Financial institutions
Energy
Infrastructure, mining and commodities
Transport
Technology and innovation
Life sciences and healthcare

NORTON ROSE FULBRIGHT

Getting paid in the new economy

Anthony de Fazekas, Head of Technology and Innovation, Partner, Patent Agent

January 31, 2018

*motion*2018
discussing what matters

Join the conversation

Tweet using #NLawMotion and connect with @NLawGlobal

Connect with us on LinkedIn
linkedin.com/company/nortonrosefulbright

Speaker

Anthony de Fazekas

Head of Technology and Innovation
Norton Rose Fulbright
Toronto

Anthony is our Canadian Head of Technology & Innovation as well as our Canadian Head of Fintech. He is a partner in our Toronto IP Group, practising in IP strategy, technology and IP collaborations, and corporate innovation, particularly in the FinTech space.

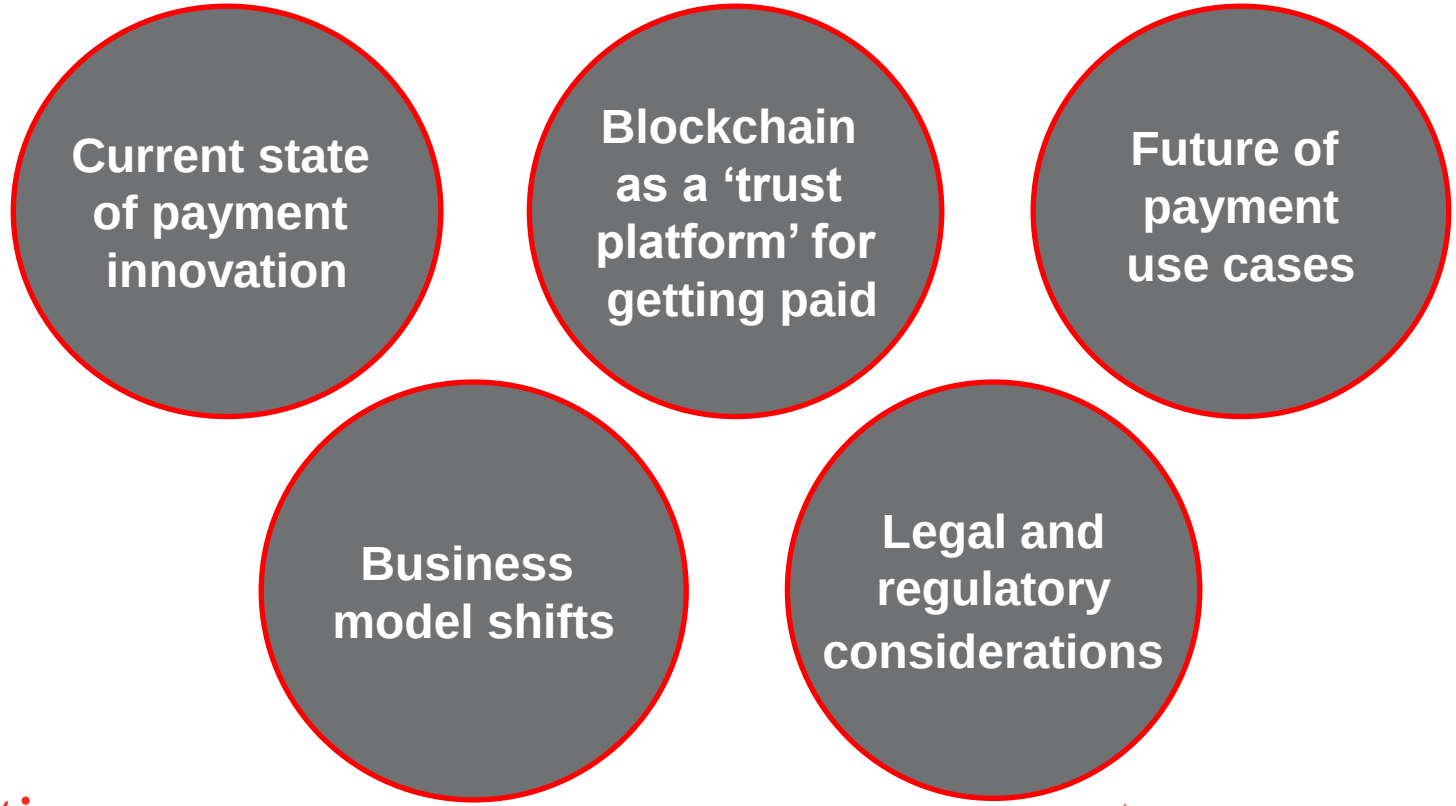
Anthony assists FinTech innovators in all aspects of their technology and IP collaborations. He advises companies regarding development of IP strategies, and drafts and prosecutes FinTech patent applications in a wide range of areas including trading platforms, blockchain technologies, risk analysis systems, and financial identity authentication systems. Anthony also advises FinTech innovators on corporate innovation frameworks, innovation management tools, processes and templates, and negotiates, drafts, and advises on IP implications of technology and IP collaborations.

