



Introduction to FinTech

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 Dimon noted: JPMC should absolutely be "scared shi*tless" about FinTech threat (CNBC, January 5, 2021)





- The term fintech refers to the synergy between finance and technology, which is used to enhance business operations and the delivery of financial services.
- Fintech can take the form of software, a service, or a business that provides technologically advanced ways to make financial processes more efficient by disrupting traditional methods.



FinTech: Areas of Concentration



FinTech and Banking

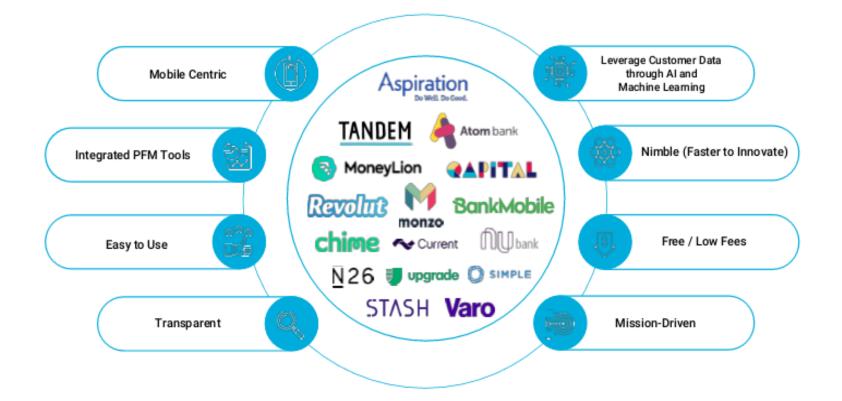


FinTech: Universal Adoption





FinTech: Disruptors (Challenger Banks and ValProp)





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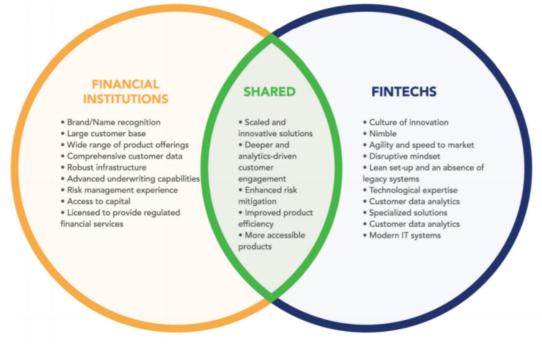
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Unbundling of a Bank



Mutual benefits to the bank and fintech



*Source: Center for Financial Inclusion at Accion and the Institute of International Finance, July 2017



Bank—Fintech Opportunities

Accounts payable processing	Accounts receivable processing	Card (prepaid) sponsoring	Consumer and commercial bill payment	Cryptocurrencies
Financial management and budgeting	International settlement and payments	Investment advisors and broker-dealers	Invoicing and collections	Lending models (consumer and small business)
Merchant acquirer services	Mobile payments processing	Mobile wallet solutions	Online account solutions	SMB payment processing



Structuring partnerships

- Will the non-bank "white label" the product?
- Who will market?
- Who will underwrite?
- Who will decision and action applicants?
- Who will provide the originations platform?
- Who will service?
- Who will default service?
- Relationship Structure:
 - Will the bank retain ownership of the loan? (Participation Model)
 - Will the bank transfer the loan? (Whole Loan Sale Model)
 - Will the bank obtain a funding line from the investor? (Warehouse Model)
 - Will the marketing entity be separate from the financial entity? (3-Party Model)



- Electronic Fund Transfer Act / Regulation E
- Truth in Lending Act / Regulation Z
- PCI DSS
- BSA/AML/KYC
- UDAAP
- FinCEN Money Transmission
- Gramm-Leach-Bliley Act / Regulation P
- CFPB's nine consumer protection principles for new faster payments systems

Blockchain Technology



- Bitcoin has been described by Bill Gates as a "techno tour de force."
- Peter Thiel, the co-founder of PayPal and an early investor in Facebook, believes Bitcoin has "world changing" promise for online transactions without fees.
- Fred Wilson of Union Square Ventures believes "Bitcoin represents something fundamental and powerful.
 ..."
- Leading Silicon Valley investors, including Andreessen Horowitz, Lightspeed Ventures, and Hong Kong Billionaire Li Ka-shing's Horizon Ventures, are supporters of the digital currency.
- Bitcoin and Ether are digital, private crypto currencies that are exchanged by means of the Internet.



