can automatically time stamp and person stamp your work or publication. The process is far more effective than marking books with watermarks which serve no real purpose.

You can also ensure that the copyright belongs to you and the ownership can be traced back to authors, even when an eBook has changed several hands. The records of ownership are immutable based on the nature of smart contracts and cannot be manipulated or tampered.

Smart contracts can carry out actions according to predefined rules and automatically share the profit among the stakeholders.

3. Sharing of Revenue among Stakeholders

Blockchain will benefit all stakeholders, like designers and editors, who worked on the project by sharing profit according to some predefined rules. Any party contributing to the development of publishing can be linked using the public ledger technology of blockchain permanently. Along with the author they will also be credited for their work and can receive a share of revenues earned.

Smart contracts can carry out actions according to predefined rules and automatically share the profit among the stakeholders. There is no need for anyone to work out the individual shares each time or send checks to the stakeholders- everything is done without human intervention through blockchain.

4. Management of Ancillary Projects

For publishers and authors, books are not the primary and only source of revenues. Many fanfictions, translations, spin-offs, movie adaptations or ancillary projects are associated with a published book that can be distributed for profit.

Publishers and authors can copyright these ancillary projects and enjoy their share of royalties when they are marketed well. Blockchain will simplify the tracking process and eliminate the need to seek permission from any human for carrying out any transaction.

5. Smart Contracts with Self-Executing Terms

Apart from payments and sharing of revenues, smart contracts are also ideal for carrying out agreements and actions. Smart contracts of blockchain can carry out pre-programmed tasks and fulfill the conditions of an agreement once the pre-defined terms are met.

Smart contracts can be connected to other resources like a distribution network including physical and online stores. Such contracts will be able to handle aspects, like reimburse costs and share profits. Any changes made to a contract or the information of a new contract can be made available to all peers in a matter of minutes. The technology even has the potential to deal with complex activities, like royalty sharing in real-time.

Smart contracts can significantly cut back the time and effort needed for creating and implementing contract terms.

Blockchain will simplify the tracking process and eliminate the need to seek permission from any human party for carrying out any transaction.

6. Smart Wallets

Blockchain can ensure a secure payment system for publishers and authors with the technology of smart wallets. The encrypted wallets will be able to deal with pre-defined cryptocurrencies or tokens used within an ecosystem of a project.

Authors and publishers will be able to receive payment directly in their wallets without the need of any third party executing agency. The process will also enable micro-payments where readers can directly pay into the author's or publisher's wallets using the accepted payment methods.

The other stakeholders, like editors and designers, can have their respective wallets and receive secure online payments.

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7. Blockchain for Digital Property Management

Blockchain can encourage an ecosystem of eBooks or digital content as intellectual property. Under the current norms, you can purchase an eBook, but you cannot sell it or lend it to anyone. This whole approach prevents eBooks from enjoying the normal lifecycle of a physical book.

Physical books can be shared with friends or be sold if you want to part away with them. Blockchain can enable this by exchanging eBooks using its technology. Any reader will be able to own eBooks or any digital content as an online object and share them or sell them, as they please.

Each time the book is shared or sold, blockchain will track and keep a record of the transfer of ownership with automatic payments made into the smart wallets as per the preset rules.

Blockchain can simplify the copyright and ownership of digital content and reduce or eliminate costs associated with the normal supply chain of books. It will solve many of the distribution pain points and also increase revenue for both publishers and authors.

Let's take a look at the real-life applications of blockchain in publishing.

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Application of Blockchain in Digital Publishing Industry

Several blockchain projects have already started in the area of digital publishing and digital content. These new projects are disrupting the traditional publishing industry in a bid to promote a transparent business model while implementing improved copyright management. The content creators and authors are also roped in the process, and they can have a say in how things operate.

Here is a brief list of potential blockchain projects in publishing that have attracted a lot of attention.

These new projects are disrupting the traditional publishing industry in a bid to promote a transparent business model while implementing improved copyright management.

1. Decent *(https://decent.ch/)*

Decent looks to bring blockchain technology to the field of digital content and entertainment. They have developed DCore which promises to provide a decentralized and simplified platform for data and content distribution for any decentralized application.

The company looks to transform the way data is traded on the internet and promote trust and security with their platform. The distribution ecosystem uses a native cryptographic asset, called DCT, which is used for payments and other transaction. They also provide a secure wallet to store the DCT tokens.

Various digital media, such as text, audio, video, software and games, can be traded on their platform. The ecosystem accommodates multiple contributors to a piece of content and can share the revenue between pre-defined stakeholders in less than 5 seconds.

2. Creativechain *(https://www.creativechain.org)*

Creativechain is aimed towards writers and even serves the needs of designers, musicians and other professionals in the digital content and audio-visual industry. It is ideal for people who use the internet to distribute or sell their work with followers and fans.

Creativechain is a disruption in the field of traditional processes of copyright management agencies. They provide a transparent and public alternative to register intellectual property through the distributed and revolutionary blockchain technology.

The platform uses the decentralized characteristic of blockchain to create immutable proof of existence (POE) that can certify the ownership of a wide range of digital content. The peer-to-peer ecosystem of Creativechain eliminates any need of intermediary content distribution parties, which increase the cost of content.

The platform uses the Creativecoin (CREA) for any transaction and authors can receive donations every time a reader 'likes' their work on the platform.

3. Po.et *(https://po.et/)*

Writers and authors can use the Po.et platform to create timestamped and immutable records for their creative works. They can register their work on the Po.et platform and get discovered by members and fans. The ownership metadata can be verified and is secure due to the decentralized nature of blockchain.

