

Emerging Technology in the Practice of Law: Be Aware, Be Effective

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Understanding and Developing Technical Skills

- It's not enough to just know the law. . .
 - Effective advocacy and advice requires both an understanding of new technologies and the development of technical skills
- The Rules of Professional Conduct
 - In 2012, the American Bar Association formally approved a change to Comment 8 of Rule 1.1 of the Model Rules of Professional Conduct, providing that at least one measure of a lawyer's **competence** is tied to their knowledge of technology

Model Rules of Professional Conduct

- The Amended Comment:

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, **including the benefits and risks associated with relevant technology**, [emphasis added] engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject

- 28 states have adopted this comment (either verbatim or with local changes) as part of their respective Rules of Professional Conduct

[Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Idaho, Illinois, Iowa, Kansas, Massachusetts, Minnesota, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming]

Rule 3-110 California Rules of Professional Conduct

(A) A member shall not intentionally, recklessly, or repeatedly fail to perform legal services with competence.

(B) For purposes of this rule, “competence” in any legal service shall mean to apply the 1) diligence, 2) learning and skill, and 3) mental, emotional, and physical ability reasonably necessary for the performance of such service.

(C) If a member does not have sufficient learning and skill when the legal service is undertaken, the member may nonetheless perform such services competently by 1) associating with or, where appropriate, professionally consulting another lawyer reasonably believed to be competent, or 2) by **acquiring sufficient learning and skill** before performance is required. The increasing importance of ESI in our daily lives and, in particular, in the context of litigation, has expanded the duty of competence. Not only must attorneys understand or educate themselves on substantive areas of the law, or associate with other practitioners reasonably believed to be competent in ESI, lawyers must also know and **understand a client’s technology and how to preserve, collect, review and produce a client’s data** while maintaining applicable privileges, trade secrets and confidentiality. Of course, lawyers can always decline a representation.

California - Ethical Obligation

- Committee on Professional Responsibility and Conduct has a formal ethics opinion finding:
 - “Attorney competence related to litigation generally requires, among other things, and at a minimum, a basic understanding of, and facility with, issues relating to eDiscovery including the discovery of ESI.”
[Formal Opinion No. 2015-193]
- Additional related duties: vet and **oversee vendors** (California State Bar Formal Opn. No. 2004-165 [duty to supervise outside contract lawyers] and San Diego County Bar Association Formal Opn. No. 2012-1 [duty to supervise clients relating to ESI, citing *Cardenas v. Dorel Juvenile Group, Inc.* (D. Kan. 2006) 2006 WL 1537394]); **implement litigation hold** with an understanding of client’s organizational and data storage structure (*Qualcomm, Inc. v. Broadcom Corp.* (S.D. Cal. Apr. 2, 2010) 2010 U.S. Dist. LEXIS 33889, 2010 WL 1336937, at *2-*3)

Training For Lawyers

- ABA annual technology training survey [2017] indicates that most lawyers (42.4%) are trained by vendors and manufactures - think ESI vendors and even trial graphic firms
- Some states require technology training - Florida:
Effective January 1, 2017, Florida lawyers must complete 3 hours of training in technology programs
[Rule 6-10.3(b)]
- Beyond eDiscovery and ESI. . .

Taking the Offense Approach to Technology

- Why go on the offense in technology training?

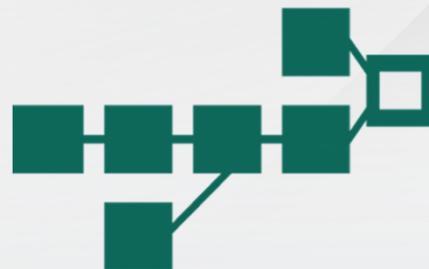
- Reality
 - Law moving to an interdisciplinary model (tech and process-enabled marketplace)
 - Disaggregation of tasks (Big Four; Gig-Economy, AI)

[Forbes, *Lawyers and Technology: Frenemies or Collaborators?*, Jan. 15, 2019]

- Insights and Advantages

- Data Analytics to guide decision making
- Better AFAs
 - Real time budget and project management
 - Data on resource uses and outcomes
- Cost efficiencies (e.g., google scholar/Lexis)
- Messaging and connection
 - Client, Judge and Jury
 - Interactive, immediate and consistent with information sharing expectations

BLOCKCHAIN BASICS



What is Blockchain?

