T14P04 / Public Policy for Cryptocurrency and Blockchain Technology

Topic : T14 / Science, Internet and Technology Policy **Chair :** Jason Potts (RMIT University)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

New technologies often cultivate forces of creative destruction that disrupt incumbent industries and catalyse economic transformation, in the process driving development, growth, and prosperity. With technological innovation continuing apace, the theory and practice of public policy is frequently confronted with a corresponding challenge: the need to develop novel research in 'greenfield' technology public policy areas.

One such new research area is cryptocurrency and blockchain technology. Cryptocurrencies use cryptography to allow the secure transfer and exchange of digital tokens in a distributed and decentralized manner. A blockchain is a peer-to-peer distributed ledger of timestamped transactions of digital tokens. It is the general purpose technology underlying Bitcoin and other cryptocurrencies, as well as potential further applications in other domains, such as legal services, logistics, insurance, healthcare, and including many areas of governmental administration.

The most prominent example of this technology is Bitcoin, the decentralized digital currency, or cryptocurrency, first introduced in 2008. Bitcoin's use of the blockchain technology eliminates the need for trusted central authorities by allowing each user to maintain an individual copy of the ledger of all Bitcoin transactions, and by verifiably synchronizing all copies of the ledger through a consensus algorithm. But blockchain technology can be used for more than online payments; most generally it enables the secure and decentralized transfer of value across digital networks (e.g. digital assets, identity, reputation, voting, computing, etc.), in ways that obviate the need for traditional central intermediaries.

Cryptocurrency and blockchain technology presents significant opportunities and challenges for incumbents and start-ups, as well as for public policymakers and regulatory bodies. In this regard cryptocurrency and blockchain technology is purported to be as disruptive and transformative a technology as the computer and the internet before it. But the open and decentralized nature of blockchains, and the lack of central authorities, means that regulatory issues require deeper analysis than previous technologies. It is possible that the affordances of the technology have outpaced the regulatory capacities of law and legislation, meaning that fundamentally new public policy thinking is needed. Or, more prosaically, perhaps existing approach to public policy are sufficient, given a proper understanding of how existing regulations apply to these new activities. In any case, cryptocurrency and blockchain technology is a key emerging issue in public policy.

CALL FOR PAPERS

This session will explore the public policy landscape for cryptocurrency and blockchain technology by bringing together scholars studying distributed ledger technologies (such as cryptocurrencies and blockchains) with scholars from established public policy fields. The aim is to address current research deficits on one of the most important emerging technological trends shaping public policy. We welcome theoretical and empirical research from all relevant disciplines (e.g. law, economics, political science, sociology, etc.) that can provide useful perspectives on the topic. Topics of interests include but are not limited to:

- · Cryptocurrencies and blockchains
- \cdot Smart contracts and distributed autonomous organizations
- \cdot Public policy development related to cryptocurrency and blockchain technology
- \cdot Understanding how existing public policy approaches and regulations can be applied
- \cdot Conflicts between public policy and cryptocurrency and blockchain technology
- \cdot Transnational issues in cryptocurrency and blockchain technology public policy
- \cdot Integrating cryptocurrency and blockchain technology into incumbent economic systems
- · Innovation and entrepreneurship in cryptocurrency and blockchain technology applications
- \cdot Impacts of blockchain technology in a given industry or government

- · Impact on corporate governance, compliance, and risk
- \cdot Financial surveillance, anti-money laundering, and counter terrorism financing
- $\boldsymbol{\cdot}$ Impact on governmental administration, management, and operations
- · Applications of blockchain technology in provision of education, health, social services, welfare, etc.
- · Monetary policy, fiscal policy, regulatory policy, competition policy, industry policy, innovation policy, etc.
- Consumer protection
- Privacy and identity
- \cdot Securities and commodities regulation
- \cdot Tax avoidance and compliance
- · Implications for trade and globalization