Content

1. Growing momentum, and accelerating speed, of Fintech innovation, including around payments
2. And the dominant topic at *Davos 2018* was…

Blockchain, blockchain, blockchain

Future of payment? What will we cover?



Key data points

1. *Global FinTech Report 2017, PwC*
   a) 77% of financial institutions expect to adopt blockchain as part of an in production system or process by 2020 (*Global FinTech Report 2017, PwC*)
   b) 80% fear losing business to innovators, especially in payments
2. Large tech companies are increasing their focus on FS (*Google, Apple, eBay, Amazon, Shopify*)
3. Social media / internet platforms + blockchain could result in a disruptive combination
4. There are now around 1500 different cryptocurrencies (*Coinbase*)

Building momentum in payment innovation

- Incumbents
- Major movements of FS superstars to blockchain companies
- Barclays, Santander
- Convergence (e.g. blockchain and AI)
- FIs are increasing pace of collaborations with Fintechs, (e.g. RBC/Wave Accounting)
- Consortia (e.g. R3, Hyperledger)

- Blockchain community
- *Global Blockchain Business Council*
- 'Financial inclusion' projects
- Global collaborative networks for building business
- *ColliderX*
- 'Movement', that we must all follow

Key trends that will affect how we get paid (and pay others)

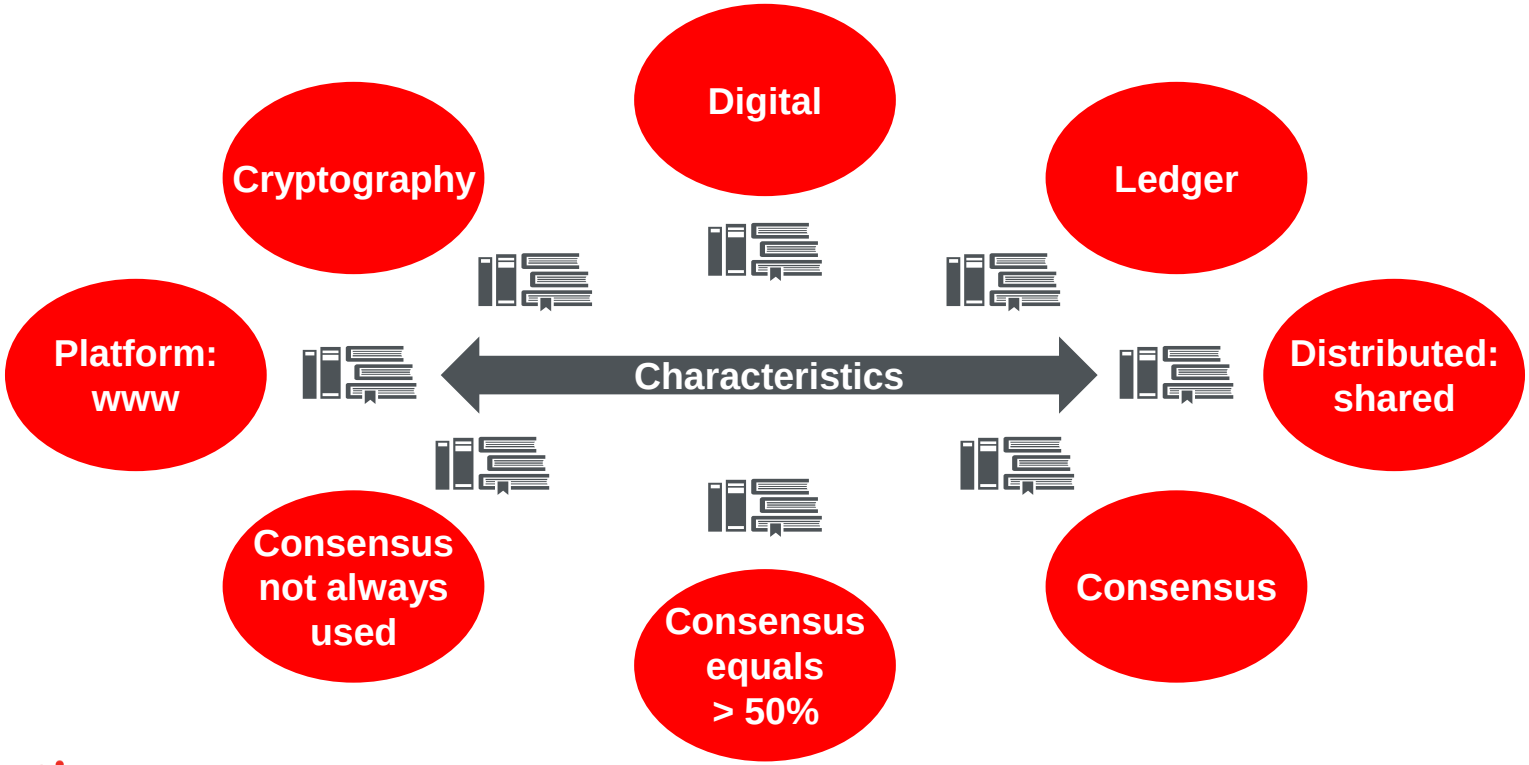
- In Canada, banks are perceived (by innovators outside Canada) as having a tight grip on payment systems, but global trends in ‘open banking’ could change that soon
- In other jurisdictions, payment innovations have stronger momentum
- Broader movement toward blockchain as a ‘trust platform’
- Synergistic effects of global collaboration on a vast peer-to-peer basis through blockchain plus payments (**and other ways of sharing value**)
- Responding to some of these changes early will drive significant shifts in market share (capturing new clients in existing markets, or new entrants in an increasingly global peer-to-peer economic system
- Business model shifts are already underway for example *Abra*
- Certain specialized platforms, built on blockchain and utility tokens, may push us to deal in cryptocurrency e.g. *AdBank*

What everybody needs to know about blockchain, considering how we get paid and pay others will change in the near term

