# Blockchain IP

WIPO Webinar

Stephen MacKenzie – Koch Industries

28/09/2021

# Blockchain – Disruptive technology for transactional business

Blockchains integrate different systems to get data right at the point of origination, which can eliminate downstream reconciliations. This enables straight-through processing, also known as touchless transactions.

Blockchain Solutions can:
- take time and cost out of almost any process, enabling near real-time operations.
- deliver a high degree of accuracy and control, with much less risk than many alternatives.
- perform recordkeeping using automated, low-cost mechanisms.
- enable asset transfer through secure, real-time methods.
- provide governance in the form of smart contracts.

*Use of Blockchain technologies in highly transactional businesses such as Financial services is set to rise exponentially*

**Market Size (Billions $)**

Market size in billions US $

25
20
15
10
5
0

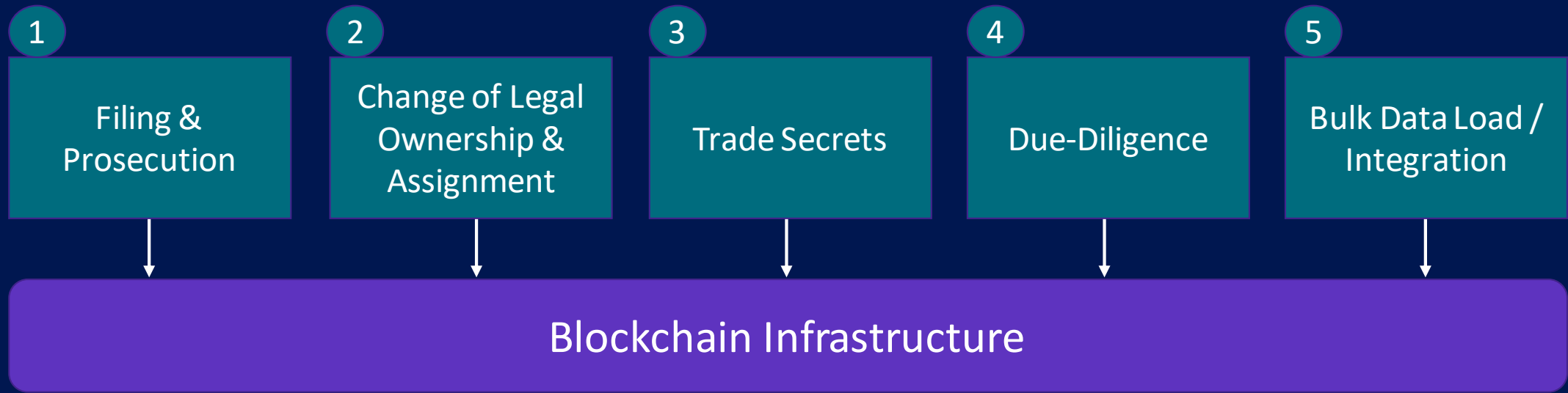2018  2019  2020  2021  2022  2023  2024  2025  2026