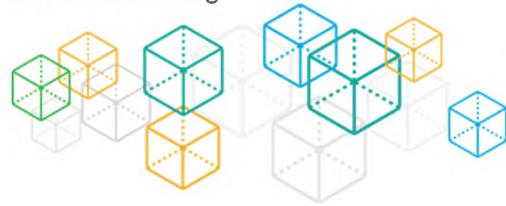
A shared, permissioned ledger, that cannot be altered, for recording the history of transactions

Peer-to-Peer Network that sits on top of the Internet

Like a public bulletin board, or database

Ledgers can be public, private, or hybrid; IBM, Oracle involved in creating blockchain programs for companies

Not a new concept: ledger system is the original system of accounting



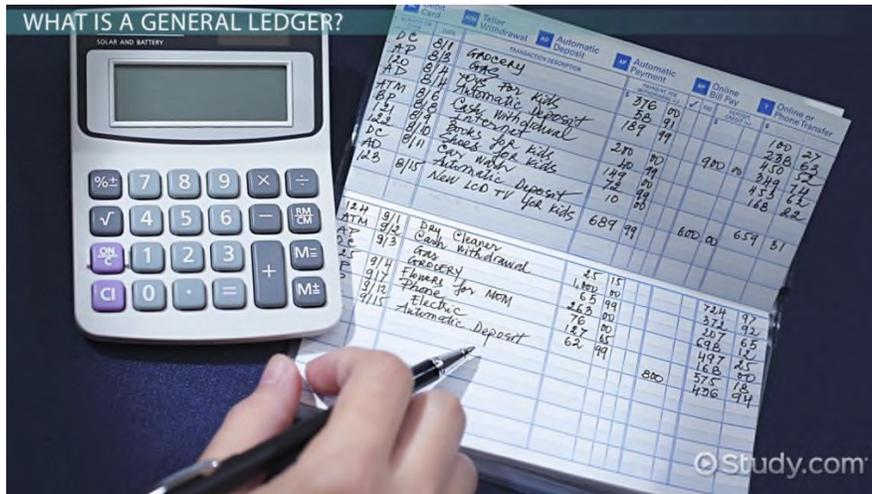
Luca Pacioli, aka "Friar Luca"

Wrote first accounting treatise c. 1494 discussing ledgers

Leonardo Da Vinci
= student



We all have used the ledger system



- Blockchain technology is like your checkbook ledger on steroids - ideal for tracking lots of parties, many different items, sprawling distances.

Burglar alarm example

- A blockchain involves recording ownership of an asset and then “broadcasting” the registered owner of that asset using an anonymous key to a group of parties in a network.
- Any change in asset ownership by any member in the anonymous network is recorded and broadcast across the network, including an authorization key that verifies the legitimacy of the transfer.
- Because the entire record of transactions is recorded by many different parties across the network, a blockchain reduces the risk of fraud, and the risk of simple errors in transactions that are typically corrected through reconciliation in traditional bookkeeping.



Google Docs Example

- Think of Google Docs: one person creates a document, anyone with internet access to whom it is sent can type and add to it, and document is updated that way, with a master copy being stored and updated with Google.
- With blockchain technology, updates to such a "document" are broadcast to all nodes in the blockchain, who record the updates.
- Everyone who is part of the blockchain receives the updates and can access the ledger; no single entity like Google holds the master copy of the ledger; rather, the blockchain group collectively holds the ledger, and adds to the ledger. The ledger is decentralized.
- Upon joining the network, each connected computer receives a copy of the blockchain, which has records, and stands as proof of every transaction ever executed. It can thus provide insight about facts like how much value belonged to a particular address at any point in the past. [Blockchain.info](#) provides access to the entire Bitcoin blockchain.



Advantages

- Blockchain ledgers unify multiple ledger systems so there is one accounting system that all participants share in.

eliminates the need for multiple ledgers, which can lead to multiple versions of "the truth"

helps eliminate error, fraud, and inefficiencies

helps eliminate reliance on intermediaries

helps eliminate delays while multiple systems are reconciled

Examples of Blockchain Technology At Work

Tracking Diamonds from Mine to Final Customer

Problems:

- Diamond smuggling
- Fraud
- Counterfeit diamonds
- Unethically mined stones



With Blockchain technology, you can digitally:

Keep a record of high-resolution photos of diamonds at every point of its journey

