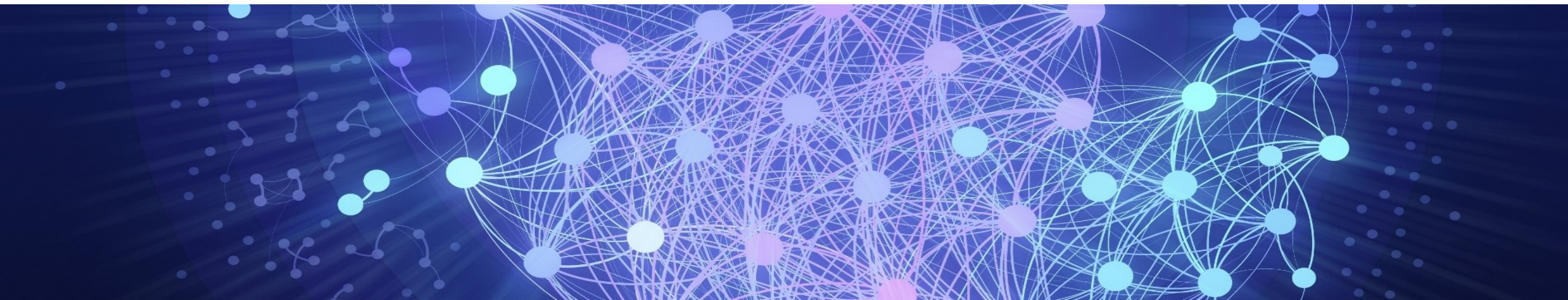


Blockchains for IP

A few ideas to consider

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Blockchain workshop @ Harwell Campus, 14 September 2018



What is an intellectual property?

*“Intellectual property (IP) is **a category of property** that includes **intangible creations of the human intellect**, and primarily encompasses copyrights, patents, and trademarks. It also includes other types of rights, such as trade secrets, publicity rights, moral rights, and rights against unfair competition. Artistic works like music and literature, as well as some discoveries, inventions, words, phrases, symbols, and designs, can all be protected as intellectual property.”*

https://en.wikipedia.org/wiki/Intellectual_property

General ~~blockchain~~ distributed ledger use cases in the IP domain

“Defence”
(preventing
damage)

- **IP registration**, and hard proof for it
- **Resolution of legal disputes** based on IP provenance chain

“Offence”
(getting
new value)

- **IP licensing agreements** can be created and recorded in the ledger
- **IP transactions of all kinds** can be designed and implemented using ledger

Just an
aspect or
context of
either
“defence” or
“offence”

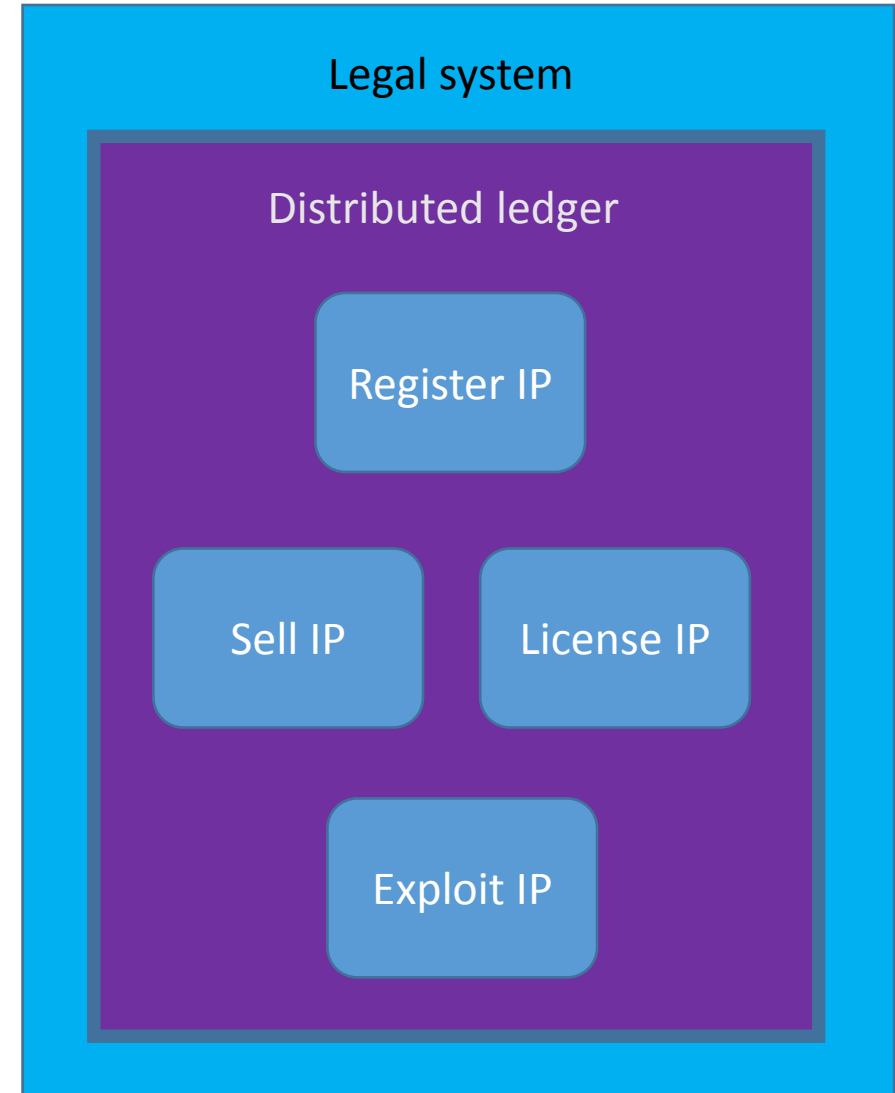
- **Cases where legal system is costly or otherwise problematic**, e.g. developing economies or countries with not brilliant track of IP rights enforcement

