P14 / IT-Mediated Platforms and the Public Sector: Applications of Sharing Economy, Block-chains and Crowd-sourcing

Topic : COMPARATIVE PUBLIC POLICY

Chair : Araz Taeihagh (National University of Singapore)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Platforms significantly increase the efficiency and ease of interactions between individuals and groups in society. For instance, crowdsourcing platforms utilise information technology to collect information directly from individuals to solve problems, whereas sharing economy platforms do so to exchange goods and services without requiring the transfer of ownership (Taeihagh 2017a,b). In the public sector, platforms are a way to improve the efficiency and quality of public services and to solve increasingly complex and “wicked” problems that characterise societies today (Head 2008; Hautamäki & Oksanen 2018; Janssen & Estevez 2013; Layne & Lee 2001; Bertot et al. 2010). By leveraging on new technologies such as big data, Internet of Things (IoT) and cloud computing, platforms enable public agencies to derive insights from a critical mass of citizens to improve the design, production and delivery of public services, which are commonly known as co-creation and co-production processes (Voorberg et al. 2015; Bason 2010; Needham 2008; cite). For instance, crowdsourcing platforms can increase citizen participation in policy-making, increase transparency of the policy process, improve policy design and analysis (Prpi? et al. 2015; Taeihagh 2017), and strengthen the legitimacy of the government (Christensen et al. 2015).

Platforms will play a pivotal role in public sector innovation, but how they are implemented and managed can introduce various risks that may undermine their effectiveness for public service delivery and detriment society as a whole. Some of the risks that arise from using platforms are diminished accountability, inadequate compensation and reduced job security for individuals, widening of the digital divide and inequality, and the potential for crowds to manipulate information and outcomes (Taeihagh 2017b; Loukis et al. 2017). When applied to the public sector, the opening up of citizen’s personal data on platforms raises concerns over privacy and data security (Hautamäki & Oksanen 2018). The effectiveness of platforms may be further undermined by the risk of fragmentation among multiple platforms and the difficulty of designing attractive platforms to attract a sufficient level of citizen participation (Hautamäki & Oksanen 2018; Janssen & Estevez 2013). Some countries may face more challenges than others in building platforms in the public sector, particularly those without strong governance mechanisms and property rights to attract the required capital investments (Taeihagh 2017b). While these issues are being increasingly recognised in the public administration and policy literature, more research is required to evaluate the usefulness of the collected information from platforms and the extent to which these platforms lead to improved public service outcomes (Voorberg et al. 2015), especially if the government aims to deliver all public services through a unified digital platform (Hautamäki & Oksanen 2018).

Furthermore, more recently among the various platforms that have proliferated, blockchain-enabled platforms are being experimented with by many governments around the world for public service delivery in areas such as e-voting, digital identity and the recording of legal documents (Cheng et al. 2017; Swan 2015; Wolfond 2017; Hou 2017). Blockchain’s distributed, open and immutable nature offers many benefits for governments, including greater transparency, reduced corruption, greater efficiency and increased citizen participation (Ølnes et al. 2017). For these benefits to materialise, governments need to also guard against emerging risks of blockchain technology, which include security vulnerabilities, privacy concerns, and internal governance challenges that can result in conflicts (Li et al. 2017; Trump et al. 2018; Mattila & Seppälä 2018). In addition, organisational processes in the public sector need to transform to accommodate new infrastructures that support blockchain-enabled applications and platforms, which warrants further research into such organisational and institutional changes in the public administration and policy literature (Ølnes et al. 2017).

This panel will present papers that explore the implications of these IT-mediated platforms for the public sector in both developed and developing countries. In light of the above issues, the papers should address the following research questions:
· Theoretical, conceptual or empirical studies that evaluate the effects of IT-mediated platform (e.g. crowdsourcing, sharing economy, blockchain) activities on public sector delivery outcomes and analysis of

how IT-mediated platform activities affect the perceived political legitimacy or performance of governments in serving the needs of citizens.
· Exploration and analysis of the different types of challenges and risks that arise from adoption/implementation of IT-mediated platforms for public service delivery, and possible governance strategies to address these risks.
· Analysis of the various roles of different actors in influencing policy outcomes through participation in platforms and at different stages of the policy making process.
· Theoretical and conceptual analysis of how IT-mediated platforms contribute to policy learning in order to improve public service delivery.
· Exploration and analysis of the different types of platform governance structures in blockchain and their risks and unintended consequences (e.g. coordination challenges) and analysis of the organisational, administrative and institutional transformations in public sector organisations to accommodate blockchain-enabled platforms.
· Single and comparative case studies across different countries, sectors and types of IT-mediated platforms (blockchain, sharing economy, crowdsourcing, etc.)

