CC BY-NC-ND

ISSN 1648-2603 (print) ISSN 2029-2872 (online) VIEŠOJI POLITIKA IR ADMINISTRAVIMAS PUBLIC POLICY AND ADMINISTRATION 2019, T. 18, Nr. 4 / 2019, Vol. 18, No 4, p. 430–446.

WHAT SHAPES PUBLIC SECTOR INNOVATION?

Bevaola Kusumasari

Department of Public Policy and Management, Faculty of Social and Political Sciences, Universitas Gadjah Mada, Indonesia Jl. Sosio-yustisia No.2 Bulaksumur Yogyakarta 55281, Indonesia

Agus Pramusinto

Department of Public Policy and Management, Faculty of Social and Political Sciences, Universitas Gadjah Mada, Indonesia Jl. Sosio-yustisia No.2 Bulaksumur Yogyakarta 55281, Indonesia

Anang Dwi Santoso^{*}

Department of Public Administration, Faculty of Social and Political Sciences, Universitas Srwijaya Jl. Raya Palembang – Prabumulih Km. 32 Indralaya, OI, Sumatera Selatan 30662

Cinintya Audori Fathin

Faculty of Arts, Rijkuniversiteit Groningen Oude Kijk in 't Jatstraat 26 9712 EK Groningen The Netherlands

DOI: 10.13165/VPA-19-18-4-05

Abstract. This research attempts to analyse the determining factors of successful innovations and formulate a strategy for replicating public service innovation. It also aims to fill the gap in research regarding the public sector innovation that is required to create sustainable, innovative services, and to develop a better understanding of how innovation develops in the public sector. In this study, the desk review method was used with data of the public services available in Indonesia to analyse the determinants of service innovations in the public sector. Additionally, interviews and Focus Group Discussions (FGDs) were

^{*}corresponding author

held to gain a deeper understanding of how innovation can develop in government institutions. Analysis of the results indicates that the most dominant innovation determinant is found within the institution itself, although other determinants also provide positive contributions as well. The replication and adoption of public service innovation efforts that institutions carry out need to undergo several stages in order to achieve optimal implementation. One of the practical implications here is that public institutions can use the findings of this study to begin developing innovation within their organization and implement it using the stages of strategy analyzed in this paper.

Keywords: public sector innovation; public service determinants.

Raktiniai žodžiai: *naujovės viešajame sektoriuje*; *viešųjų tarnybų lemiamas veiksnys*.

Background

Public service is a crucial matter for citizens, hence quality assessment of public services is a necessity. Effective public services provided by public organizations can have a positive impact on democracy and human rights (Adenskog 2018), improve socioeconomic welfare (Choi and Chandler 2015), reduce poverty incidence (Zhu and Zhao 2018), and, most importantly, increase the public's trust in the government (Ahmed and Campbell 2015). The nature of issues confronted in the public sector - complex, multifaceted, and unresolvable by traditional government tools and approaches - also reinforces the significance of building the government's capacity to innovate and find solutions for problems prevalent in society (Bloch and Bugge 2013; Agger and Sørensen 2018; Hutahaen et al. 2018). Public sector organizations have always sought ways to achieve their objectives. Several recent studies indicate a significant rise in rates of innovation in the public sector (OECD 2014). As an example, in the European Union's (EU) 2010 survey (Innobarometer 2010), which was conducted across the EU27, as many as 66% of governmental organizations in those countries had implemented innovations in public services. Another survey conducted by Local Government Authorities and the National Health Service in the United Kingdom (2011) shows that 90% of public organizations in the UK had implemented innovations in their public services. This demonstrates the increasing attention governments and public organizations are giving to the quality of their public services.

Despite numerous research studies having been conducted on public sector innovation, there is still a limited number studies pertaining to more systematic efforts to promote such innovation (Bloch and Bugge 2013; Hartley and Rashman 2018). A study on factors that determine the success of public service innovation, and one that formulates a strategy to replicate and disseminate public service innovation, is thus required (Djellal and Gallouj 2015; Serrat 2017). This study is conducted to fill the research gap in public sector innovation in order to maintain the maximum level of service, assist in addressing social and economic challenges in the public sector, and develop a better understanding of how innovation develops in the public sector.

Indonesia was selected as the location of study because the Indonesian government has been paying attention to the importance of public service as stipulated in Law No. 25/2009 on Public Services. This regulation contains principles of good governance, with 'the effectiveness of public services' featuring. The Ministry of Administrative and Bureaucratic Reform subsequently carried out real measures to encourage the initiation of public service innovation by implementing the Public Service Innovation System (Sistem Inovasi Pelayanan Publik—Sinovik) program, which is aimed at promoting public sector innovations in Indonesia. Sinovik is a web-based system that stores documentation and information networks to facilitate the development of public service innovation. This paper is comprised of four sections. The first section discusses the significance of innovation in public service and the research gap in public service innovation studies. The second section of this study is a literature review on public service innovation. The third section discusses the research methods and techniques used in the data analysis. This is followed by a discussion on the research findings, which will be summarized in the final section. This final section contains the conclusion, managerial and theoretical implications, and research limitations.

Literature Review

Public Sector Innovation

Innovation has a broad and ambiguous definition that requires an underlying understanding of the word's development to understand its current meaning. Several literature studies emphasize various different aspects of innovation in their definitions. Schumpeter (2003), the founding father of innovation theory, emphasized the novelty of innovation outcome. This means that a change can be considered as an innovation when it contributes to the development of something that is completely different from before, in terms of the novelty of product quality, production method, or market scope. Discussions on innovation found in contemporary literature tend to define innovation with an emphasis on the occurring process that generates output. There is also Bason (2018), who defines innovation as a process where an organization is able to select and produce the best idea, implement it effectively, and ensure that it provides value to the public. Assessments of innovation tend to be more on the subjective side as they describe innovation as an idea, practice, or object that is "considered" new by an individual or group (Borins, 2014; Walker, 2014).

