

SMART COPYRIGHT

CREATE SMARTEST DIGITAL WORLD

WHITE PAPER

Version 1.0

1. Abstract.

Smart Copyright is an innovative anti-piracy platform that allows users to register and purchase creative products using blockchain technology. The system uses Ethereum smart contract to ensure the security, confidentiality and public observation of all transactions.

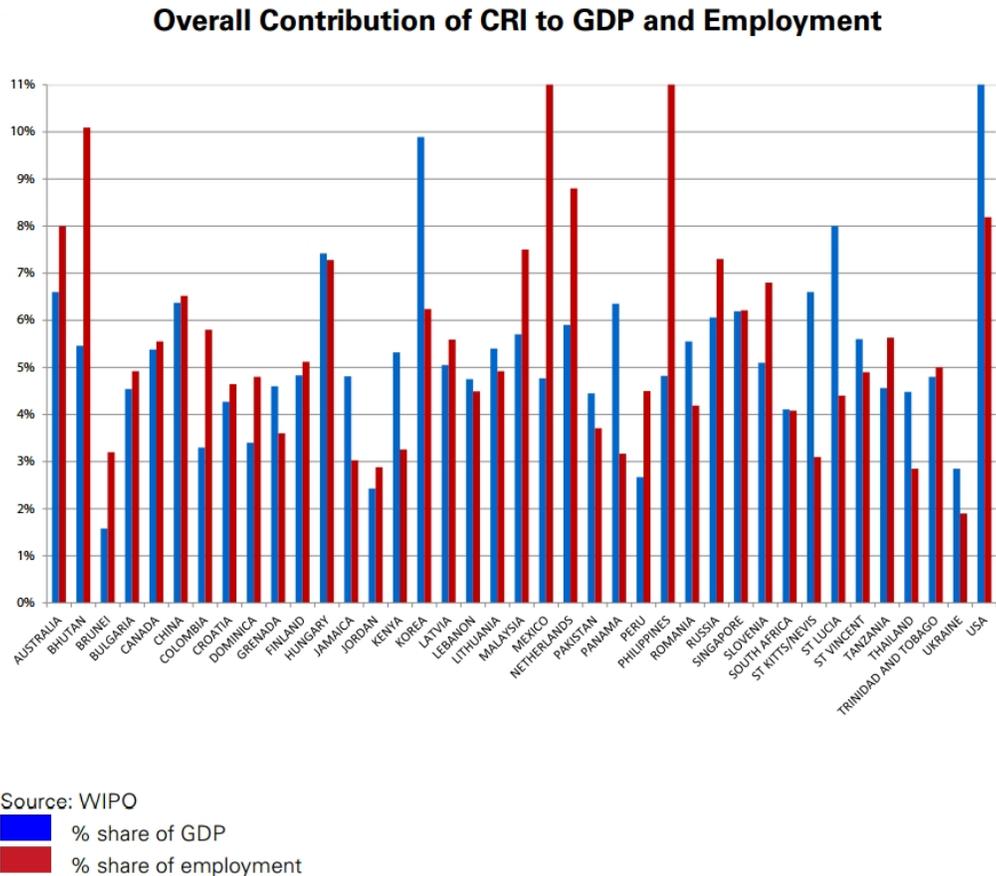
This document provides a conception of our platform for investors and users.

2. The market.

In recent years, there has been significant interest in the economic exploitation of copyright and related rights and in their role as drivers of development in content based industries. Copyright has taken a center stage in public debates about access to information, and its relevance to daily life and to business operations has attracted the keen interest of most stakeholders in the creative economy. The term ‘creative economy’ has itself come to symbolize a new, global awareness of the role of creativity and innovation, which is underpinned by intellectual property rights and their contribution to economic, social, and cultural development.

Studies have greatly contributed to presenting copyright not only as a legal category, but also as a mechanism which helps creators to earn a living, thereby generating significant employment, wealth, and trade.

The major results of the studies are summarized in the following chart:



In the surveyed countries, there is a sizeable copyright industry sector, which in most countries was found to be larger than expected. This overview suggests that copyright industries make a

significant overall economic contribution, in many cases bigger than traditional industries such as agriculture and social services.

