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Government Business Model Innovation: Multi Stakeholders Collaborations in Ecosystems

Arwa H.S. Alhyari, Omar Al-Tabbaa, Jing Zeng

Summary:

Governments are increasingly investing in innovation-centric initiatives aiming to offer new alternatives for improving public value creation, especially in emerging economies which are assuming a more leading position in the global economy. While several studies can be found on different forms of public sector innovation, research on business models innovation in this sector is still limited. Thus, this study aims to investigate government business model innovation and value creation focusing on public and private multi stakeholder collaborations in ecosystems. Understanding how governments and multi-actors collaborations are driving the growth of ecosystems have important implications and gains to the fields of strategy and management supporting the ongoing efforts for developing collaborative innovation and ecosystem theories. Guided by the revealed Government BMI, policymakers and managers will have a new innovation alternative aligned with strategy towards an enhanced public value creation. Whereas, the multi stakeholders collaborative BMI-ecosystem approach is expected to steer managing the entire ecosystem prosperously.

1. Introduction

Innovation is on the top of the governments' plans because it offers intelligent alternatives and helps in addressing problems that cannot be resolved otherwise using existing standard procedures (Ansell & Torfing 2014; Torfing 2019). Government innovation deals with opening up new approaches to enhance the delivery of public services. It is about government ability to skilfully navigate a fast changing world, and acting as sound stewards for addressing the upcoming challenges (OECD, 2017). The contribution of public sector ranges from 20% to 40% of total global Gross Domestic Product (GDP). While, emerging economies today represent 59% of total global GDP (OECD, 2019). Across the globe, governments set policies, programmes and provide services to face the continuous challenges and changes in social and economic needs such as budgetary constraints, and delivering high quality public services that meet societal demands. These circumstances require governments to consider new ways and approaches for improving both public administrations and public services. Although research on government innovation has grown recently (Arundel et al. 2019; Torfing, 2019) and different types and forms of innovation have been studied such as open innovation (Bogers et al., 2018), innovation labs (McGann et al., 2018), and agile innovation (Mergel, 2016). However, the majority of previous studies focused on internal administrative innovation and there is a need to study new concepts and approaches to investigate government innovation and other exiting types of government innovation (de Vries et al., 2016, Tamtik, 2017; Arundel et al. 2019; Torfing 2019; Carbonara & Pellegrino, 2019).

Business model describes the organization's approach in value creation, delivery, and capture (Osterwalder & Pigneur, 2010). This concept, while being extensively researched and applied in the private sector domain, it is relevant to other sectors. For example, public sector, nonprofit and social enterprises (Kaplan, 2011). Indeed, governmental organisations have business models while delivering public value (i.e., their own approach for creating value), but have received limited attention (Wiprächtiger et al., 2019). Business Model Innovation (BMI) can be investigated in governmental organisations based on the fact that BMI are considered to be a new and distinctive kind of innovation (Massa et al., 2017). Revealing the characteristics, components and design of Government BMI, requires understanding how governmental organisations innovate their business models not only from a single entity perspective, but also from an ecosystem perspective comprised of multi public and private actors (Bekkers & Tummers 2018; Joacbides et al., 2018; Torfing 2019). The latter, is referred to as collaborative innovation, a distinctive approach to public innovation that engages public organisations with diverse groups of actors in processes of creative problem solving in multi actor networks and ecosystems (Torfing & Ansell, 2017; Bekkers & Tummers 2018). Value is created here by sharing knowledge, combining resources, and making use of innovation assets of partners (Moore & Hartley, 2010; Soe & Drechsler, 2018), while each actor and stakeholder has different attributes and objectives (Joacbides et al., 2018). Investigating both government BMI and collaborative innovation business model will provide an understandings for unanswered questions regarding the nature of inter-organizational collaborations and arrangements in ecosystems based on the resources and capabilities of multi stakeholders, and the roles of these stakeholders which are fundamental for creating value in ecosystems of multi stakeholder collaborations (Hannah & Eisenhardt, 2016; Adner, 2017; Joacbides et al., 2018). This research aims to investigate how do governmental organisations innovate their business models? And how does collaborative innovation among multi public and private stakeholders drive value creation in ecosystems?

