

Blockchain agreements: avoiding ambiguity, manifesting assent

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A key requirement for mass adoption of fully decentralized blockchain networks is a process through which parties to a transaction can enter into legally binding agreements. The practical challenge is that the minimum requirements that courts have consistently imposed to form binding online contracts do not translate easily to blockchain-based applications. This article explains this challenge and one innovative solution that should meet legal requirements.

Courts have consistently held that in order for online agreements to be enforceable, the user must be on notice of the contract's terms and must unambiguously manifest assent through some type of affirmative action. In deciding whether the notice requirement is satisfied for online contracts, courts generally look to whether the terms were provided in a clear and conspicuous manner. *Berman v. Freedom Financial Network, LLC*, 30 F.4th 849 (9th Cir. 2022) at 855 (finding that terms were not binding where the link appeared only in "tiny gray font considerably smaller than the font used in the surrounding website elements barely visible to the naked eye").

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With respect to the "manifestation of assent" requirement, courts often start with the basic principle from the Restatement of Contracts that "[t]he conduct of a party is not effective as a manifestation of his assent unless he intends to engage in the conduct and knows or has reason to know that the other party may infer from his conduct that he assents." Restatement (Second) of Contracts §19(2) (1981). In the case of online contracts, this means looking at the actions, if any, taken by the user to signify their assent to the contract.

According to the 9th U.S. Circuit Court of Appeals, for example, a website "must explicitly notify a user of the legal significance of

the action she must take to enter into a contractual agreement." *Berman*, 30 F.4th 849 at 858. Whether a user has manifested assent will depend on the type of online agreement.

On one end of the spectrum are so-called "browsewrap" agreements, which purport to bind the user simply by displaying a link to the terms (typically at the bottom of a webpage). These agreements require no further action showing that the user has read or agreed to the terms. Courts have been reluctant to enforce them because "there is no assurance that the user was put on notice as to the existence or content of the terms" or that they manifested acceptance of those terms. See, e.g., *Gaker v. Citizens Disability, LLC*, No. 20-CV-110310AK, 2023 WL 1777460, at *6 (D. Mass. Feb. 6, 2023) (citing *Kauders v. Uber Techs.*, 159 N.E.3d 1033, 1054 (2021)); *Berman* at 1178.

In contrast, courts are more likely to enforce "clickwrap" agreements; namely, online agreements where the terms are presented to the user through a clear and conspicuous link, often through a pop-up window, and the user can only proceed with using the website or service by clicking or checking an "I agree" button or box. Courts are most likely to enforce these terms because they represent the clearest and most direct manifestation of assent.

In a decentralized digital asset environment, it may be difficult to establish that a party to an agreement demonstrated the requisite manifestation of assent. This is because most user experiences on decentralized platforms do not facilitate providing a user with legal terms in a clear and conspicuous manner or a mechanism to manifest assent (e.g., by clicking "I agree").

For example, assume an NFT issuer seeks to attach terms and conditions governing the purchase of their NFTs. The issuer can direct initial NFT purchasers to a website requiring them to click to agree to the legal terms before they can proceed to purchase the NFT. Assuming the NFT is freely transferable on secondary markets, downstream buyers who purchase that NFT through decentralized platforms may not be provided with the terms in a "clean and conspicuous manner" or be obligated to "click to agree" to the terms. Although in some cases, a link to the legal terms may be included in the NFT's metadata, courts may view this as equivalent to browsewrap agreement and therefore unenforceable.

Moreover, the mere act of signing binding legal agreements in a decentralized environment may be challenging. While e-signature services are readily available for digital transactions, almost all rely on a centralized provider, defeating the goal of a fully decentralized system. In addition, while a party to a blockchain-based transaction must “sign” a transaction through their wallet, they typically do not receive any notice that this “signing” means they are agreeing to certain legal terms.

Some have suggested that the absence of traditional binding written agreements is irrelevant in decentralized systems because the “code is the law,” implying that the functionality of “smart contract” computer code itself dictates and defines the agreement between the parties. There are two potential shortcomings to this approach.

First, it is not clear that in the event of a dispute, a court would look solely to the smart contract code, absent some agreement that the parties intended the code standing alone to govern their contractual relationship. Second, and more importantly, smart contract code, like any computer code, cannot capture many of the nuances and subtleties that are captured by the written word. This includes, for example: standards of performance such as “commercially reasonable efforts,” triggers such as “material adverse effect” or disclaimers of liability for actions other than fraud or willful misconduct.

The parties may also want to build flexibility into their relationship that smart contract code cannot provide. For example, rather than trying to address every issue that may arise in a contractual relationship and how it would be handled — which a code-only approach requires — the parties may prefer to memorialize in writing that those situations will be negotiated in good faith.

The optimal solution, given the contours of contract law, would be a hybrid solution that marries the benefits of “wet ink” written agreements with the capabilities offered by smart contracts. The team at MetaLex (metalex.tech) has developed one such innovative approach with functionality that creates a smart contract and written contract which mirror each other.

The “product-legal” fit is the Cybernetic Law Token Exchange App (CyTE) which features a trustless escrow for peer-to-peer over-the-counter (OTC) token transactions that functions both as an on-chain and off-chain enforceable contract. CyTE addresses cases where there is a deferred closing between two parties engaged in a token transaction or where the parties otherwise want their coins held in a smart contract escrow until consummation of the transaction, but without the need for a third-party (centralized) escrow agent.

Through CyTE, the initiating party to the transaction inputs the pertinent details of the transaction, such as the parties’ names and contact details, the identity of the tokens being exchanged and an agreement expiration time (i.e., upon which the agreement terminates if the transaction has not yet closed). The initiating

party also enters a choice of law jurisdiction and dispute resolution method (arbitration or judicial).

CyTE then populates an agreement with that information which the counterparty must sign. This signing is accomplished on-chain from the parties’ wallets, but with the parties signing a legal agreement as opposed to merely signing the execution of a transaction. The innovation comes with what simultaneously happens on-chain.

When the contract is counter-signed, the input parameters as well as the signatures are stored on-chain, and an immutable escrow smart contract is deployed with those parameters. That on-chain escrow can hold the tokens until the transaction closes, upon which the tokens are automatically exchanged or until the expiration time is reached, at which point the on-chain contract terminates.

CyTE therefore creates two contracts that operate in parallel — the standard, text-based “wet” contract and a corresponding smart contract. A party who believes the counterparty has breached the terms of their agreement, such as by failing to deposit their tokens into the smart contract as required, could bring a claim under the signed wet contract applying the choice of law and dispute resolution method to which the parties agreed, with confidence that a court or arbitrator would deem the agreement enforceable.

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Critically, the CyTE approach does not require the parties to treat the smart contract itself as the sole binding legal agreement, a concept that most courts would likely not accept. Rather, the smart contract is an on-chain mechanism to effectuate the traditional legal agreement.

Others are experimenting with “legal wrapper” tokens that would require a contracting party to open and accept that token prior to effectuating a transaction. These experiments are in their early stages and may not work for all on-chain use cases.

Going forward, regulators and legislators will need to reevaluate certain legal concepts in the context of decentralized environments. However, principles of basic contract formation are unlikely to change, and developers and deployers of blockchain-based protocols and services will need to find mechanisms to create binding legal agreements. Innovations such as that offered by MetaLex and legal wrapper tokens help address these issues and should spark further innovation in this critical area.

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