- Critics of digital assets have been equally as vocal in their skepticism of the digital currency and concern about its long-term viability as a unit of exchange as well as its potential impact on financial services and commerce.
- Digital assets has been derided as a "shady online currency" and as "a digital Wild West for narco traffickers and other criminals."
- Senator Charles Schumer has described Bitcoin as a form of money laundering.
- Leading economist, Paul Krugman, has been critical of Bitcoin, suggesting that the structure of the currency incentivizes hoarding.
- Other analysts have raised concerns of a Bitcoin bubble.
- Former Secretary of the Treasury Larry Summers has been more circumspect in his evaluation of the digital currency and appears to be waiting to judge its potential.



- The idea of a blockchain was introduced in 2008 as a basis for the virtual currency Bitcoin, which is an example of an unrestricted blockchain.
- Blockchain technology is a distributed list of all transactions across a peer-to-peer network.
- Blockchain is the technology underlying Bitcoin and other digital currencies, and it has the potential to disrupt a wide variety of business processes. (PricewaterhouseCoopers)
- The blockchain is "authoritative" because every user agrees on it.
- In some blockchain initiatives there are no central, regulated institutions playing any role in the process.
- Advocates of blockchain technology believe it could substantially improve the trading, clearance and settlement of securities.
- Former SEC Commissioner Kara Stein once noted "one could imagine a world in which securities lending, repo, and margin financing are all traceable though blockchain's transparent and open approach to tracking transactions."



- The technologies used by the financial services industry have developed over time as a network of mutually trusting institutions, with legal agreements and regulations designed to minimize risks, such as operational and counterparty risk, that are not directly related to the business of a securities issuer.
- Each institution trades with accountable and authorized counterparties, under the supervision and oversight of regulators.
- The adoption of blockchain technology will mean that competing financial institutions will be able to share a common digital representation of asset holdings and keep track of the execution, clearing and settlement of trades outside their legacy proprietary databases, and without the need for a central database management system.
- Blockchain technology will enable users to become peers in a shared database, which they can rely on to record transfers of assets and to perform additional related activities involving multiple parties, such as trading, clearance, and settlement.
- Blockchain users can propose new transactions and, depending on the blockchain chosen, they can either contribute to validation collectively or have a subset of users responsible for this task.
- A transaction is validated when a specified proportion of the network's validators have reached a consensus as to its legitimacy.



Blockchain benefits are critical to enterprises



It's distributed

Blockchain works as a shared system of record among participants on a business network, eliminating the need to reconcile disparate ledgers.



It's permissioned

Each member of the network has access rights so that confidential information is shared on a need-toknow basis.



It's secure

Consensus is required from all network members, and all validated transactions are permanently recorded. No one, not even a system administrator, can delete a transaction.



- Changes to the shared database are then reflected in its digitally signed versions, which users can store locally (either in their entirety or with only a subset of transactions/accounts visible).
- Users can then extract the updated information they need for conducting their respective businesses from these locally stored databases.
- Blockchains allow their users to store and access information relating to a given set of assets and their holders in a shared database of either transactions or account balances.
- This information is distributed among users, who could then use it to settle their transfers of, or for example, securities and cash, without needing to rely on a trusted central validation system.
- In financial markets, the substantial de-materialization of securities and cash has progressively shifted the settlement of a trade from the physical delivery and paper-based recording, to a system of book transfers in digital databases.
- What remains unchanged is the need for an authoritative "golden record" of holdings to be kept by specific financial market infrastructures, and for intermediaries involved in the settlement process to update their individual databases by communicating with the other institutions involved, at the different levels of post-trading, in order to be able to reflect the changes in each other's records.