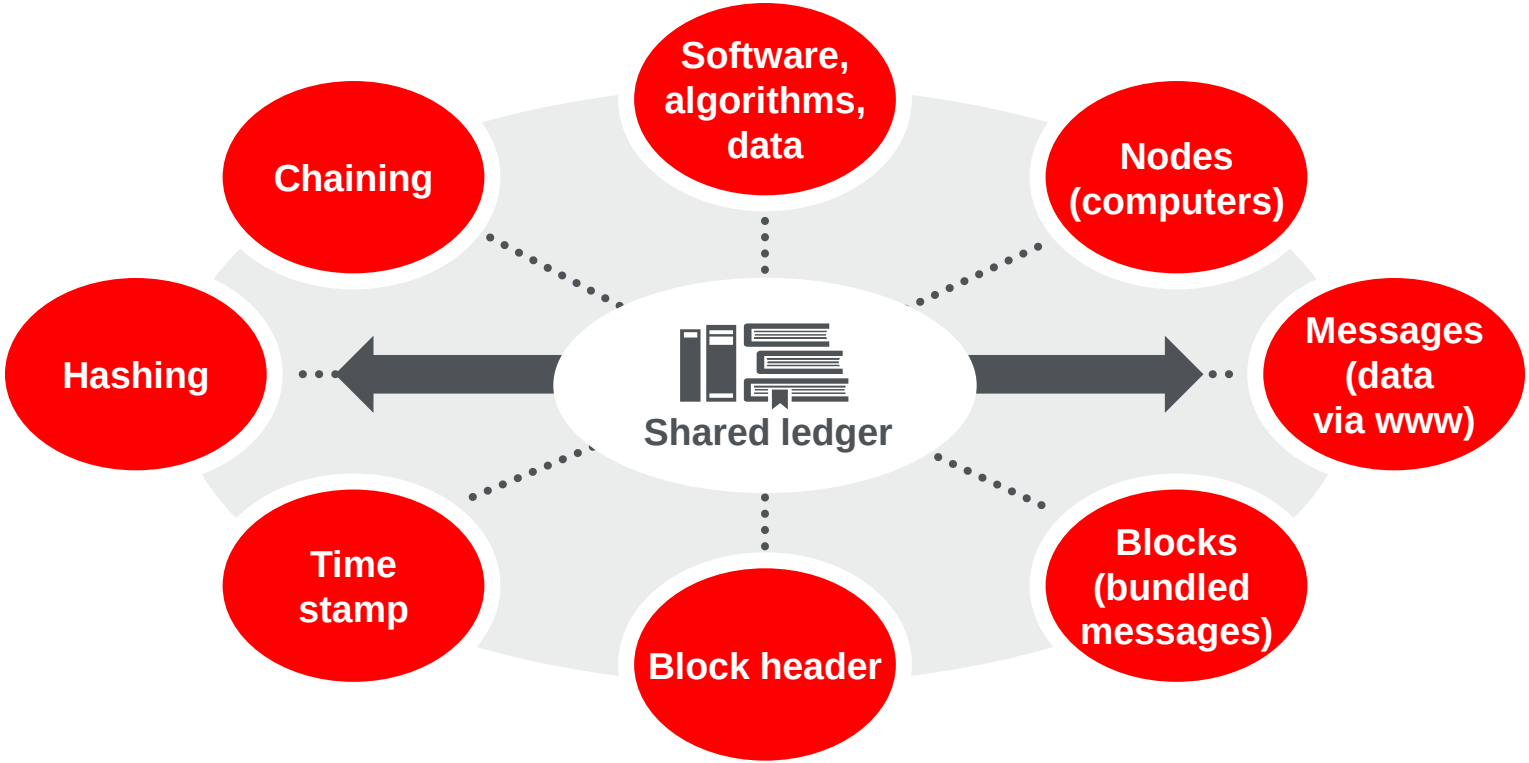
A blockchain is a digital, distributed transaction ledger, with identical copies maintained on multiple computer systems controlled by different entities.

- David Schatsky and Craig Muraskin, *Beyond Bitcoin: Blockchain is Coming to Disrupt your Industry*

What are the characteristics of a blockchain?