Track real-time records of every payment transaction

Hold certificates of authenticity

Maintain product details like serial numbers, cut, clarity, carat, color

Everledger

- Everledger, a global digital registry for diamonds, uses blockchain technology and is already tracking one million diamonds:
 - Entries on the digital ledger (i.e. certificate number etc.) are inscribed by laser on the stone, creating a digital twin
 - Enables diamond suppliers intermediaries, like border agents, and purchasers to replace a paper certification process with a blockchain ledger that can track the provenance of a diamond



Everledger

- Everledger is adding other luxury goods to its blockchain, including wine (hidden codes are added to the bottle to see where the bottle originated and how it was distributed):
 - Useful for auction houses who have been sued for selling fake wines, i.e. allegedly belonging to Thomas Jefferson
<https://www.cbsnews.com/news/billionaire-spends-35m-to-investigate-400k-wine-fraud/>
 - Why important? Recent WSJ article explains ("Would You Know A Fake Wine If You Tasted It?"), sometimes the fake wines taste better than the real ones - fooling even the experts
 - If you can't trust the experts to ferret out fakes, whom can you really trust?
 - Same technology being applied to fine art



Blockchain technology is great for many industries: Any industry with a supply chain



In 2016, **Walmart** partnered with IBM and Tsinghua University in Beijing to digitally track the movement of pork in China on a blockchain for transparency and food safety purposes



In 2017, **Maersk** partnered with IBM to enhance the management of shipping containers globally and facilitate payments to customs officials



Govt. of Singapore: building blockchain tool to digitally track shipments of various commodities

Blockchain is Changing the World



- **Fintech** (i.e. mobile-only stock trading apps, peer-to-peer lending sights, all-in-one money management tools), etc.
 - NASDAQ recently announced a new initiative to try and use blockchain to speed the securities clearing process.



- **Healthcare** (i.e. to track medical records, clinical trials, and prescription drug monitoring);
 - In 2016, Chronicle launched Cryptoseal, a tamper-evident seal that records the identity of its registrant and packaging metadata to the blockchain. Great for fighting counterfeit drug problem.
 - In 2017, US FDA and IBM entered into agreement to explore the use of blockchain technology to securely share patient data.

BLOCKCHAIN BASICS



- **Intellectual property/Music industry:** PeerTracks, Bittunes, Ujo Music: companies using blockchain to register royalty payments, music and artists' intellectual property rights; tracks when songs are sold, assures correct revenue splits; allows for digital sale of music without intermediaries.
- **Real-estate (tracking title):** emerging countries that have no efficient, reliable, or corruption-free public land registry are starting them through blockchain.
 - Bitland: NGO in Ghana proposing blockchain based registry for property.
- **Government:** ideal for tracking birth and death certificates, citizenships, tax payments, voting, service-of-process, etc.

BLOCKCHAIN RISKS



Great way to fund illegal activity

- Avoids centralized banking and government repositories
- Often accept payment through cryptocurrencies like bitcoin, which can be hard to track
- Use can easily lead to other crimes: tax evasion, human trafficking, drug crimes, money laundering
- Prime target for hackers



Legal issues abound!

- DATA PRIVACY ISSUES - HOW TO MANAGE BORDERLESS TECHNOLOGY?
- Blockchains can be comprised of blocks containing personal information from subject residents in a multitude of jurisdictions. Which data privacy laws will apply?
 - The EU-US Privacy Shield may provide some protection for cross-border transfers of personal information from the EU to the US, but Privacy Shield is limited to EU-US data transfers and participating companies.
 - What about the EU General Data Protection Regulation (GDPR) that became effective in May 2018? The GDPR is a comprehensive regulation designed to protect the privacy of personal information of EU citizens for transactions taking place among (and with) EU member states.
 - Although pseudonymization of personal information is part of the GDPR requirements (something that is already implemented within BLT), the requirement that data subjects be able to request deletion of their personal information directly contradicts the immutability of information in records contained within the blockchain.
 - Failure to comply with GDPR requirements can result in hefty fines, so the answers to these questions are not only complicated, but carry significant potential risk.
- Common work-around? CONSENT - Google parent Alphabet's method of choice
<https://www.wsj.com/articles/alphabets-earnings-soar-as-sales-continue-to-climb-1524514801>

Dispute resolution issues abound!