The contribution to GDP varies significantly across countries from over 10 percent in the USA to under 2 percent in Brunei. With an average and median values of 5.48 percent and 4.83 percent respectively, three quarters of the countries have a contribution between 4 percent and 6.5 percent. Countries which have experienced rapid economic growth typically have an above-average share of GDP attributed to copyright industries.

The contribution of copyright industries to national employment is slightly higher than the contribution to GDP, with an average of 5.34 per cent and a median of 4.91 per cent. In nearly three-quarters of the countries, copyright industries contribute between 4 per cent and 7 percent of national employment. Mexico and the Philippines have by far the highest percentage of employment in copyright industries.

The calls for copyright reform at both the national and international level are growing louder. Many authors, owners, distributors, users, and consumers are dissatisfied with the current regime, but solutions are not easy to find. Existing rules are inadequate to deal with copyright in the digital world and partial solutions are not likely to be durable. The problems of copyright are not confined to one jurisdiction. Just as the creation and dissemination of copyright works are global, copyright's legal problems are an international problem.

Below are some common issues in the copyright industry:

- Copy entire or part of an earlier work without the permission of the copyrighted person or the copyright holder.
- Text is not copied entirely but the whole idea as well as the order of presentation of a work is copied. This type of violation is more difficult to detect, but can still be considered a form of copyright infringement if there is evidence of a "copy" imitation of the prototype. There are examples of graduate theses without the source and the main author.
- The work is translated into another language without the permission of the author.
- Copyright registration costs a lot of time and money: in the US, it costs about \$40 and 6 months to pass the review and get the certificate.
- The distribution of artists' incomes is highly skewed, with a few superstars achieving high incomes from fees, sales, and royalties. Research in many of countries has shown that the 'typical' (i.e. non-star) artist is a multiple jobholder, working longer than average hours in arts and non-arts, working on short-term contracts with no career structure, and earning a variable and lower than-average income despite being highly educated. With respect to supply behavior, artists respond to increases in income from both arts and non-arts work by spending more time on their chosen art form.
- A common tale of copyright's problems is that of global versus territorial tensions. Copyright law is territorial, which means that each country has an independent copyright law. Consequently, an owner of copyright in one country will own a separate copyright in another country. For example, copyright in the United States is only applicable in the United States. If a US copyright owner requires protection of her work in New Zealand, she will need to rely on New Zealand law. Whether dealing with a photo, film, broadcast, music, or

any other copyright work, legal complexity arises from the dichotomy between a global market and territorial law.

3. Solution

Overall

The Copyright team has spent years researching the current market dynamics in the industry. Our goal is to address industry shortfalls through the creation of a new decentralized network with built in trust, transparency and accountability. We seek to reinvigorate Copyright market through the utilization of the Ethereum blockchain, peer-to-peer networking, cryptographically secured payouts. Also, improve the experience at a lower cost for the user. Using these new frameworks, we will fix the broken Copyright economy, provide reduced costs to users and create the safest and most secure trading platform. This will enable all users to have a fun experience and develop more creative work for the world.

Reduce Costs, Time When Registering Copyright

Users only need to pay a small fee to make a transaction to register a new product into the system (verification fee, storage fee). The main purpose of fees is to avoid spam transactions that wastes resources of the network.

Use Smart Contract as a Middle Man Between Seller and Buyer

After the successful registration of the product, everything else will be managed by the smart contract, the codes of the smart contract will be public so that everyone can verify it's correctness.

Private Ethereum Network Combined With the MinerGate to Prevent 51% Attack

Unlike other cryptocurrency networks dominated by miner with specially designed hardware, the system will have a separate mining pool including trusted miners and a mining pool that includes miners that allowed to join by MinerGate. This is to prevent any temptation of malicious miners, co-operate to dominate and alter the correctness of the system. If there is a large difference in the rate of block generation between the two sides, MinerGate will be responsible for removing those miners from the network.

Identification and Authentication of Copyright for Intellectual Products

Each digital asset in the system possesses a unique digital fingerprint. Identical or similar products will produce similar digital fingerprints, so that one can easily distinguish whether this is a new product or not. Smart Copyright provides digital certificate for each digital asset that succeeds the copyright certification.