(c) Statista 2021

*The value realized increases significantly when blockchains are combined with other technologies, such as automation or artificial intelligence, to reimagine an entire end-to-end process*
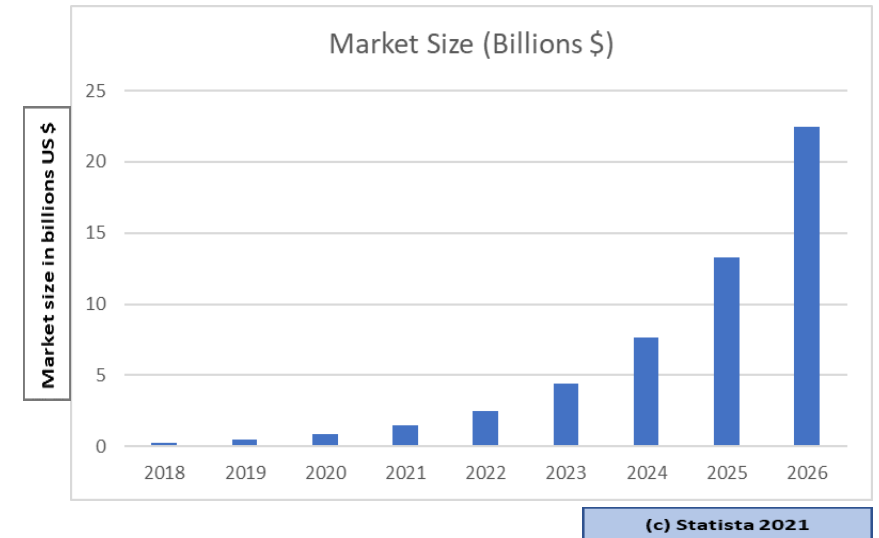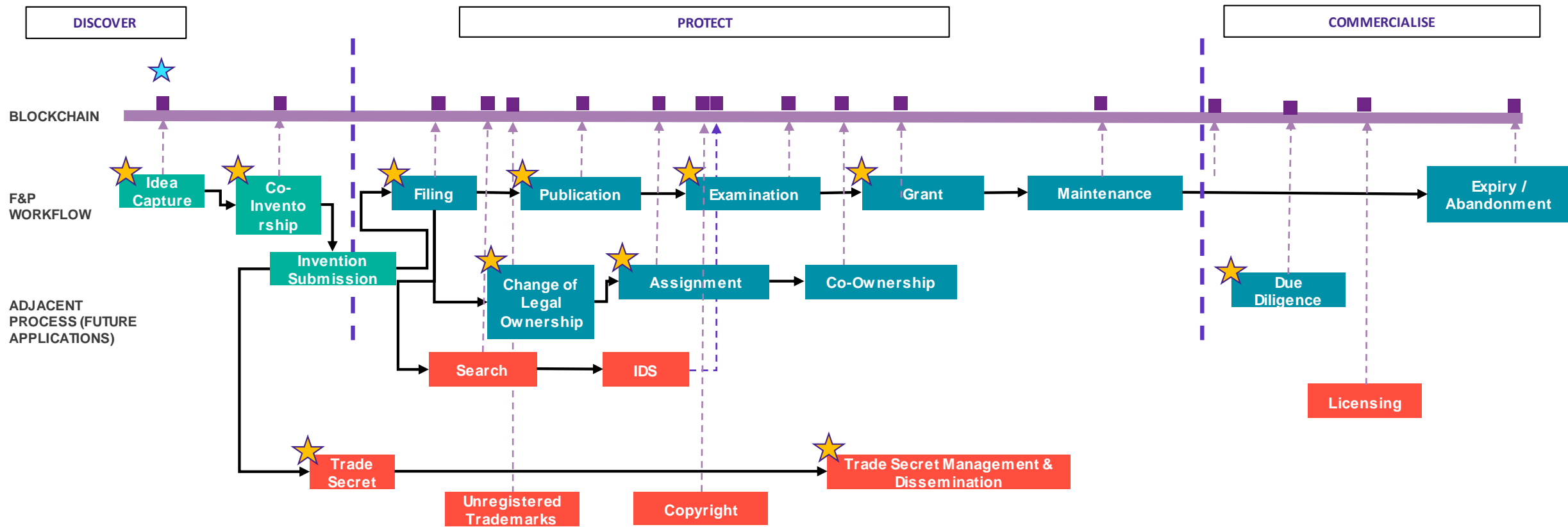
# WHAT HAVE WE BUILT?

For the purposes of a pilot project we decided to address five use cases which are both core to the activity undertaken by corporate IP departments and IP firms and provide an opportunity to solve longstanding issues which without a Blockchain solution would not be possible…

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Filing & Prosecution | Change of Legal Ownership & Assignment | Trade Secrets | Due-Diligence | Bulk Data Load / Integration |