2. Multi Stakeholders Collaborative Innovation in Ecosystems

In quest of investigating government innovation, there is a growing argument and recognition amongst national public leaders that incremental adjustments and modifications of public policies or services are not enough to solve the existing economic, social challenges (Arundel et al. 2019; Osborne & Brown 2011). Traditional internal innovation processes appears to be insufficient, for providing best innovative solutions (Pollitt & Hupe, 2011), that is why collaborative innovation provide the hope for gathering efforts to offer a better future for the society in various sectors. This growing awareness of the importance of government innovation raises the question of which is the best approach for implementing innovative solutions. Recent research indicates that collaborations in multi actor structures is pointed to as the superior driver of innovation (Neumanna et al, 2019; Torfing, 2019). Because public sector targets producing public value, and in fact both public and private actors can jointly contribute to public value creation with high potential to be motivated in pursuing collaborations (Hartley, Sørensen, & Torfing 2013).

The notion of values created for and by different stakeholders becomes important and requires further investigation (Adner, 2017; Bekkers & Tummers, 2018; Moore & Hartley, 2010). Only few studies were implemented of how government organisations pursue collaborative innovation in practice (Vaz Lopes & Farias, 2020). Moreover, it is still unclear how multi stakeholder collaborative innovation occur in multi actor networks and ecosystems and how exactly they need to be designed to contribute in creating value (Davis, 2016, Mergel, 2018; Neumanna et al. 2019; Ranerup et al., 2016; Torfing, 2019). Therefore, it becomes important to study how public and private stakeholders are activated to join and collaborate innovatively for the benefit of the society in ecosystems.

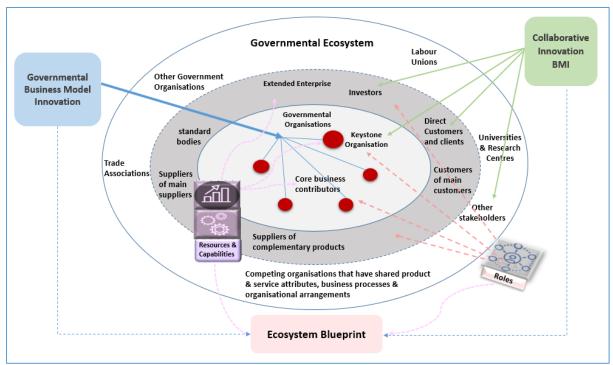


Figure 1: Research Conceptual Model

Governmental organisations have to develop their business models to be able to adapt and respond to their evolving contexts. Successful government innovation requires creating an ecosystem of multi stakeholders' networks that promote collaborations and flexibility while considering joint value creation with private sector and citizens. With this viewpoint, the research conceptual model is developed building on Priem et al., (2013) rational for expanded boundaries in linking business ecosystems with business models, and the notion of public value creation (Moore, 1996; Moore & Hartley, 2010), Figure 1. The model illustrates the boundaries of the organisations that will be investigated. The solid lines refer to the position of governmental organisations in business ecosystems and the stakeholders engaged in collaborative innovation. The value offering in ecosystems raise enquiries of how multi stakeholders resources and capabilities (Adner, 2017; Joacbides et al., 2018) can drive ecosystems of collaborative innovation to grow. Similarly, roles and dynamic capabilities of these stakeholders (Teece, 2007) need to be reconsidered to understand the ecosystems evolving context (Adner, 2017; Teece, 2019). The model dotted lines refer to the embedded adaptable variables which altogether are anticipated to form the blue print of the ecosystem dynamics and provide an explanation for ecosystems governance.