Po.et looks forward to bridge the gap between authors and publishers by eliminating third parties. The transparent framework of attribution can be used to discover fresh content and verify the authenticity while also making authorizations possible.

The platform also equips content creators and publishers to automate their licensing process without the need to depend on third parties. Authors will be able to choose from pre-built licenses or have the ability to create their own terms. The system will automate payment and issuance of licenses and their transfer.

4. LBRY *(https://lbry.io/)*

LBRY is digital marketplace run by the community. In the free and open framework, the authors own their content. Going down to the basics, the platform enables the association between a piece of digital content and a unique name. The platform supports games, books and movies and will not need any special access for people to get the content.

The decentralized system can also be used for monetary transactions. For example, writers can charge readers for accessing their content. The platform is not tied to a specific computer or network so that disruption and failure cannot arise.

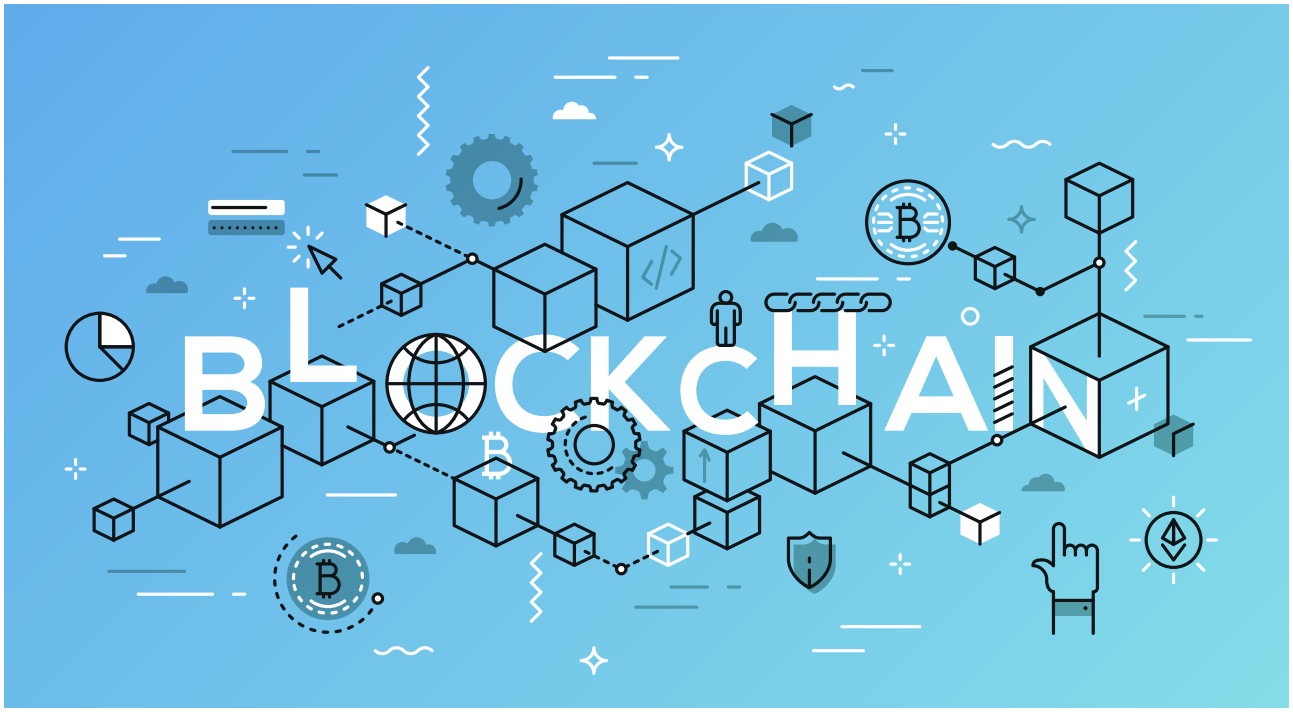
5. Hubii *(https://hubii.network)*

Hubii started their journey as a collector of local news but soon found out the pain in the process. In 2017 they introduced blockchain in their business in a bid to make the distribution of content effective. The process seeks to make the whole thing relevant to the authors, distributors and the readers.

The initiative soon became successful, and they developed a whole ecosystem based on blockchain for creating, sharing, monetizing, verifying, funding and managing digital assets. The Ethereum based digital and decentralized marketplace will help copyright holders and authors to reach their consumers directly through the platform's distribution network.

6. Rakugo *(https://rakugo.co/)*

Rakugo is a content publishing platform secured by the blockchain technology. The platform rewards content creators with profit and gives an opportunity to gain exposure with their work. The company claims that their platform is built on transparency, trust and democratization. The solution enables any content creator to monetize their work intuitively by simply using the power of blockchain.



Conclusion: Blockchain and the Future of Digital Publishing

We are in the initial stages of using the technology of blockchain for digital publishing. However, the potential benefits of blockchain and the current application in the industry surely point to a bright future. We will see blockchain become an integral part of the publishing industry which enables authors to retain their intellectual property rights and reap the rewards of their work.

That said, there are a few questions that need to be answered before we can move forward with the technology- do we really live in a state for full transparency? How can we delete content if the technology makes it immutable? Can blockchain protect against all kinds of attacks and hacks?

Blockchain can bring many more benefits to publishers once we have answered the above questions. Surely, we can look forward to more promising projects using blockchain in digital publishing.

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About KITABOO

KITABOO, by Hurix Digital, is a cloud-based platform that helps create, publish, and distribute interactive content to varied audiences on multiple devices. It allows creators to track the analytics on how their content was consumed, secure their content via DRM, and add multi-level creativity to increase engagement. It also allows a hassle-free distribution of eBooks on multiple eReaders.

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