Distributed File Storage System

Our platform uses IPFS to store and distribute files in a decentralized manner, ensuring that no single user is responsible for the integrity of the database. IPFS files are content addressed (meaning that their hash-based identification comes from the contents of the file itself). Using IPFS helps us to reduce storage costs. It also increases the security because no one can tamper this distributed file storage system.

Short-term Objective

Become the first anti-piracy platform for images use smart contract and blockchain technology.

Long-term Objective

Extend the platform to apply to other copyright-related areas such as: video, music, graduate thesis, software application.

System Architecture

Smart Copyright Web

The main interface of the system, including the main features such as: tools for users to interact with blockchain, copyright registration, search, purchase products.

Smart File Browser

It works as a protection component of products when displayed on Smart Copyright Web, avoid copying the product when displayed on the browser for the user to preview.

Smart Judge

A search engine to help people check whether the product is similar with the product has existed on the blockchain before or not. It also includes an ***Encryption Layer*** for encrypting files before archiving in ***IPFS***.

Private Ethereum Network

The network is designed to run separately from the main Ethereum network. Nodes in the network will be equipped with an ***IPFS*** module to help the node store distributed files.

MinerGate

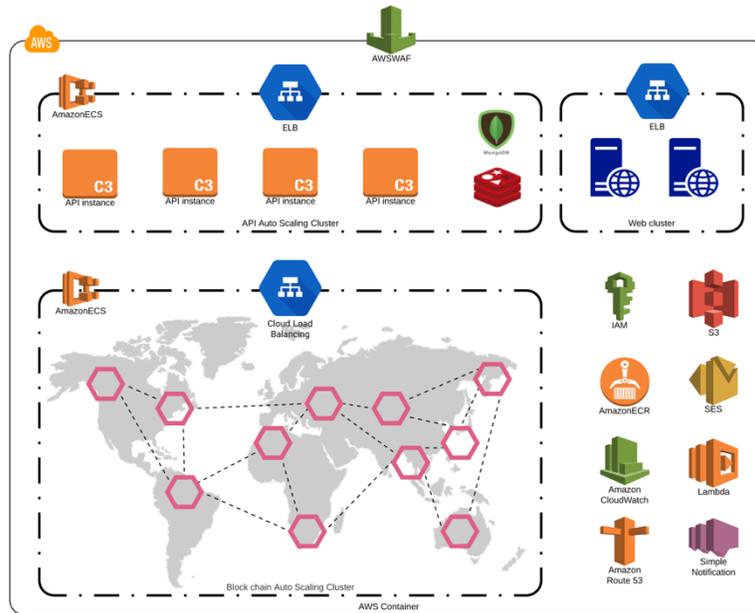
The protocol is designed specifically to allow the miner to join the network of the system. It also manages the nodes in the network to prevent a 51% attack.

Selling/Purchase platform

Intermediate component of the system, is a smart contract to make buying and selling between users transparent and convenient.

Blockchain Exchange

The trading platform of the system allows users to trade, exchange between our token and other cryptocurrencies.



Smart Copyright exchange platform architecture

System flow

Users only need to select the category of the product they need upload (image, music, document) then Smart Judge will determine if the product already exists or there are similar products has existed before. Otherwise, the product is considered valid and will be upload on IPFS and will return a URL containing the path to the product on IPFS.

Note that the system will encrypt the product with the public key of the user before uploading to avoid the case URL is exposed, the user is not affected at all because no one can read the content of the file except the user.

After successfully uploading, ID and price of the product will be saved on the smart contract, from which all purchases and sales take place through smart contract, the system does not interfere anymore so the transparency will be 100% guaranteed.

4. In-platform Token.

SSIO token specification

Smart Copyright platform has its own tokens to let the whole system functions called Smart Copyright Coin (SCC). SCC are Ethereum-based crypto currency which means they only function on our private Ethereum blockchain and it costs SCC while using our services. As SCC run on one of the most stable and powerful blockchain in the world now, Ethereum Blockchain, investors or holders of SCC can benefit the following advantages:

- **Security and stability:** as using private Ethereum network, one of the most robust Blockchain in the world, it is not viable to attack the network nor hacking the whole system so SCC holders will not have to worry of losing funds from their wallets as long as they assure the access to the passphrase of the wallet.
- **Transparency and immutability:** every SCC transaction will be stored publicly on our Ethereum blockchain so everyone can easily verify whether a transaction has happened and once it happened, there is nothing that anyone can do to change or revert that transaction.