In effect, when governmental organizations collaborate with multi stakeholders in the context of networks and ecosystem this fact encourages us to link with other bodies of literature. Business model innovation can form and inform the basis for understanding how government collaborative innovation provide novel solutions in creating public value from multi stakeholder perspective in ecosystems. Especially that business models can distinguish boundaries crossing of keystone organisations (Dattée et al., 2018; Zott & Amit, 2013).

3. Government BMI: The new approach for Government Innovation

The main objective of a business model (BM) is to describe value creation, delivery, and capture (Amit & Zott, 2001, Osterwalder & Pigneur, 2010). It is defined as the "design or architecture of the value creation, delivery, and capture mechanisms" of a firm (Teece, 2010: 172). The extant BM literature (Foss & Saebi, 2017) indicates that BMs can be used for better performance, as some BMs perform better than others (Zott & Amit, 2007, 2010). On the other hand, BMs can be used as a prospective innovation unit, where mangers purposefully innovate their BMs (Zott et al., 2011). Therefore, Business Model Innovation (BMI) can be considered as a new source of innovation (Foss & Saebi, 2017). The prospect offered by BMI does not require only radical changes of the BM elements but can also consider BM elements' incremental reconfigurations (Velu & Jacob, 2016). Previous research (Clauss et al., 2019) provide evidences that organisations who succeeded in their BMI have reconfigured specific components of their business or the complete business model. As such, BMI offers an approach for describing how an organisation innovates its business model to enhance value creation.

While BMs have been mainly researched and practiced by private sector where businesses aim to reach more customers and make profit (Kaplan, 2011). In governmental organisations taxes, licensing fees and services revenues are forming sources of finance (Moore & Hartley, 2010). As such government BMs do exist but the objective is to create public value, improve performance and deliver better services. However they are invisible and not yet observed neither have been applied or investigated in governmental organisations (DaSilva & Trkman, 2014; Massa et al., 2017; Wirtz et al., 2016; Wiprachtiger et al., 2019; Zott et al., 2011). An organisation with social and economic impact whether publicly or privately owned has to innovate and redesign its BM to face the continuous coevolving ecosystem developments and

changes. Very limited studies have been conducted to describe BMs in public sector (Chambers & Patrocinio, 2012; Panagiotopoulos et al., 2012; Ranerup et al., 2016). However, these studies were focused on understanding the underlying business logic for providing services but not for investigating BMs as new source of innovation.

BMI is considered to be a distinctive kind of innovation, providing new improvement of products, services and processes through a comprehensive perspective for innovation potentials of the organisation elements (Massa et al., 2017). Based on this view of BMI, this research put forward a new path for investigating government innovation and introduces an additional innovation dimension that can provide a novel organizational innovation practice which may contribute to theory building (Foss & Saebi, 2017) and can be used to reveal the characteristics of government business model innovation "Government BMI".

4. Expected Contribution

The expected contribution for this research are both theoretical and practical. Theoretically; this research is expected to reveal Government BMI components and design (Arundel et al. 2019, Zott & Amit, 2013). It will add important insights to BMI literature and to the development of collaborative innovation theory (Bekkers & Tummers 2018; Torfing 2019). Furthermore, this research is expected to provide an initial ecosystem blueprint based on multi stakeholders' roles, resources, and dynamic capabilities (Adner, 2017; Joacbides et al., 2018; Teece, 2007). Hence supporting the ongoing efforts for establishing the ecosystem theory. Practically, policymakers and managers of governmental organisations will have a new alternative for innovation that can be aligned with the organisation's strategy towards an enhanced public value creation guided by the revealed Government BMI. Moreover, the multistakeholders collaborative BMI-ecosystem approach is most likely to affect managing the entire ecosystem sector successfully.

5. Paper Development Plan

This paper will be developed during 2020-2021 based on a systematic literature review and research methodology investigation currently under progress, followed by multiple cases to study governmental organisations and multi-stakeholders in various ecosystems in selected emerging economies. The innovation greatest opportunities are foreseen in emerging economies (OECD, 2019) because their governments are playing a key role in driving innovation through collaborations with multiple stakeholders, and their ability to create social prosperity and a stronger position in global economy.