References:
Bason, C. (2010). The innovation ecosystem. In (Ed.), Leading public sector innovation: Co-creating for a better society. : Policy Press, Retrieved 24 Oct. 2018, from http://policypress.universitypressscholarship.com.libproxy1.nus.edu.sg/view/10.1332/policypress/9781847426345.

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. Government information quarterly, 27(3), 264-271.

Cheng, S., Daub, M., Domeyer, A., & Lundqvist, M. (2017). Using blockchain to improve data management in the public sector. Digital McKinsey

Christensen, H. S., Karjalainen, M., & Nurminen, L. (2015). Does crowdsourcing legislation increase political legitimacy? the case of avoin ministeriö in Finland. Policy & Internet, 7(1), 25-45. doi:10.1002/poi3.80

Hautamäki, A., & Oksanen, K. (2018). Digital Platforms for Restructuring the Public Sector. In Collaborative Value Co-creation in the Platform Economy (pp. 91-108). Springer, Singapore.

Head, B. W. (2008). Wicked problems in public policy. Public policy, 3(2), 101.

Hou, H. (2017, July). The application of blockchain technology in E-government in China. In Computer Communication and Networks (ICCCN), 2017 26th International Conference on(pp. 1-4). IEEE.

Janssen, M., & Estevez, E. (2013). Lean government and platform-based governance—Doing more with less. Government Information Quarterly, 30, S1-S8.

Layne, K., & Lee, J. (2001). Developing fully functional E-government: A four-stage model. Government information quarterly, 18(2), 122-136.

Li, X., Jiang, P., Chen, T., Luo, X., & Wen, Q. (2017). A survey on the security of blockchain systems. Future Generation Computer Systems.

Loukis, E., Charalabidis, Y., & Androutsopoulou, A. (2017). Promoting open innovation in the public sector through social media monitoring. Government Information Quarterly, 34(1), 99-109. doi:10.1016/j.giq.2016.09.004

Mattila, J., & Seppälä, T. (2018). Distributed Governance in Multi-sided Platforms: A Conceptual Framework from Case: Bitcoin. In Collaborative Value Co-creation in the Platform Economy (pp. 183-205). Springer, Singapore.

Needham, C. (2008). Realising the potential of co-production: negotiating improvements in public services. Social policy and society, 7(2), 221-231.

Ølnes, S., Ubacht, J., & Janssen, M. (2017). Blockchain in government: Benefits and implications of distributed ledger technology for information sharing.

Ølnes, S., & Jansen, A. (2017, September). Blockchain Technology as s Support Infrastructure in e-Government. In International Conference on Electronic Government (pp. 215-227). Springer, Cham.

Prpi?, J., Taeihagh, A., & Melton, J. (2015). The fundamentals of policy crowdsourcing. Policy & Internet,

7(3), 340-361.

Swan, M. (2015). Blockchain: Blueprint for a new economy. Sebastopol, CA: O'Reilly.

Taeihagh, A. (2017a). Crowdsourcing: a new tool for policy-making? Policy Sciences Journal, 50(4):629-647

Taeihagh, A. (2017b). Crowdsourcing, Sharing Economies and Development, Journal of Developing Societies, Vol 33(2): 191–222. DOI: 10.1177/0169796X17710072

Trump, B. D., Wells, E., Trump, J., & Linkov, I. (2018). Cryptocurrency: Governance for what was meant to be ungovernable. Environment Systems and Decisions, 38(3), 426-430.

Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. Public Management Review, 17(9), 1333-1357.

Wolfond, G. (2017). A Blockchain Ecosystem for Digital Identity: Improving Service Delivery in Canada's Public and Private Sectors. Technology Innovation Management Review, 7(10).

CALL FOR PAPERS

Platforms significantly increase the ease of interactions and transactions in society. In the public sector, platforms are a way to improve public service delivery and solve increasingly "wicked" problems that characterize societies today (Head 2008; Hautamäki & Oksanen 2018; Janssen & Estevez 2013; Layne & Lee 2001; Bertot et al. 2010). Aided with information technology, public agencies can derive insights from a critical mass of citizens through platforms and improve citizen participation, transparency, policy design, and political legitimacy (Prpi? et al. 2015; Taeihagh 2017; Voorberg et al. 2015; Bason 2010; Needham 2008; Christensen et al. 2015).