Difference from a traditional IP handling

Direct interference with legal system



“Encapsulation” within ledger (eventually)



STFC-specific business cases for IP

- **IP created by STFC employees**

Challenge: redefining STFC employees rights in respect to IP created by them

- **IP created by STFC spin-off companies**

Challenge: holding shares or selling off the companies may not be the only (or the best) ways of having returns from spin-offs – so STFC Innovations will have to reconsider their traditional business models

- **IP created by collaborative projects and long-term programmes with STFC participation**

Challenge: building IT infrastructure and governance for it that transcend STFC walls

- **IP created by visitors to STFC facilities**

Challenge: the same as the previous one, plus more players and longer value chains, **plus the ledger itself becomes the main framework for collaboration**

A common challenge for all the above: adoption of technology and governance models that have emerged and keep emerging in the open, not within STFC

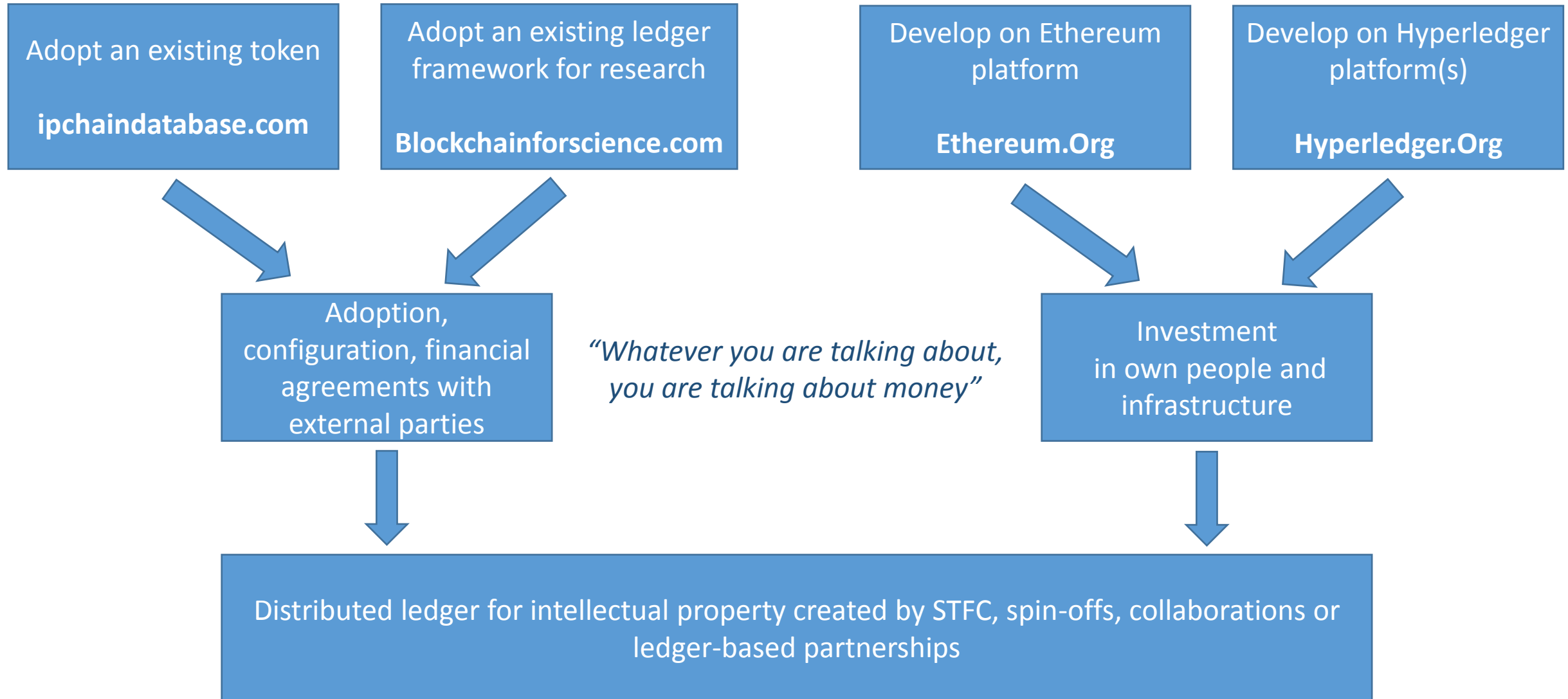
Principles of blockchain technology adoption

Start small

LEARN BIG

Think what technology and governance route is the best for a particular business case (see the earlier slide on opportunities and challenges)

Routes for blockchain technology adoption by STFC (for the IP cases and beyond)



Some of the blockchain initiatives are really big... yet help is out there if STFC are willing to explore them



Frameworks



Permissionable smart contract machine (EVM)



Permissioned with channel support



Decentralized identity



Mobile application focus



Permissioned & permissionless support; EVM transaction family

Tools



Blockchain framework benchmark platform



As-a-service deployment



Model and build blockchain networks



View and explore data on the blockchain



Ledger interoperability