Regulation of Blockchain and Digital Assets



- While blockchain technologies may be well suited to accomplishing the goals of the Securities Acts Amendments, the laws that regulate securities and commodities are not designed to regulate such innovative technologies.
- As noted by Commissioner Stein, "creative uses of blockchain are still in their infancy... [and] a lot of questions will need to be answered."
- Echoing Commissioner Stein's comments, a former SEC Chair noted: "[b]lockchain technology has the potential to modernize, **simplify, or even potentially replace** current trading and clearing and settlement operations."
- However, as White noted in the same speech:

One key regulatory issue is whether blockchain applications require registration under existing [SEC] regulatory regimes, such as those for transfer agents or clearing agencies. We are actively exploring these issues and their implications. [The SEC's] Advanced Notice of Proposed Rulemaking and Concept Release on transfer agent regulations... asked for public comment on the use of blockchain technology by transfer agents and how such systems fit within federal securities regulations.



- While there is tremendous potential for blockchain technology in the financial services industry, it is less clear how regulators in the United States will treat platforms that use blockchain technology in the financial or securities sectors.
- It is unclear if those platforms must register with the SEC as an exchange, an ATS, a broker-dealer, a clearing agency, or a transfer agent.
- Before regulators can address this issue, they must better understand in what instances blockchain technology involves transactions in securities.



- The definitions of "security" under the Securities Act of 1933 (the "Securities Act") and the Securities Exchange Act of 1934 are nearly identical and each is broad enough to include the various types of instruments that are used in commercial marketplaces that one might suspect to fall within the ordinary concepts of a security.
- This would include common instruments like stocks, bonds, and notes, as well as the various collective investment pools and common enterprises devised by persons seeking to generate profits from the efforts and investments of others (i.e. investment contracts and instruments commonly known as securities).
- Section 2(a)(1) of the Securities Act defines a "security" as:

[A]any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, . . . transferable share, *investment contract*, . . . any put, call, straddle, option, or privilege on any security, certificate of deposit, . . . or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a "security", or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.



- Although the term "note" is specifically enumerated in the Securities Acts' definitions of "security," courts have not found all notes to be securities because notes are used in a variety of contexts.
- A note may function as both a commercial vehicle, which is not a security,3 as well as an investment vehicle, which courts have deemed to be a security.
- In Marine Bank v. Weaver, 455 U.S. 551 (1982), the U.S. Supreme Court addressed whether the sale of a \$50,000 certificate of deposit, with a 6-year maturity that featured a 7.5% interest rate was a security.
- The note also provided that, if the bank permitted early withdrawal, the depositor would earn interest at the bank's current savings passbook rate on the amount withdrawn, except that no interest would be paid for the three months prior to withdrawal.
- The Court noted that while the definition of "security" in the Securities Exchange Act of 1934 (the "1934 Act") is quite broad, Congress, in enacting the securities laws, did not intend to provide a broad federal remedy for all fraud.



- The Court cautioned, however, "[t]he definition of 'security' in the 1934 Act provides that an instrument which seems to fall within the broad sweep of the Act is not to be considered a security if the context otherwise requires."
- The Court also noted that a certificate of deposit is not the functional equivalent of the withdrawable capital shares of a savings and loan association held to be securities, nor is it similar to any other longterm debt obligation commonly found to be a security.
- The purchaser of a certificate of deposit is virtually guaranteed payment in full, whereas the holder of an ordinary long-term debt obligation assumes the risk of the borrower's insolvency.
- The Court held neither the certificate of deposit nor the agreement in question was a security within the meaning of § 10(b) of the Securities Act.