- Whose law governs?
- What jurisdiction are you in on a borderless, decentralized ledger?
- Will want to draft user agreements to require consent to a specific jurisdiction as part of the “terms of use” for the technology. But what if such terms are not present? Even if such terms are present, will they be deemed enforceable? What about governing law and venue — what tribunal would (or should) address the dispute?
- Serious thought should also be given to the type of award that may be given under any terms of use as well. For example, arbitration clauses are common in online terms of use; however, the enforceability of such clauses should be carefully evaluated when overseas transactions are involved.



* Be prepared when your CEO asks for cost reductions by applying blockchain technology and smart contracts.

“What the internet did for communications blockchain will do for trusted transactions.”

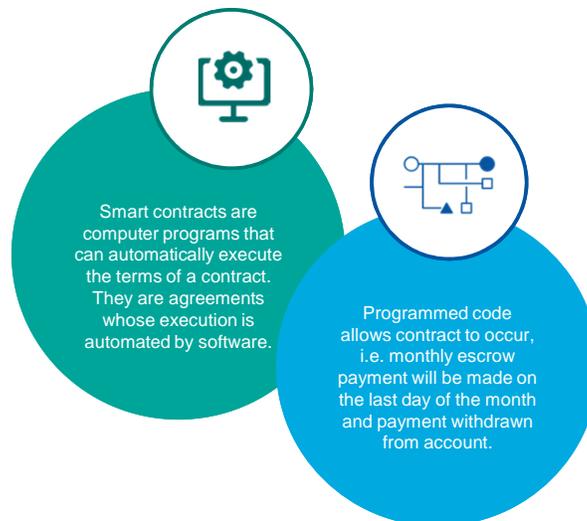


Ginni Rometty
CEO of IBM

SMART CONTRACTS



Say what?



If/then computer code triggers events

Super Bowl bet: Say you want to bet \$500 that the Packers will beat the Bears in their next match up. Step one is for you and your friend to place your bitcoin in a neutral account controlled by the smart contract. When the game is over and the smart contract is able to verify via ESPN that the Packers beat the Bears, the smart contract would automatically deposit your bet and your winnings from your friend back into your account.

Because smart contracts are computer programs, it is easy to add more complex betting elements like odds and score differentials into the mix.

While there are services out there today that might handle this sort of transaction, they all charge a fee. The key difference with smart contracts is that they are a decentralized system accessible to anyone, and don't require any intermediary party.



- **Online shopping.** Maybe you've ordered from overseas and been burned. Now you don't want to pay a merchant until you've received delivery of the item. You could set up a contract that looks for FedEx tracking data saying that the package you ordered has been delivered to your address before releasing payment.
- **Amazon:** Now using smart contracts to offer in-home and in-car delivery. Partnering with General Motors and Volvo. The system, which "includes a so-called smart lock for the door and a security camera, currently costs about \$220." Customers download the Amazon Key app with a connected car service, and a delivery driver unlocks the car through the wireless connection.





- **Mortgage payments:** although you got your mortgage through a bank, that bank won't generally hold onto it for the entire 30-year loan; it will be sold to an investor. But you keep making payments to the bank, not the investor that owns your mortgage. The bank just becomes a processor for your monthly payments, sending a chunk to the investor, a slice to taxes, and a bit for homeowner's insurance.
 - The bank will often take a quarter to a half percent per year to service that mortgage, i.e. to manage the operational headache of receiving payments and redirecting them. But a smart contract could theoretically administer this task very easily.
 - If mortgage payments were handled by smart contracts, mortgage processing fees could be eliminated and that savings passed on to consumers. The result would be lowered cost of home ownership.
 - Law firms and banks who are holders of escrow accounts need to ensure anti-money-laundering due diligence is in place before set up a smart contract to "automatically" handle escrow issues!

Say Goodbye To Lawyers And Banks?

- In a lot of routine financial transactions, what lawyers and banks do is repetitively process mundane tasks. And yet huge fees go towards paying for lawyers to go through wills or for banks to process our mortgage payments.
- Smart contracts could automate many of these processes, so that ordinary people can save time and money.



Smart Contracts Raise Interesting Legal Issues

- Lawyers will always be necessary to draft appropriate smart contracts.
- Debate over whether, and in what context, the drafting of smart contracts constitutes computer programming, **the practice of law**, or the **unauthorized practice of law** under ABA Model Rule of Professional Conduct 5.5.
- What if no contract is drafted, just smart contract computer programming? Which forum governs the smart contract? Where is venue? How are disputes resolved? If the technology fails, are those issues governed by tort law, contract law, cybersecurity law, fraud, or all of the above?
- Can and will there be insurance coverage for smart contracts?
- How to securitize smart contracts?
- Lots of patent and IP issues surrounding smart contracts, and blockchain technology

CRYPTOCURRENCIES



Cryptocurrencies Can Offer Confidence - Depending



The circulation of confidence is better than the circulation of money.

