



# **BLOCKCHAIN AND THE LAW:**

**PRACTICAL IMPLICATIONS OF A REVOLUTIONARY  
TECHNOLOGY FOR FINANCIAL MARKETS AND  
BEYOND**

**Monday, April 11, 2016, 12:00 p.m. – 1:00 p.m. EST**

*This information is offered for informational purposes only, and the content should not be construed as legal advice on any matter.*

# Panelists



## Commissioner Bart Chilton

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- Commissioner, Commodity Futures Trading Commission (2007-2014)
- US Senate staff (2001-2005)
- Deputy Chief of Staff to the Secretary of Agriculture (1995-2001)
- US House staff (1985-1995)



## Dr. Nicolette Kost De Sevres

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- 15+ years experience in EU, Canadian and international financial regulation, in London, Paris, Montreal, DC
- Former Special Advisor to Chair of financial markets regulator
- Former Head of Regulatory Reform for a global stock exchange and a global bank
- EU, US and Canadian attorney



## Sydney White

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- Of Counsel, Technology, Sourcing and Commercial
- Sydney's practice includes global representation of Internet, technology, financial services and e-commerce companies including on policy issues pending before Congress and Federal regulatory agencies



## Christopher Beaudro [christopher.beaudro@dlapiper.com](mailto:christopher.beaudro@dlapiper.com)

- Associate, Tax
- Chris handles an array of state and federal tax issues for emerging and established technology companies including: sales taxation of SaaS, state income tax apportionment, and federal and state tax controversy matters, as well as various transactional tax issues



## Perianne Boring

[perianne@digitalchamber.org](mailto:perianne@digitalchamber.org)

- President and Founder, Chamber of Digital Commerce, Washington, DC
- Perianne oversees the Chamber's operations, government affairs and public policy initiatives
- She previously worked in network broadcast news, as a Forbes contributor, and as a legislative analyst in the US House of Representatives



## Hossein Kakavand

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- CEO of Luther Systems (UK), which leverages blockchain technology to provide solutions for financial institutions' transaction management
- Adviser to a number of financial and technology start-ups on both technical and strategic issues



## Bradley Cohen

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- Attorney, Corporate
- Brad focuses his practice on financial services regulatory matters, advising clients on a wide range of domestic and international regulatory and compliance issues related to securities and derivatives

# Agenda



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## **Welcome and introduction – Commissioner Bart Chilton, DLA Piper**

- Regulators' view of bitcoin and blockchain

## **Bitcoin versus blockchain – Perianne Boring, Digital Chamber of Commerce**

- What is bitcoin?
- What is blockchain?
- What is a distributed ledger?
- Introduction to Proposed Digital Currency Consumer Guidelines

## Proposed Digital Currency Consumer Guidelines – Sydney White, DLA Piper

- Guidelines are targeted to consumers interested in purchasing, trading or holding digital currency who are either new to digital currencies or looking for additional information in order to protect themselves.
- Incorporate existing guidance from consumer protection regulators in the area of digital currency, online consumer personal information, and e-commerce.
- Guidelines focus on consumer interactions with merchants accepting digital currency, digital wallets, and exchanges in order to identify best practices for consumers to look for from companies and red flags to avoid.
  - Emphasis on terms of service, privacy, and security.

## Digital currency tax implications – Christopher Beaudro, DLA Piper

### IRS Notice 2014-21

- Digital currency is treated as property and not foreign currency
- Foreign currency rules for determining gain or loss do not apply to digital currency
- Taxpayers that receive digital currency as payment for goods or services recognize income at the time of receipt in the amount of the fair market value of the digital currency received
- At the time of receipt, the taxpayer takes a basis in the digital currency equal to the fair market value
- When the taxpayer disposes of the currency, it will recognize gain or loss
- The character of the gain or loss will depend upon whether the property is a capital asset in the hands of the taxpayer
- Fair market value?
  - If listed on an exchange, the fair market value of the digital currency is determined by converting the digital currency into US dollars

## ***Skatteverket v. David Hedqvist, C-264/14 (CJEU 2015)***

- Transactions involving the exchange of bitcoins for other currencies are exempt from VAT

## **Tax treatment of digital currencies in Australia**

- Digital currency may not be considered money or currency
- Transactions using digital currency are generally treated as barter transactions
- The Australian Goods and Services Tax may apply twice

## Blockchain, the law and financial markets – Dr. Nicolette Kost De Sevres, DLA Piper

### Smart contracts

- What are smart contracts? How do they function on the blockchain?
- Advantages and risks

### Blockchain for trading and clearing

- Australian Stock Exchange decision
- Legal challenges

### Blockchain in banking and payment systems

- Possible uses
- Regulatory overview

### Other legal challenges of the blockchain



## Blockchain beyond financial applications – Hossein Kakavand, Luther Systems

### Blockchain in real estate

- Public and private applications
- Land registry and public record of land ownership, explored by various jurisdictions around the world including Honduras
- Residential rental agreements between private counter-parties placed on blockchain and executed via smart contracts, to streamline private contracts and real estate agency workflow

### Blockchain in healthcare

- Authentication and time stamping of drugs and drug delivery
- Pipeline management of drug distribution