References:

Adner, R., 2017. Ecosystem as structure: An actionable construct for strategy. *Journal of management*, *43*(1), pp.39-58.

Amit, R. and Zott, C., 2001. Value creation in e-business. *Strategic management journal*, 22(6-7), pp.493-520.

Ansell, C. and Torfing, J. eds., 2014. *Public innovation through collaboration and design*. Routledge.

Arundel, A., Bloch, C., & Ferguson, B. (2019). Advancing innovation in the public sector: Aligning innovation measurement with policy goals. *Research Policy*, *48*(3), 789–798. https://doi.org/10.1016/j.respol.2018.12.001

Bekkers, V. and Tummers, L., 2018. Innovation in the public sector: Towards an open and collaborative approach. *International Review of Administrative Sciences*, 84(2), pp.209-213.

Carbonara, N. and Pellegrino, R., 2019. The role of public private partnerships in fostering innovation. *Construction Management and Economics*, pp.1-17.

Chambers, E. and Patrocínio, M., 2012. Business Models and Value Creation: A Case Study of New York City Economic Development Corporation.

Clauss T, Bouncken RB, Laudien S, Kraus S. Business model reconfiguration and innovation in SMEs: a mixed-method analysis from the electronics industry. International Journal of Innovation Management. 2019 Apr 15:2050015.

Dattée, B., Alexy, O. and Autio, E., 2018. Maneuvering in poor visibility: How firms play the ecosystem game when uncertainty is high. *Academy of Management Journal*, *61*(2), pp.466-498.

Davis, J.P., 2016. The group dynamics of interorganizational relationships: Collaborating with multiple partners in innovation ecosystems. *Administrative Science Quarterly*, *61*(4), pp.621-661.

DaSilva, C.M. and Trkman, P., 2014. Business model: What it is and what it is not. *Long range planning*, *47*(6), pp.379-389.

De Vries, H., Bekkers, V. and Tummers, L., 2016. Innovation in the public sector: A systematic review and future research agenda. *Public administration*, *94*(1), pp.146-166.

Foss, N.J. and Saebi, T., 2017. Fifteen years of research on business model innovation: How far have we come, and where should we go?. *Journal of Management*, *43*(1), pp.200-227.

Hannah, D.P. and Eisenhardt, K.M., 2018. How firms navigate cooperation and competition in nascent ecosystems. *Strategic Management Journal*, *39*(12), pp.3163-3192.

Hartley, J., Sørensen, E. and Torfing, J., 2013. Collaborative innovation: A viable alternative to market competition and organizational entrepreneurship. *Public administration review*, *73*(6), pp.821-830.

Jacobides, M.G., Cennamo, C. and Gawer, A., 2018. Towards a theory of ecosystems. *Strategic Management Journal*, *39*(8), pp.2255-2276.

Kaplan, S., 2011. Research in cognition and strategy: Reflections on two decades of progress and a look to the future. *Journal of Management Studies*, 48(3), pp.665-695.

Massa, L., Tucci, C.L. and Afuah, A., 2017. A critical assessment of business model research. *Academy of Management Annals*, 11(1), pp.73-104.

Lopes, A.V. and Farias, J.S., 2020. How can governance support collaborative innovation in the public sector? A systematic review of the literature. *International Review of Administrative Sciences*, p.0020852319893444.

McGann, M., Blomkamp, E. and Lewis, J.M., 2018. The rise of public sector innovation labs: experiments in design thinking for policy. *Policy Sciences*, *51*(3), pp.249-267.

Mergel, I., 2018. Open innovation in the public sector: drivers and barriers for the adoption of Challenge. gov. *Public Management Review*, 20(5), pp.726-745.

Moore, M. and Hartley, J., 2010. Innovations in governance. In *The new public governance?* (pp. 68-87). Routledge.