SCC token specification have been chosen to meet the system requirements.

- Token name: SCC
- Consensus algorithm: Proof of work.
- Initial token supply: 10 000 000 (Genesis block)
- Max token supply: 10 000 000 000.
- Initial token price: \$1 for Pre-ICO.
- Block time: 15 sec
- Max block size: 500KB
- Reward per forged block: 1 SCC
- Transaction fees: Vary by transaction type.

A block time of 15 seconds was chosen because Smart Copyright platform is operated by fast transactions with tiny fees. Every forged block will include up to 200 transactions, which will be enough for convenient and stable platform usage.

The network's minimal setting requires 3 nodes, but more of them involves greater security and reliability. And when fork-situation occurs, the system will select the longest block chain available.

The initial token supply counts 10 000 000 tokens (the so-called "Genesis block"), while the maximum token amount is 100 000 000. The first major part of SSC token will be distributed among all kind of project contributors, which the Genesis block is made for.

We believe 100 000 000 tokens is enough to support full nodes for thirty years, and after that — transaction fees will become the main node-reward. Block-forging reward is to be "1 token per block" for the first year, decreasing 5% each following year

How to participate in the Smart Copyright Platform ICO?

To participate in the ICO, firstly, potential investors must register to our portal by following the identity validation process of the platform. By applying the KYC (Know Your Customer) procedure, our system can comply the AML (Anti Money Laundry) regulations. Secondly, only approved users with identity validated will be able to send money into our Blockchain Exchange by using investment tools in the user portal. This means the ICO is managed to accept investments from a list of certain people, those who are not tracked by the system will not be able to arbitrarily send their money into the exchange and purchase SCC tokens.

5. Token distribution.

Platform Development

Our team has spent over months developing algorithms for the platform, and will need to continue to build out our development team to create a fully functional platform, especially with the goal to make the system fully functional with breakthrough features coming from smart contracts. We will hire developers to improve our search engine, create custom interfaces, write secure and effective smart contracts, and implement storage functionality. We will also re-skin our current applications and build out a user interface for our platform which meet standards for a commercial quality front-end.

Marketing campaigns

We will compete with market incumbents with large marketing budgets and sophisticated customer acquisition processes. We will dedicate significant marketing resources to guaranteed tournaments and free rolls, marketing analytics software, and other paid marketing initiatives, including partnering with affiliates.

Referrals system

Smart Copyright Platform encourages the growth of community with referral system with 10 levels of referring. After a user comes to our webpage via your referral link, and then anytime he/she buys SSC tokens, you'll receive **5% of that user's total order!** The sooner you register with SCC, the higher referring level you are and **exponential** profit you get.

Legal

Our team has already begun consulting with well-respected law firms and with regulators around the globe. We plan to continue consulting with these resources as we navigate applicable legal and regulatory frameworks. We also intend to pursue a specific certificate prior to our launch to ensure our platform adheres to compliance standards and our user are sufficiently protected.

Further development

The Smart Copyright team is growing a core team and will use the proceeds from our sale to continue to develop our team and the Copyright platform.

At the very first phase of the project, our system will only work by identifying and validating the uploaded images to blockchain.

For our platform to be successful, in latter phases, we must also provide service for music, video, software application... However, to achieve this goal, the application must undergo significant testing to ensure the platform are sufficiently accurate, and our data storage mechanism is able to track data points necessary for compliance and to detect hacking. Other services are under consideration for the team to implement with the goal to create the first and unique ecosystem based on Blockchain and Ethereum tokens.

6. Roadmap

To achieve success, the Smart Copyright team has a long vision in mind. These milestones below mark the important steps to bring the idea into reality, and to reach the designed goals.

- ✓ Avril 2017: idea forming, team setting up
- ✓ June 2017: project analyzing and planning
- ✓ October 2017: project prototyping
- ✓ January 2018: marketing, wallet app releasing
- Mars 2018: ICO running
- Avril 2018: system beta test with image copyright detect, bring token to famous exchanges
- June 2018: develop music recognition module, release image smart copyright with payment options
- long-term vision
 - attract new users globally, SCC price rises)
 - develop and integrate video, music, document copyright detection