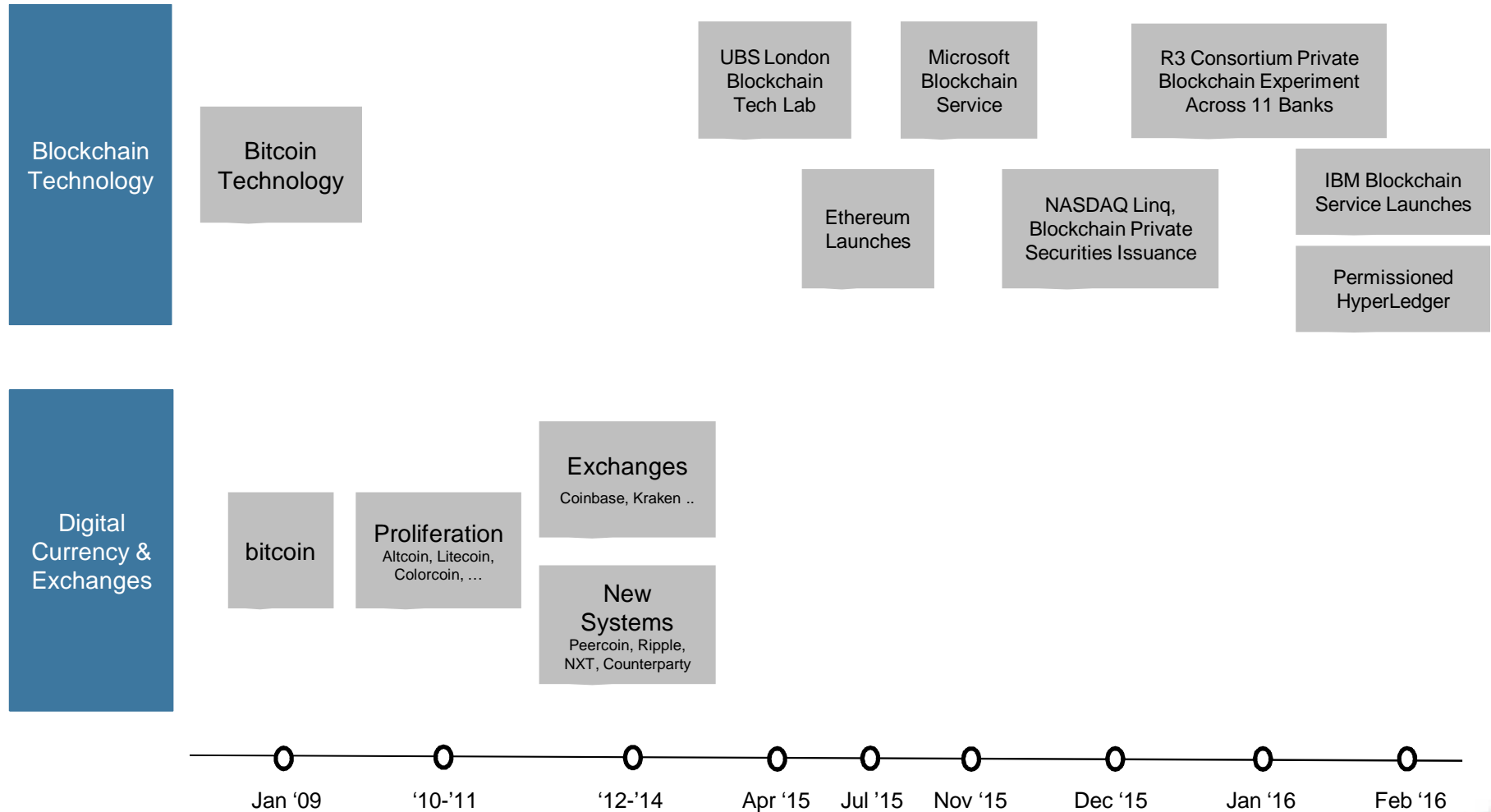
### Artificial intelligence

- Currently “smart contracts” have very basic “narrow intelligence,” *i.e.*, they can be programmed to execute a number of actions based on pre-determined rules and conditions, for example timing of transaction execution
- As blockchains develop, smart contracts implementation and development will advance and become more sophisticated
- At some point, nodes in the blockchain can “learn” and be able to function on their own in a semi-autonomous way
- IBM is working on integrating its Watson artificial intelligence systems on the blockchain
- Applications include
  - Negotiations between nodes on asset price discovery
  - Cooperation between nodes to optimize household energy consumption within the broader Internet of Things model

## Smart government

- **Identity management**
  - Placing passports, drivers licenses on the blockchain, enabling multiple agencies to share, access and verify identification real time
  - Estonia is experimenting with identity management on blockchain
- **Regulatory and taxation**
  - When institutional and personal financial transactions are placed on the blockchain, as many banks and financial institutions are working towards, various regulatory restrictions can be enforced automatically, reducing implementation burden
  - Financial transactions can also be taxed automatically as the ledger keeps track of transfer of ownership of assets
- **Foreign aid (cross-border remittance)**
  - Using cross-border transfers foreign aid can be distributed in far more targeted and efficient manner, reaching its intended recipients directly, considerably reducing the need for middlemen
  - Reduction in necessity of middlemen eliminates multiple channels and opportunities for corruption and misuse of funds
- **Voting**
  - Using blockchain technology, each citizen (or recognized member of group) can vote and the result of the voting can be determined by consensus between the participants without the details of each person's vote ever becoming public
  - This eliminates considerable voting environment overhead, from preparation to technology to staff to counts and recounts

# Parallel evolution of blockchain and digital currencies



# Closing remarks and questions



- **Closing remarks – Commissioner Bart Chilton and Dr. Nicolette Kost De Sevres, DLA Piper**
- **Questions?**