Moore, J., 1996. Death of competition. The age of business ecosystems. fortune. *4/15/96*, *133*.

Neumann, O., Matt, C., Hitz-Gamper, B.S., Schmidthuber, L. and Stürmer, M., 2019. Joining forces for public value creation? Exploring collaborative innovation in smart city initiatives. *Government information quarterly*, *36*(4), p.101411.

OECD (Organization for Economic Cooperation and Development), 2017. Embracing innovation in government: Global trends 2017.

OECD (Organization for Economic Cooperation and Development), 2019, "Business Insights on Emerging Markets 2019", OECD Emerging Markets Network, OECD Development Centre, Paris, http://www.oecd.org/dev/oecdemnet.htm.

Osborne, S.P. and Brown, L., 2011. Innovation, public policy and public services delivery in the UK. The word that would be king?. *Public administration*, *89*(4), pp.1335-1350.

Osterwalder, A. and Pigneur, Y., 2010. Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.

Panagiotopoulos, P., Al-Debei, M.M., Fitzgerald, G. and Elliman, T., 2012. A business model perspective for ICTs in public engagement. *Government Information Quarterly*, 29(2), pp.192-202.

Pollitt, C. and Hupe, P., 2011. Talking about government: The role of magic concepts. *Public Management Review*, *13*(5), pp.641-658.

Ranerup, A., Henriksen, H.Z. and Hedman, J., 2016. An analysis of business models in Public Service Platforms. *Government Information Quarterly*, 33(1), pp.6-14.

Soe, R.M. and Drechsler, W., 2018. Agile local governments: Experimentation before implementation. *Government Information Quarterly*, *35*(2), pp.323-335.

Tamtik, M., 2017. Policy coordination challenges in governments' innovation policy—The case of Ontario, Canada. *Science and public policy*, *44*(3), pp.417-427.

Teece, D.J., 2019. China and the reshaping of the auto industry: A dynamic capabilities perspective. *Management and Organization Review*, *15*(1), pp.177-199.

Teece, D.J., 2010. Technological innovation and the theory of the firm: the role of enterpriselevel knowledge, complementarities, and (dynamic) capabilities. In *Handbook of the Economics of Innovation* (Vol. 1, pp. 679-730). North-Holland.

Teece, D.J., Pisano, G. and Shuen, A., 1997. Dynamic capabilities and strategic management. *Strategic management journal*, *18*(7), pp.509-533.

Torfing, J., 2019. Collaborative innovation in the public sector: the argument. *Public Management Review*, 21(1), pp.1-11.

Torfing, J. and Ansell, C., 2017. Strengthening political leadership and policy innovation through the expansion of collaborative forms of governance. *Public Management Review*, *19*(1), pp.37-54.

Velu, C. and Jacob, A., 2016. Business model innovation and owner-managers: the moderating role of competition. *R&D Management*, *46*(3), pp.451-463.

Wiprächtiger, D., Narayanamurthy, G., Moser, R. and Sengupta, T., 2019. Access-based business model innovation in frontier markets: Case study of shared mobility in Timor-Leste. *Technological Forecasting and Social Change*, *143*, pp.224-238.

Wirtz, B.W., Pistoia, A., Ullrich, S. and Göttel, V., 2016. Business models: Origin, development and future research perspectives. *Long range planning*, *49*(1), pp.36-54.

Zott, C. and Amit, R., 2007. Business model design and the performance of entrepreneurial firms. *Organization science*, *18*(2), pp.181-199.

Zott, C. and Amit, R., 2010. Business model design: an activity system perspective. *Long range planning*, *43*(2-3), pp.216-226.

Zott, C., Amit, R. and Massa, L., 2011. The business model: recent developments and future research. *Journal of management*, *37*(4), pp.1019-1042.

Zott, C. and Amit, R., 2013. The business model: A theoretically anchored robust construct for strategic analysis. *Strategic Organization*, *11*(4), pp.403-411.