James Madison
Virginia Convention, June 20, 1788

Cryptocurrencies

Brief History of Money

1. Physical trading of commodities and services
2. Use of certain commodities (precious metals or other valuable items) to represent and exchange value from one person to another.
3. Coins and paper money, backed by precious metals (i.e. gold, silver), made it easier to transfer value back and forth among users. Problem: money supply was limited by Mother Nature - only so much gold in the world.
4. Fiat currency, money that is not backed by precious metals—but only by the promise of the issuing government, enabling central authorities to control monetary supplies. Works well IF you trust the issuing government.
5. Digitalization of currency. The world-changing creation of the blockchain ledger has eliminated the need for a central authority to back or issue currency.

Bitcoin & Other Cryptocurrencies

What are cryptocurrencies?

A cryptocurrency is a **digital asset** designed to work as a **medium of exchange** that uses **cryptography** (computer codes) to secure its transactions, to control the creation of additional units, and to verify the transfer of assets.

Cryptocurrencies use decentralized control as opposed to centralized **electronic money** and **central banking** systems. The decentralized control of each cryptocurrency works through a **blockchain**, which is a public transaction database, functioning as a distributed **ledger**.

Bitcoin, created in 2009, was the first **decentralized** cryptocurrency. Since then, numerous other cryptocurrencies have been created. These are frequently called altcoins (*alternative coins*).



Cryptocurrency Advantages

- Hard for most mainstream Americans to appreciate how valuable it is to eliminate need for government-back currencies
 - Our currency is backed by a stable government, it is one of the leading world currencies
 - In economies where the government is unstable, or untrustworthy, the ability to rely on a banking system that is not tied to the government is priceless
 - Reason why China is banning bitcoin, ICOs, and other cryptocurrencies — not so much because they are unsafe (the stated reason), but because investment in cryptocurrencies takes money away from People's Bank of China, and government control
 - Venezuela: suffering from U.S. sanctions, now offering Petro: a government-run oil-based Bitcoin-type money. Venezuela has significant oil reserves. What the country badly needs is cash in the form of dollars or other convertible currency, and Petro is the latest money-raising vehicle dreamed up by the Venezuelan government.
 - **But Americans will likely run afoul of U.S. sanctions laws if you buy!**



You, Too, Can Launch A Cryptocurrency!

- Russian farmer recently profiled in WSJ for launching his own cryptocurrency
- Saw it as best way to revive ailing economy in his small town, way to cut financial ties with Moscow and Russian banking system
- "Slowly becoming a 'tender of choice' ... for transactions from milk to tractors"
- Citizens want to pay one another for services each perform, but hampered by poverty and inability to get loans (due to high interest rates) from Russian banks
- Russia is weighing whether to embrace or ban cryptocurrencies

<https://www.wsj.com/articles/russian-farmer-alters-rural-economy-with-virtual-currency-as-moscow-watches-warily-1524398400>



Cryptocurrency Advantages

- Eliminates need for things like armored cars, high transportation costs
- Eliminates need for Automated Clearing House (ACH) system (electronic network of U.S. financial institutions)
- Eliminates need for money-moving services like Western Union, MoneyGram and their associated fees
- Offer "pseudonymity" - or do they? Usually have to use on exchanges, which can be subpoenaed



Over 1300 cryptocurrencies exist Some of the most common:



Bitcoin

- largest cryptocurrency by value
- Originally described by its founder as a "peer-to-peer version of electronic cash [that] would allow online payments to be sent directly from one party to another without going through a financial institution."
- Runs on the "Blockchain" (capital "B")



Ether

- used on the blockchain Ethereum
- Aimed for use with Smart Contracts
- A consortium called the **Enterprise Ethereum Alliance**, which includes companies like Microsoft and JPMorgan and ~135 banks, are developing uses for the Ethereum blockchain.