## Blockchain Infrastructure

# Blockchain – The prototype

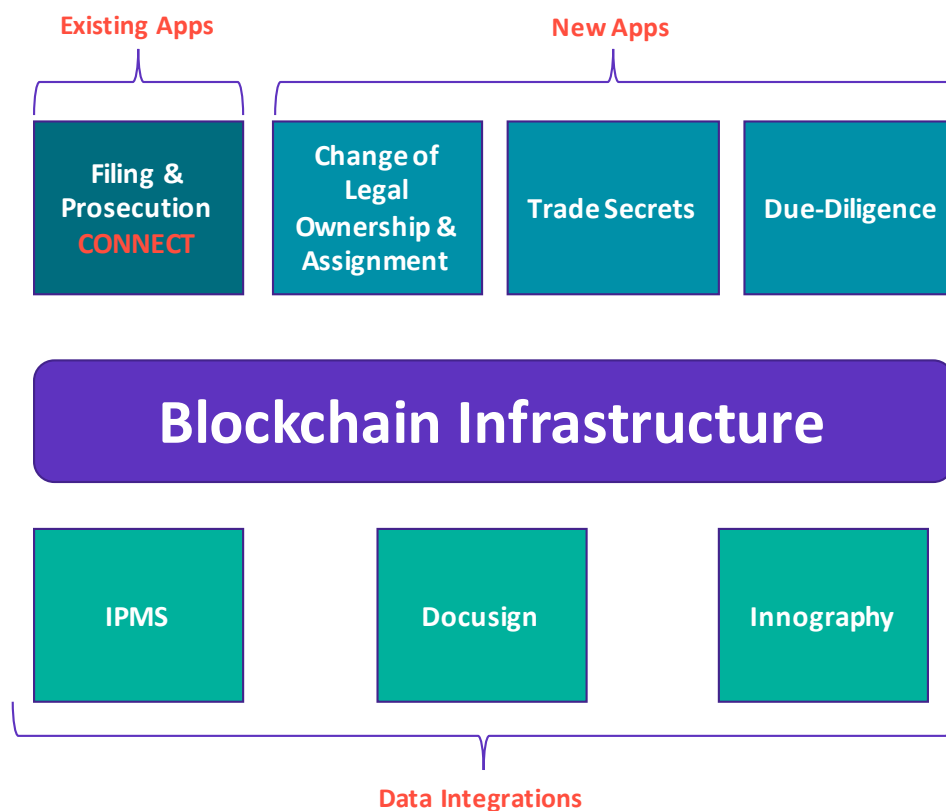An IP Blockchain platform underpinning the IP Lifecycle



Legend:
- ⭐ Filing & Prosecution
- ⭐ Idea Capture
- ⭐ Change of Legal Ownership and Assignment
- ⭐ Due Diligence
- ⭐ Trade Secrets
- ⭐ Digital Identity and Credentialing (evaluating partnerships)

**DISCOVER** | **PROTECT** | **COMMERCIALISE**

BLOCKCHAIN

**F&P WORKFLOW**
- Idea Capture → Co-Inventorship → Invention Submission
- Filing → Publication → Examination → Grant → Maintenance → Expiry / Abandonment

**ADJACENT PROCESS (FUTURE APPLICATIONS)**
- Change of Legal Ownership → Assignment → Co-Ownership
- Search → IDS
- Trade Secret → Trade Secret Management & Dissemination
- Due Diligence
- Licensing
- Unregistered Trademarks
- Copyright

# Blockchain and other applications

*The Clarivate/Koch blockchain solution has been designed as an open API infrastructure which can integrate with other applications.*
*Although a customer can interrogate the blockchain directly, most user experience occurs in the associated app*

**Existing Apps**                    **New Apps**

| Filing & Prosecution CONNECT | Change of Legal Ownership & Assignment | Trade Secrets | Due-Diligence |