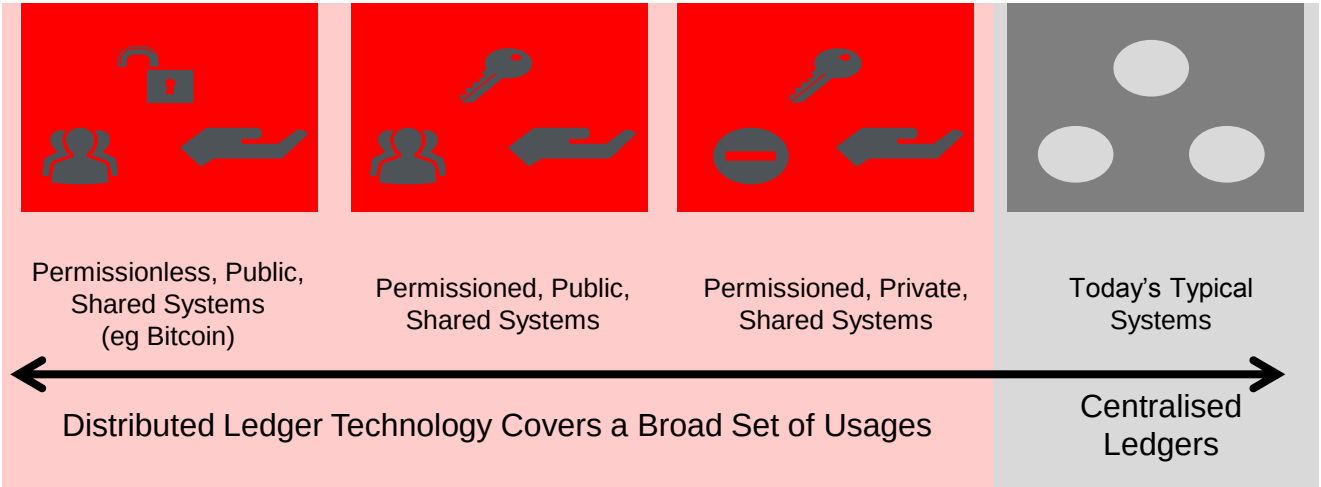


What are the components of a blockchain?



What is a permissioned blockchain?

Different ledger technologies vary in their ‘degrees of centralisation”



How does a blockchain transaction work?

Public key encryption infrastructure used

Download software from www

Address generates public key

Publish public key via www

Software generates private key corresponding to public key

Use address to send initiating message to www with private key

Nodes pick up message

Nodes verify message with public key

Nodes apply consensus protocol

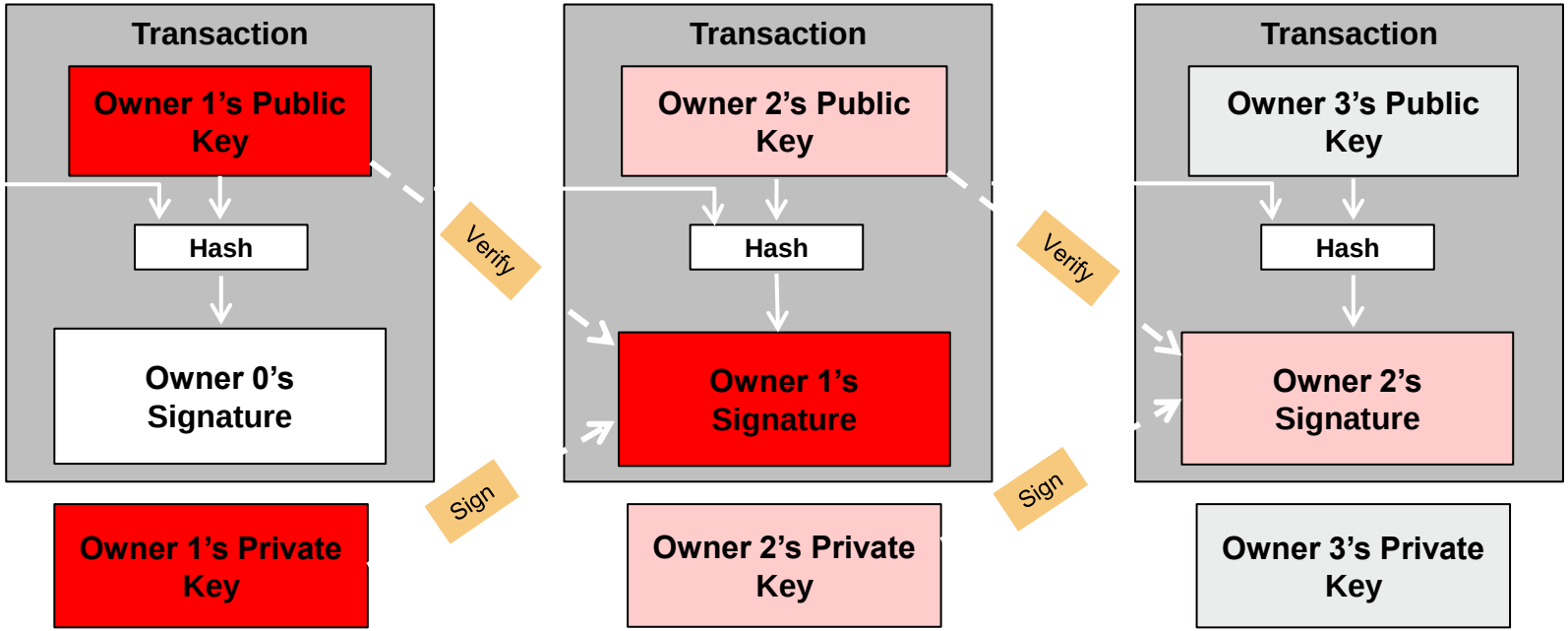
Permissioned system may use alternative method