Bitcoin Cash

- Bitcoin cash was created in 2017, by splitting **bitcoin through what is known as a "hard fork."** A section of the bitcoin community had forced the Blockchain (the digital ledger which records every bitcoin transaction) to **split into two separate chains for speed purposes (Bitcoin is slow).**



Ripple

- Markets itself as a cross-border payment solution for large financial institutions based on blockchain technology.
- Purports to solve the problem of high-volume/low value transactions, which are a headache for banks. The start-up has been conducting **trials with a number of financial institutions**, including **American Express** and Santander.



Litecoin

- Markets itself as very similar to bitcoin, but allegedly 4x as many coins and 4x faster.



- To use Bitcoin, you have to sign up for a **Bitcoin Wallet app online** or download a Bitcoin Wallet app to your smartphone (**iOS** or **Android**).
- Your "**Wallet**" acts as a **virtual bank account** of sorts that allows you to send or receive bitcoins.
- You can buy bitcoins using your traditional bank account through a **Bitcoin Exchange**.
- Then you can spend bitcoins by locating businesses that accept it.



Bitcoin and other cryptocurrency balances are kept using public and private "keys," which are long strings of numbers and letters linked through the mathematical encryption algorithm that was used to create them.

The public key (comparable to a bank account number) serves as the address which is published to the world and to which others may send bitcoins.

The private key (comparable to an ATM PIN) is meant to be a guarded secret, and only used to authorize Bitcoin transmissions.

Big problem

**YOU CAN'T LOSE YOUR PRIVATE KEY—
NOWHERE TO GO TO FIND IT!**

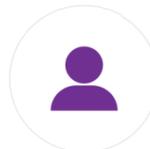
Good News! You Are a Bitcoin Millionaire. Bad News! You Forgot Your Password

— Wall Street Journal Dec. 19, 2017.

Distraught investors go to extreme lengths to recover their lost cryptocurrency, including hypnosis and 'brute force' attacks with a supercomputer
<https://www.wsj.com/articles/good-news-you-are-a-bitcoin-millionaire-bad-news-you-forgot-your-password-1513701480>

"The private key is cumbersome and looks something like this:

E9873D79C6D87DC0FB6A5778633389F4453213303DA61F20BD67FC233AA
33262. Protecting the private key is paramount—anyone who accesses it can transfer or spend the bitcoin, and transactions can't be reversed or stopped."



"Jason Miller, a hypnotist in Greenville, S.C., recently began offering to help people recall forgotten passwords or find misplaced storage devices. He charges one bitcoin plus 5% of the amount recovered, although he says that's negotiable."

Why should your company care?

- The more types of payment you accept, the more easily clients can pay you for services rendered.
- The more global you are, the more valuable the cryptocurrency option is.



Bitcoin Downsides: it is Super Volatile!

- Can be super volatile: bitcoin's exchange rate against the U.S. dollar has frequently jumped or crashed over 20% (sometimes nearly 50%) in a single day
- By contrast, U.S. dollar-to-Euro exchange rate generally has not changed more than 2.5% in one day
- Such instability = not desirable in a currency, because holder's purchasing power can increase or decrease drastically and suddenly
- **Warren Buffett: Bitcoin is "probably rat poison squared"**
- **Warren Buffett's Vice Chairman at Berkshire, Charlie Munger: "To me, it's just dementia. It's like somebody else is trading turds and you decide you can't be left out."**
 - -CNN Money, May 8, 2018



And the regulators are watching!



SEC and CFTC: assuming joint regulatory oversight of virtual currencies

*Virtual currencies = commodities → FTC oversight

CFTC regulates things like futures sales of virtual currencies, but also "spot" commodities transactions involving fraud/manipulation

*SEC does not have direct oversight of transactions in currencies or commodities. BUT SEC does have oversight of cryptocurrencies that have the characteristics of securities, i.e. things like token offerings (i.e. initial coin offerings, or ICOs), where companies sell tokens or coins, like shares, during capital raises

SEC & CFTC have established virtual currency task forces



SEC: The *Howey* test remains the appropriate standard for determining whether a particular token involves an investment contract:



"A rose by any other name would smell as sweet":

can't maneuver around SEC by offering "tokens" or "coins" rather than "shares"



Possible exception being lobbied for: if coins offer goods/services, similar to gift cards; i.e. if coins have a purely consumer use

In joint WSJ Op-Ed piece, Jay Clayton and J. Christopher Giancarlo likened interest in virtual currencies to interest in dot-com investing in 1990s - some people got really rich, lots of people lost a lot of money

Issue of who else regulates?