## Blockchain Infrastructure
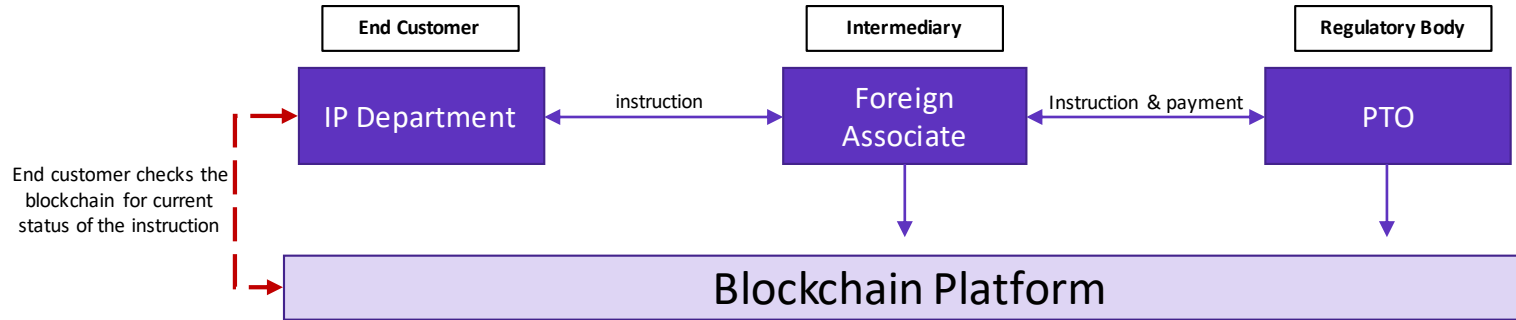
| IPMS | Docusign | Innography |

**Data Integrations**

- The blockchain platform integrates with existing applications.
- We can build new apps to meet particular market needs
- We can integrate with existing applications and capture the data
- We can integrate with 3$^{rd}$ party apps or allow 3$^{rd}$ parties to develop apps on the blockchain platform
- We could also develop new functionality in existing applications and integrate with the blockchain platform

Clarivate™    KOCH

# Bringing trust to the system

*The end customer currently has no transparency into whether the foreign associate, outside counsel or service provider has fulfilled the instruction / payment until an official receipt is processed by the PTO. The end customer has to rely on trust that an instruction has been processed and this creates additional work chasing for a response.*
*In certain countries payment is not issued until evidence of the fulfilment has been received.*

| End Customer | Intermediary | Regulatory Body |
|---|---|---|
| IP Department | Foreign Associate | PTO |

instruction

Instruction & payment

End customer checks the blockchain for current status of the instruction

Blockchain Platform

- End customer sends instruction
- Instruction is recorded as an event on the blockchain
- Foreign Associate sends instruction to PTO and transfers funds
- The PTO instruction is recorded as a transaction on the blockchain
- PTO sends confirmation by blockchain and this is recorded as a transaction on the blockchain

The end customer can now interrogate the Blockchain Platform and see when the Foreign Associate has actioned the instruction. They no longer have to rely on trust or chase the Foreign Associate for an update

As the number of actors in the chain increases the delay between the PTO action and this filtering through to the IP Department increases

# Unlocking the data

A blockchain platform can draw data from multiple sources – This allows Clarivate/Koch to build out a data source in real time that can be easily distributed and used by 3rd parties. 3rd party apps using the data would also provide novel data back to the case object.

The data has a number of characteristics that distinguish it from other sources and create future value drivers:

- Immutable – *the data is recorded and cannot be amended. Errors can be added but do not overwrite the original data thereby providing an audit trail of the error*
- Immediacy – *Data is recorded in real time rather than waiting for a data source or data aggregator (e.g. Inpadoc to publish)*
- Non registry data – *The data includes non-registry or non-official events from processes adjacent to the filing and prosecution (this can remain private among the transacting parties).*
- Anonymised pre-publication data – *By it's nature the data is anonymised and encrypted. This can be used to analyse trends without revealing anything confidential*
- Non-IP data – *Interoperability between non-IP blockchains (e.g. Louis Vuitton supply chain solution) could provide non IP data that could be used to augment the IP data*
- Financial data – *Data could be collated that can be presented to Financial Services company using blockchain solutions or with the added trust that being blockchain based brings*

Clarivate™

KOCH

# Digital Identity and Credentialing

Digital identification is critical to long-term sustainability of any intellectual property blockchain solution. Inventors, corporations, IP owners, licensees, and other users need a digital representation of their analogue identity in order to verifiably transact and maintain anonymity.

A digital identity will permit the following:

- Data Veracity - *removing guess work on which user has rights to transact. Users will interact with and complete transactions on the blockchain using their digital identity; similar to corporate credentialing when signing into IT systems. No more misspelled inventor names or wrong corporate entities on filings.*
- Anonymity – *transactions are recorded on the blockchain using public keys, whereby the user maintains the private key counterpart. The user can control what data they are associated with.*
- Permissions – *authorizations, power of attorneys and other user permissions can be managed through the digital identification. This should eliminate the need for notarizations, apostilles, and other analogue identity verifications.*

Clarivate™  KOCH  8

# Questions?

Clarivate™

KOCH