Consensus of > 50% reached

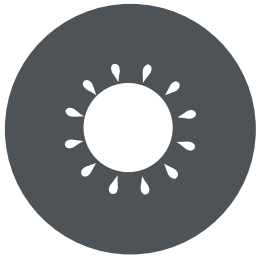
Message is written to a block

Block is added to the blockchain

How does blockchain cryptography work?



What are the performance characteristics?



Transparent

Time stamped

Immutable

No single point of failure

Irrevocable

Programmable

Technical risks

1. Cybersecurity is a risk e.g. quantum risk
2. Concerns around the need for new core blockchain innovation to ensure scalability
3. Concerns around vulnerability to fraud, not inherent to technology, but rather lack of oversight of those bringing new platforms to market

What are smart contracts and how will they impact on the future of getting paid?

Examples of use cases

- Abra: a mobile wallet app and teller network (using humans and their smart phones as ‘human ATM machines’), effectively building out in 18 months a network similar to that of Western Union

- Stack Fintech (bank for millennials), with heavy focus on cryptocurrency, supported by MasterCard

- *Circle* peer-to-peer payment technology (e.g. texting money in any currency) – free service, focused on unlocking value of financial data

Scenarios that will drive change across all types of business

- Supplanting intermediaries (dramatic increase in ‘direct’ relationships)
- Decrease in fees of intermediaries (such as transaction fees)
- ‘Sharing economy’ without aggregators such as Uber
- Automation of supply chain using smart contracts (e.g. automatic payment based on performance)
- Recruiting, managing and paying ‘crowds’ of workers
- Increasing growth opportunities in connecting with large numbers of new customers globally (with significant revenue in aggregate), where blockchain provides both the connectivity and the efficiencies
- Blockchain may ensure that businesses are *less vulnerable* to cyber attacks
- Blockchain based *digital avatars* for processing payments to us and paying others

What are the regulatory considerations?

Other regulatory considerations

1. Likely impact of PSD2, open banking trends, cybersecurity and upcoming G7 meeting in Canada
2. Likelihood of cybersecurity standards from regulators

What are some of the legal considerations?

- Risk management considering new models of ‘trust’ and risk sharing
- What are legal obligations around understanding how innovative trust platforms work, and monitoring of activities?
- More global platforms, but increasing importance of acquiring understanding of risks associated with emerging markets
- Structuring products (program agreements etc.)
- Technology procurement related to blockchain deployments
- Legal and IP implications of participation in consortia, and IP and technology collaborations
- Increasingly competitive patent landscape, risk posed by predatory patenting
- Patent freedom to operate issues

Key takeaways

1. Explore blockchain applications that may be most relevant to your business
2. Consider legal / regulatory implications, but begin experimenting with one or more applications
3. For example consider accepting cryptocurrency for certain business
4. Use learnings to consider possible business model shifts, and to stay ahead of the curve

Contact

Anthony de Fazekas

Head of Technology and Innovation,

Norton Rose Fulbright

anthony.defazekas@nortonrosefulbright.com

motion2018

discussing what matters

NORTON ROSE FULBRIGHT