"A key issue before market regulators is whether our historical approach to the regulation of currency transactions is appropriate for the cryptocurrency markets. Check-cashing and money-transmission services that operate in the U.S. are primarily regulated by states. Many of the internet-based cryptocurrency-trading platforms have registered as payment services and are not subject to direct oversight by the SEC or the CFTC. We would support policy efforts to revisit these frameworks and ensure they are effective and efficient for the digital era."



You generally need a state license to operate a money transmitting business, and can be a federal felony to fail to get such a license

[Obopay/Payza](#) article

"MH Pillars, Ltd., doing business as Payza, has been indicted by a federal grand jury in the District of Columbia on charges alleging they operated an Internet-based unlicensed money service business that processed more than \$250 million in transactions."



FinCEN

- "In some areas, federal authority to police cryptocurrencies is clear. The Bank Secrecy Act and its implementing regulations establish federal anti-money-laundering obligations that apply to most people engaged in the business of accepting and transmitting, selling or storing cryptocurrencies."
- Under Bank Secrecy Act, banks & other financial institutions are subject to various registration and recordkeeping requirements.
- E.g., all "**money service businesses**" are required to register with the Dept. of the Treasury and **develop anti-money-laundering and customer identification programs ("KYC")**
 - These rules cover certain participants who transact in "convertible virtual currencies"
 - "Exchangers" and "administrators" are likely subject to regulation
 - "Exchangers" = persons/business that exchange virtual currency for real currency or other virtual currency
 - "Administrators" = persons/business engaged in putting into circulation a virtual currency who also have the authority to redeem virtual currency from circulation



FinCEN

- Any blockchain transaction involving cryptocurrencies is likely a virtual-currency transaction, but **end-users, such as merchants or consumers, are likely exempted**; miners are also likely exempted
- But businesses involved in creating and exchanging virtual currencies better be careful
- 2015 FinCEN enforcement action against Ripple for not having proper AML program in place



Other Regulators

- **IRS:** Virtual currencies are treated as property and income for federal tax purposes
 - <https://www.irs.gov/pub/irs-drop/n-14-21.pdf>
 - Will be taxed for successfully "mining" and then receiving virtual currency
- **States:** Some states are aggressively regulating cryptocurrency businesses (California, New York, Texas). But some are trying to lure cryptocurrency businesses by offering little to no state regulation of certain cryptocurrencies
 - Wyoming: passed the Utility Token bill, which was designed to exempt specific cryptocurrencies from state money transmission laws and is the first of its kind to legally define the way in which specific types of crypto tokens are treated by regulatory bodies



Arbitrating Cryptocurrency Disputes

- Most major digital asset exchanges require customers to agree to arbitration clauses as a condition of opening an account
- The exchanges are specifying the venue and other limitations
 - One popular exchange requires users to resolve disputes in accordance with the American Arbitration Association under its Rules of Arbitration of Consumer-Related Disputes in San Francisco
 - Another requires arbitration before JAMS under its Comprehensive Arbitration Rules & Procedures in NY
 - Another provides for arbitration before JAMS in San Francisco
- User agreements also differ in how they impose limitations on claims and remedies, e.g. sometimes providing for a 1-year time limitation, or barring an award of punitive damages
- All such arbitration clauses = likely enforceable under the Federal Arbitration Act, 9 U.S.C. 1, which adopts a liberal policy favoring arbitration agreements

Arbitrating Cryptocurrency Disputes Contd.

- CONTRAST with FINRA arbitration agreements, which govern traditional arbitration agreements against broker-dealers
 - FINRA uses strict rules and procedures
 - FINRA = overseen by the SEC
 - FINRA = generally viewed as an investor-friendly forum; 6-year eligibility period to bring claims, venue located in forum chosen by claimant, option to select “all-public panel,” permit punitive damages
- *Leidel v. Coinbase Inc.*, No. 17-12728, 2018 WL 1905954 (11th Cir. Apr. 23, 2018): affirmed district court’s denial of Coinbase’s motion to compel arbitration of claims brought by cryptocurrency investors who did not have direct account relationship with Coinbase
 - Investors brought tort claims, not breach of contract claims, against company that had a direct account relationship with Coinbase, and alleged Coinbase failed to stop the account holder’s theft of their cryptocurrencies
 - 11th Circuit held that the exchange’s user agreements could not be enforced against third parties who were non-signatories to those agreements

Thank you