Platforms will transform public sector innovation, but how they are implemented and managed can introduce various risks. Platforms can diminish accountability, reduce job security for individuals, widen the digital divide and inequality, undermine privacy, and can be manipulated by crowds (Taeihagh 2017b; Loukis et al. 2017; Hautamäki & Oksanen 2018). Fragmentation among multiple platforms and the difficulty of attracting sufficient of citizen participation may also undermine platforms' effectiveness (Hautamäki & Oksanen 2018; Janssen & Estevez 2013). Furthermore, countries without strong governance mechanisms and property rights to attract the required capital investments may face challenges in building platforms (Taeihagh 2017b). Currently, studies have yet to evaluate the extent to which platforms improve public service outcomes (Voorberg et al. 2015).

More recently, governments have experimented with blockchain-enabled platforms in areas such as e-voting, digital identity and storing public records (Cheng et al. 2017; Swan 2015; Wolfond 2017; Hou 2017). Block-chain's distributed, open and immutable nature offers many benefits for governments, including greater transparency, reduced corruption, greater efficiency and increased citizen participation (Ølnes et al. 2017). However, governments need to mitigate blockchain's emerging risks such as security vulnerabilities, privacy concerns, and conflicts resulting from governance challenges (Li et al. 2017; Trump et al. 2018; Mattila & Seppälä 2018). Also, more research into the organisational changes in the public sector to accommodate block-chain-enabled applications and platforms is required (Ølnes et al. 2017).

This panel welcomes papers that explore IT-mediated platforms' implications for the public sector. Key research questions to be addressed are:
• Theoretical, conceptual or empirical studies that evaluate the effects of IT-mediated platforms on public service delivery and analyse how these platform activities affect the perceived political legitimacy of governments.
• Examining the different types of challenges and risks that arise from adoption/implementation of IT-mediated platforms for public service delivery and the governance strategies to address these risks.
• Analysis of the roles of different actors in influencing policy outcomes through participation in platforms and at different stages of policy making.
• Theoretical and conceptual analysis of how IT-mediated platforms contribute to policy learning to improve public service delivery.
• Examining the different types of platform governance structures in block-chain, their risks and unintended consequences (e.g. coordination challenges), and the organisational, administrative and institutional changes in the public sector to accommodate block-chain-enabled platforms.
• Single and comparative case studies across different countries, sectors and types of IT-mediated platforms (e.g. block-chain, sharing economy, crowd-sourcing

P14 / IT-Mediated Platforms and the Public Sector: Applications of Sharing Economy, Block-chains and Crowd-sourcing

Chair : Araz Taeihagh (National University of Singapore)

Session 1

Thursday, June 27th 16:30 to 18:30 (MB 3.435)

Discussants

Nora von Ingersleben-Seip (University of Amsterdam)

Blockchains, Property Rights and the Circular Economy

Katrien Steenmans (Coventry University)

Phillip Taylor (University of Warwick)

An examination of blockchain technology as a new public sector meta-tool

Araz Taeihagh (National University of Singapore)

Hazel Lim (Policy Systems Group, Lee Kuan Yew School of Public Policy, National University of Singapore)

Data management for platform-mediated public services - challenges and best practices

Agnieszka Rychwalska

Geoffrey Goodell

Magdalena Roszczynska-Kurasinska (University of Warsaw, NIP 525-001-12-66, Krakowskie Przedmie?cie 26/28, Warsaw)

P14 / IT-Mediated Platforms and the Public Sector: Applications of Sharing Economy, Block-chains and Crowd-sourcing

Chair : Araz Taeihagh (National University of Singapore)

Session 2

Friday, June 28th 08:00 to 10:00 (MB 3.435)

Discussants

Mehmet Akif Demircioglu (Carleton University)

The Effects of Social Media Usage On Public Sector Innovation

Mehmet Akif Demircioglu (Carleton University)

ENHANCING SERVICE DELIVERY THROUGH INNOVATIONS IN PUBLIC UNIVERSITIES: A CASE OF A“ONE STOP SHOP” AT UNIVERSITY OF NAIROBI, KENYA

Joseph Obosi (University of Nairobi)

Keeping Software Platforms Open: Resisting the Power of the (Would-be) Monopolist

Nora von Ingersleben-Seip (University of Amsterdam)