Exchanges

- Section 3(a)(1) of the Exchange Act defines an "exchange" as "any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood, and includes the market place and the market facilities maintained by such exchange."
- Exchange Act Rule 3b-16(a) interprets the definition to mean any organization, association, or group of persons that: (1) brings together the orders of multiple buyers and sellers and (2) uses established, nondiscretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade.
- Absent an exemption, an exchange must register as a national securities exchange pursuant to section 6 and section 19(a) of the Exchange Act.
- If a blockchain technology platform brings together multiple buyers and sellers of digital assets that are deemed securities, the platform could be required to register as a securities exchange unless it falls within an exclusion from registration.



- In 1998, the SEC adopted Regulation ATS, which allows an ATS to choose whether to register as a national securities exchange or to register as a broker-dealer and comply with additional requirements of Regulation ATS.
- An "alternative trading system" means any organization, association, person, group of persons, or system: (1) that constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of Rule 3b-16 under the Exchange Act, and (2) that does not set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or discipline subscribers other than by exclusion from trading.
- A blockchain technology platform may be required by the SEC to register as an ATS if it maintains a marketplace or facilities for bringing together purchasers and sellers of digital assets that are deemed securities, and it does not set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such platform.
- If the platform is not required to register as an ATS, the operator of the platform may be required to register as a broker-dealer.



Broker-dealers

- Section 15 of the Exchange Act requires registration with the SEC of all broker-dealers using interstate commerce or the facilities of any national securities exchange to effect transactions in securities (other than exempted securities and certain short-term debt instruments).
- Section 3(a)(4)(A) of the Exchange Act defines a "broker" as "any person engaged in the business of effecting transactions in securities for the account of others."
- The Exchange Act and the rules thereunder do not define these terms.
- The courts and the SEC have taken an expansive view of the scope of these terms.
- The SEC and the courts apply a "facts and circumstances" analysis in evaluating whether a person has acted as a broker, with no single element being dispositive.
- Depending on the circumstances, the operator of a blockchain technology platform may be deemed a broker-dealer if the operator of the platform is deemed to be engaged in the business of effecting transactions in securities for the account of others.



FinCEN

- Virtual currencies are not created or overseen by a central bank in the manner of tradi-tional currencies.
- The fact that virtual currencies are not subject to traditional regulatory oversight has drawn the attention of federal regulators including the Treasury (through FinCEN), the SEC, and the CFTC.
- FinCEN is delegated authority under U.S. Department of Treasury Order 180-01 to administer the BSA and to thereby regulate money transmission to detect and prevent money laundering, fraud, and other illegal practices.
- FinCEN regulates money services businesses (MSBs) and money transmitters.
- The BSA and FinCEN regulations considers each of the following to be MSBs: currency exchangers; issuers, redeemers, or cashiers of travelers' checks, checks, money orders, or similar instru-ments; the United States Postal Service; a person who engages as a business in the trans-mission of funds; and any business or agency which engages in any activity determined by regulation to be an activity similar to, related to, or a substitute for these activities.



- The term "money transmitter" includes a person that engages in the acceptance of currency, funds, or other value that substitute for currency from one person and the trans-mission f currency, funds, or other value that substitutes for currency to another location or person by any means.
- It is important to note that the definition of a money transmitter does not differentiate between real currencies and instruments deemed convertible virtual currencies (CVCs).
- A person accepting or transmitting anything of value that substitutes for currency (such as Bitcoin or other digital asset) will be viewed as a money transmitter.
- Any entity or person, including certain foreign-located persons that engage in money transmission in any amount is subject to the BSA rules.
- Persons operating money transmitting businesses must register as such with FinCEN. The failure to
 register a money transmitting business is a federal offense punishable by civil and criminal penalty.
- The jurisdiction of FinCEN is proscribed under the BSA.



