RELX Group

RELX

30,000 employees
$8.8B revenue

Scientific, Technical & Medical
7,500 employees
$2.9B revenue
Science Direct & Scopus

Legal & Professional
8,200 employees
$2.0B revenue
Intellectual Property

Risk & Business Analytics
10,700 employees
$2.4B revenue

Exhibitions
4,000 employees
$1.28B revenue
Ewout van Loon
LexisNexis IP Solutions

- Global sales manager Licensing
- Product owner IP DataDirect

From the Netherlands
Background in Software development.
Now in IP + Software.
Interested in Blockchain / Cryptocurrencies
Blockchain is immutable. Transaction cannot be tampered once it is packed into the blockchain. Smart contracts is the application layer (or part of it), Blockchain is the database. Blockchain can be centralized.

Key characteristics of The blockchain technology

Decentralization, Persistency, Anonymity and Auditability.

Use case starting points:

Disintermediate, process optimization, Incentivizing
Trade-offs to make when setting up a blockchain

<table>
<thead>
<tr>
<th>Property</th>
<th>Public blockchain</th>
<th>Consortium blockchain</th>
<th>Private blockchain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensus determination</td>
<td>All miners</td>
<td>Selected set of nodes</td>
<td>One organization</td>
</tr>
<tr>
<td>Read permission</td>
<td>Public</td>
<td>Could be public or restricted</td>
<td>Could be public or restricted</td>
</tr>
<tr>
<td>Immutability</td>
<td>Nearly impossible to tamper</td>
<td>Could be tampered</td>
<td>Could be tampered</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Centralized</td>
<td>No</td>
<td>Partial</td>
<td>Yes</td>
</tr>
<tr>
<td>Consensus process</td>
<td>Permissionless</td>
<td>Permissioned</td>
<td>Permissioned</td>
</tr>
</tbody>
</table>

**Public**: all records are visible to the public and everyone could take part in the consensus process.

**Consortium blockchain** only a group of pre-selected nodes would participate in the consensus process.

**Private blockchain**, only those nodes that come from one specific organization would be allowed to join the consensus process.
Consensus Models

**PoW (Proof of work)**

Nodes that calculate the hash values are called *miners* and the PoW procedure is called *mining* in Bitcoin.

**PoS (Proof of stake)**

Miners in PoS have to prove the ownership of the amount of currency. It is believed that people with more currencies would be less likely to attack the network.

**PBFT (Practical byzantine fault tolerance)**

The whole process could be divided into three phases: *pre-prepared, prepared* and *commit*. In each phase, a node would enter the next phase if it has received votes from over 2/3 of all nodes. So PBFT requires that every node is known to the network.

**DPOS (Delegated proof of stake).**

The major difference between PoS and DPOS is that PoS is direct democratic while DPOS is representative democratic. Stakeholders elect their delegates to generate and validate blocks. With significantly fewer nodes to validate the block, the block could be confirmed quickly, leading to the quick confirmation of transactions.
Disintermediate, Process, Incentivize

Within our company / Products

Changes in the Market

- IP Offices
- Governments (Tax))
- Marketplaces
- Data aggregators
What will happen

Within our company / Products

Changes in the Market

New players

IP Offices
Governments (Tax)
Marketplaces
Data aggregators

New products
New process optimizations

New Startups
New applications
Anonymous 1

- The best method for **defensive publication** as an alternative, precursor or addition to patent applications,
- Secure proof of the status as original author and the ownership of copyrights and intellectual property rights in the context of legal proceedings, trials or patent applications,
- Protect, safely share or transfer trade secrets,
- Simpler and faster than traditional scientific publication, ensuring academic freedom to operate,
- A tool for **raising money to commercialize an invention in** countries which offer grace periods to disclosing inventors,
- Giving innovators new ways of easily storing confidential information **privately and securely sharing it with third parties** by linking non-disclosure agreements and intellectual property on the Blockchain,
- A **secure marketplace** for IP due to the documentation of transfers of ownership and contractual agreements on the Blockchain.
Anonymous 2 XXXX mission is to change the way the world invents and value ideas... Our goal is to become the gold standard platform that empowers inventors and promotes the effective matchmaking of ideas, capital and talent.

The mission encompasses:
• Creation of a revolutionary invention process that enables innovators to better find and claim their ideas using blockchain technology
• Utilization of native tokens for the creation, buying and selling of intellectual property and to become cryptocurrency that will become the **standard valuation metric of all intellectual property**
• Development of commercialization vehicles for development or licensing of inventions
• Building of a **IP bidding marketplace** to create an EBay of intellectual property
• Construction of mechanisms and social networks to incentivize and make development easier
• Deployment of an innovative economic model that fosters the growth of inventor eco-system

Disclaimer: No suggestions. DYOR
Licencing Market place

Bidding / Buying market place for IP

IDEA sharing with other parties via smart contracts (NDA’s)

Inventor ECOSYSTEM

Place to list Copyrights

A standard currency for ALL IP things..

Safer and faster scientific publications

Crowdfunding markets

Information collection incentives
Use case starting points:

Disintermediate, process optimization, Incentivizing

FACTS:
- Patents are tied to country laws and regulations. It is centralized, not a service you can just take over by doing it better / cheaper
- Improving the process between PTO’s, Attorneys, inventors / Corporates is definitely possible (Workflow)
- Adding Gamification / Incentives in the process
Within our company / Products

- BIG DATA accumulation, no
- Information sharing tool with external council?
- Collaboration tool with Attorney
- Patent office process?
- Marketplace tool / Licensing / Buying
- Gamification on monitoring?
Do we see any benefits in BIG data accumulation and commercialization?

- Not yet.
- Patents are not a service that can be taken over such as banks because its Law in multiple centralized territories
- Can Blockchain help the patent world. Yes definitely, processes, IP markets
- Maybe a new consortium blockchain initiated by IP5?
- Tax governments, Gamification / incentives on grants + patent publications.
Thank you