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Book-Smart, Not Street-Smart: Blockchain-Based Smart Contracts and The Social Workings of Law

Karen E. C. Levy

Abstract

This paper critiques blockchain-based "smart contracts," which aim to automatically and securely execute obligations without reliance on a centralized enforcement authority. Though smart contracts do have some features that might serve the goals of social justice and fairness, I suggest that they are based on a thin conception of what law does, and how it does it. Smart contracts focus on the technical form of contract to the exclusion of the social contexts within which contracts operate, and the complex ways in which people use them. In the real world, contractual obligations are enforced through all kinds of social mechanisms other than formal adjudication—and contracts serve many functions that are not explicitly legal in nature, or even designed to be formally enforced. I describe three categories of contracting practices in which people engage (the inclusion of facially unenforceable terms, the inclusion of purposefully underspecified terms, and willful nonenforcement of enforceable terms) to illustrate how contracts actually "work." The technology of smart contracts neglects the fact that people use contracts as social resources to manage their relations. The inflexibility that they introduce, by design, might short-circuit a number of social uses to which law is routinely put. Therefore, I suggest that attention to the social and relational contexts of contracting are essential considerations for the discussion, development, and deployment of smart contracts.

Keywords

law; contracts; blockchain; sociolegal studies

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Key words: contract, obligation, Blockchain, Bitcoin, Smart contract. JEL classification Z. 1 Ph.D., Associate professor and senior researcher of National Research University Higher School of Economics (Moscow, Russian Federation), Legal Attorney of IBM Russia; E-mail: alexandersavelyev83@gmail.com. Based on the analysis of the evolution of the methods of contracting and the shape of freedom of contract principle, it is possible to argue that each type of

society has its own predominant form of contracting. Agrarian economics was mostly dominated by individually agreed contracts where the parties to the contract negotiated "at arms length" all its terms. Karen Levy, 'Book-Smart, Not Street-Smart: Blockchain-Based Smart Contracts and The Social Workings of Law' (2017) Engaging Science, Technology, and Society 1-15. European Commission, 'Ethics Guidelines for Trustworthy AI' (2019). Recommend this journal. Email your librarian or administrator to recommend adding this journal to your organisation's collection. Legal Information Management. ISSN: 1472-6696. EISSN: 1741-2021. Smart contracts use cases are not, however, limited just to the financial market. A bunch of other industries could massively benefit from additional transparency, security and agility that smart contracts enable. Here are the three most curious use cases so far. 1. Computing Power Exchange. The demand for public cloud computing power has been growing by 50% annually according to Cisco . Also read: Blockchain security and the cryptocurrency boom, in theory and practice. Right now when you need more computing power, you go and rent it from a commercial data centre or a cloud service provider. Oftentimes, the onboarding process can be complicated and extended, plus the costs can be somewhat inhibitive for smaller companies. Book-Smart, Not Street-Smart: Blockchain-Based Smart Contracts And The Social Workings Of Law. 2017. Michèle Finck. Stephen M. McJohn, Ian McJohn. The Commercial Law of Bitcoin and Blockchain Transactions. 2016. Stephen M. McJohn, Ian McJohn. The Commercial Law of Bitcoin and Blockchain Transactions. 2016. Philipp Paech. 1 Blockchain-based smart contracts—self-executing code on a blockchain that automatically implements the terms of an agreement between parties—are a critical step forward, streamlining processes that are currently spread across multiple databases and ERP systems. For evidence of the growing spread of smart contracts, consider the following: Smart contract venture capital-related deals totaled \$116 million in Q1 of 2016, more than twice as much as the prior three-quarters combined and accounting for 86 percent of total blockchain venture funding; An Ethereum-based organization has raised more t



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