

The Hong Kong University of Science and Technology

Dept of Information Systems, Business Statistics
and Operations Management

Dept of Industrial Engineering & Decision Analytics
Joint Seminar Announcement



Platform Tokenization: Financing, Governance, and Moral Hazard

by

Dr Alex Yang

Associate Professor

Management Science and Operations

London Business School

Date : 24 September 2021 (Friday)
Time : 10:30 - 11:45 AM
Venue : Case Room 1005, LSK Business Building



Abstract: This paper highlights two channels through which blockchain-enabled tokenization can alleviate moral hazard frictions between founders, investors, and users of a platform: token financing and decentralized governance. We consider an entrepreneur who uses outside financing and exerts private effort to build a platform, and users who decide whether to join in response to the platform's dynamic transaction fee policy. We first show that raising capital by issuing tokens rather than equity mitigates effort under-provision because the payoff to equity investors depends on profit, whereas the payoff to token investors depends on transaction volume, which is less sensitive to effort. Second, we show that decentralized governance associated with tokenization eliminates a potential holdup of platform users, which in turn alleviates the need to provide users with incentives to join, reducing the entrepreneur's financing burden. The downside of tokenization is that it puts a cap on how much capital the entrepreneur can raise. Namely, if tokens are highly liquid, i.e., they change hands many times per unit of time, their market capitalization is small relative to the NPV of the platform profits, limiting how much money one can raise by issuing tokens rather than equity. If building the platform is expensive, this can distort the capacity investment. The resulting trade-off between the benefits and costs of tokenization leads to several predictions regarding adoption. (Link to paper: <https://ssrn.com/abstract=3459794>)

Bio: Dr S. Alex Yang is an Associate Professor of Management Science and Operations at London Business School, and a Changjiang Scholar (awarded by the Ministry of Education, China). Alex holds a PhD and an MBA from the University of Chicago Booth School of Business, an MS from Northwestern University, and a BS from Tsinghua University. Alex's primary research focus is on the interface of operations management and finance, especially in trade credit, supply chain finance, and FinTech. His other research interests include risk management, value chain management and innovation, and platform governance and operations. His research has appeared in academic journals in operations and finance, such as *Management Science*, *M&SOM*, and *Journal of Financial Economics*, and has received the *MSOM* iFORM SIG best paper award. He is the associate editor of several academic journals, and currently the co-editor of Special Issues of OpsFinTech at *M&SOM*. An award-winning teacher, Alex has taught on the MBA, EMBA, and executive education programs in universities and business schools such as London Business School, Columbia Business School, University of Chicago, University of Hong Kong, and CEIBS. Beyond research and teaching, Alex has working and consulting experience in banks, Fintech and technology companies, hedge funds, airlines, and international organizations.

All interested are welcome!

Enquiries: Dept of ISOM