- Since 2011, FinCEN has regulated money services business models involving money transmission denominated in virtual currencies through a series of administrative rulings and guidance.
- In 2019, FinCEN issued guidance that consolidated its regulations and related administrative rulings and guidance applicable to MSBs utilizing models that involve convertible virtual currencies.
- "Money transmission" includes the "acceptance...of...other value that substitutes for currency."
- The term "other value that substitutes for currency" encompasses transmission activities that do not involve currency, but instead involves something that the parties to the transaction recognize has value that is equivalent to or can substitute for currency, which may include virtual currencies.
- FinCEN defines "virtual currency" as a "medium of exchange that can operate like a currency but does not have all the attributes of 'real' currency, including legal tender status."
- The guidance further clarifies that convertible virtual currencies ("CVCs") are a type of currency that either has an equivalent value as currency, or acts as a substitute for currency, and is therefore a type of "value that substitutes for currency."
- Accordingly, the definition of money transmitter does not differentiate between real currencies and CVCs.



- Accepting anything of value that substitutes for currency, such as a digital asset like Bitcoin, therefore
 makes that person a money transmitter.
- Virtual currencies can be divided into two primary categories: (1) convertible virtual currencies and (2) nonconvertible virtual currencies.
- Nonconvertible virtual currencies are essentially credits that can only be redeemed for products or other services.
- Non-convertible virtual currencies, like Facebook credits, generally cannot be converted into state-issued or government backed currency.
- Convertible currencies, on the other hand, may act as a substitute for real currency and have an equivalent value in real currency.
- These virtual currencies are frequently converted into and exchanged for real currency. Bitcoin is a convertible virtual currency.



- FinCEN regulation is less about the type of currency involved in a transmission or transaction and more about the process by which the currency is transmitted, the purpose of the transmission and the participants involved in the transmission.
- FinCEN has stated that "[w]hat is material to the conclusion that a person is not an MSB is not the mechanism by which a person obtains the convertible virtual currency, but what the person uses the convertible virtual currency for, and for whose benefit".
- FinCEN has stated activities that do not constitute accepting and transmitting currency, funds or the value of funds do not fit within the definition of "money transmission services" and are not subject to FinCEN's registration, reporting, and recordkeeping regulations for MSBs (United States.
- However, a CVC user that wants to purchase goods or services with CVCs it has earned, that pays CVC to a third party at the direction of a seller or creditor, may be engaged in money transmission.



- FinCEN's guidance defines CVC wallets as "interfaces for storing and transferring CVCs."
- There are different wallet types that vary according to the technology employed, where and how the value is stored, and who controls the value.
- Wallets where user funds are controlled by third parties are called "hosted wallets," whereas wallets where users control the funds are called "unhosted wallets."
- FinCEN states that the regulatory obligations of persons that act as intermediaries between the owner of value and the value itself (i.e., a money transmitter) is technology agnostic.
- Determining the regulatory treatment of a digital wallet depends on four criteria: (i) who owns the value;
 (ii) where the value is stored; (iii) whether the owner interacts directly with the payment system where the CVC runs; and (iv) whether the person acting as intermediary has total independent control over the value.



- FinCEN refers to the participants in generic virtual currency arrangements, using the terms "user," "exchanger," and "administrator".
- A user is a person that obtains virtual currency to purchase goods or services. How a person engages in "obtaining" a virtual currency may be described using any number of other terms, such as "earning," "harvesting," "mining," "creating," "auto-generating," "manufacturing," or "purchasing," depending on the details of the specific virtual currency model involved. For purposes of the guidance,
- FinCEN has noted the label applied to a particular process of obtaining a virtual currency is not material to the legal characterization under the BSA of the process or of the person engaging in the process.
- An exchanger is a person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency.
- An administrator is a person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.

Final Thoughts



Questions



Nelson Mullins

- Nelson Mullins' FinTech and Regulation practice helps clients meet the challenges posed by the development of these new technologies, including digital assets and ICOs.
- Bringing together attorneys from across the firm, members of the FinTech and Regulation practice advise clients on a variety of matters, including:
 - Corporate and transactional issues
 - Cybersecurity
 - Government investigations and compliance
 - Intellectual property
 - Labor and employment
 - Litigation
 - Public policy
 - Regulation by the CFTC, the SEC and FinCEN
 - Securities and corporate finance
 - Tax



Contact

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