Discussions on the initiation of innovation also continue to develop. Initially, Schumpeter (2003) viewed innovation as something that originates solely from ideas. This approach views innovation as something that can be made or engineered. According to his perspective, innovation can happen when the right elements – human, budget, and knowledge – are all present in one location (Bekkers and Tummers 2018). In response to this view, organizations compete in creating research and development units to generate innovations. "Open innovation" is a more contemporary approach which argues that innovation will not happen in a specific organization. Organizations should, thus, collaborate to share vital resources such as ideas, knowledge, financial resources, and human resources with other organizations (Meijer 2014).

The innovations appearing within the public sector are currently given special attention by government administrators and researchers alike. Public service innovations that have been systematically designed are considered capable of maintaining the quality of public services to improve public welfare and address socioeconomic issues prevalent in the public sector (Bloch and Bugge 2013; Mergel and Desouza 2013; De Vries, Bekkers, and Tummers 2016). Mergel and Desouza (2013) further explain that public organizations are required to respond to public issues by designing a policy that regulates the interaction between the government and the public. This is in order to implement new policies or make necessary amendments to old policies in their effort to make public services more effective and efficient. In addition, Bason (2018) defines public sector innovation as the process of creating new ideas and turning them into values for the public. Meanwhile, the increase in researchers' interest in public sector innovation can be seen in the rise of research literature discussing this topic of study (De Vries et al. 2016; Cinar et al. 2018). Innovation is a crucial requirement in the provision of services because innovation is considered capable of opening up opportunities to improve service quality and efficiency. Additionally, innovation is also useful for increasing productivity and efficiency without having to raise budget allocation (Stewart-Weeks and Kastelle 2015; Andhika et al. 2018).

Determinants of Public Service Innovations

The literature review found that several researchers have tried to explain the determinants of public sector innovations (De Vries et al. 2016; Amri 2015; Bloch and Bugge 2013; Arundel et al. 2015; Linders 2012; Agolla and Lill 2013). De Vries et al. (2016) outlines the drivers of innovation in three categories, namely: environment, organization, and individual. The environment category emphasizes that innovations originate from co-evolution as a result of demands and pressures brought about by the environment. Specifically, some of the factors in this category include environmental pressures, inter-organizational relations, relations, and competition with other organizations. Meanwhile, the organization category asserts that innovation originates from an organization's structural and cultural aspects, which include resources (time, finance, and ICT facility), leadership style, organizational learning, incentives, conflict, and organizational structure. Lastly, innovation may also come from individuals. Individuals in organizations have a significant role in creating innovation. Several factors drive individuals to innovate, including employee autonomy, skills and knowledge, creativity, demographic aspect, and commitment. In another study, Amri (2015) demarcates drivers of public sector innovation into two categories, namely the individual aspect that relates to leadership and entrepreneurialism, and the structural aspect that relates to the institution. From the individual angle, leaders are seen as entrepreneurs striving to create public value. Whereas from a structural perspective, organizational resources such as the number of staff and ICT facility are also able to drive the creation of innovation.

Researchers Bloch and Bugge (2013) separate drivers of public service innovations into six factors: internal management, internal staff, political driving forces, public organizations, business (supplier, user), and citizens. Subsequently, Arundel et al. (2015) argue that innovation is created through top-down and bottom-up methods. The top-down method emphasizes that innovations are created by leaders, managers, and politicians, whereas the bottom-up method asserts that innovation can also be created by incentive-driven employees. Agolla and Lill (2013) define innovation antecedents into internal and external factors. Internal factors originate from within the organization, and they are comprised of strategy, climate, leadership, entrepreneurship, and resource. Meanwhile, external factors are drivers of innovation coming from outside the organization, which include political, economic, social, technological, ecological, and legal factors.

Research Method

This research was conducted using the desk research method and case studies, which were carried out to define the determinants of public service innovations from 2014 to 2017. In conducting the desk review, the study primarily utilized the database on public service innovations made available by the Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia on their website, which contains the results of a public service innovation competition held between 2014 and 2017. Sinovik is a webbased system that contains documentation and information networks made to facilitate the development of public service innovations. This study on the Indonesia Public Service Innovation Information System (Sinovik) employed the multiple case study method because it raises a single phenomenon similarly observed in numerous different cases in three separate locations – the Special Region of Yogyakarta, East Flores, and Teluk Bintuni in West Papua. The cases of innovation were further analyzed to provide meanings to the quantitative results in which they were selected based on a number of considerations. These considerations were: (1) the innovations have been proven to substantively succeed and were given an award by the government via the Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia during the 2014-2017 period; and (2) the innovations represent the scope of developed, developing, and under-developed regions. Data collection in the three regions was carried out by two means. First, interviews with respondents who were associated with the study case - consisting of innovation initiators, implementers, facilitators, policymakers, and beneficiaries. Second, documentary analysis was conducted to investigate relevant documents that were obtained directly from the innovative regions/units or from other relevant sources, which included the use of desktop study.

Results and Discussion

Determinants of Public Sector Innovation in Indonesia

Table 1 shows the determinants of public sector innovation in Indonesia. Based on the desktop study result, leadership played a substantial role in creating public sector innovations in Indonesia. This can be observed from the desktop study result which shows that 32.1% of public sector innovations in Indonesia were determined by leadership commitment. The second most powerful determinant is organizational commitment, which drove 26.8% of innovation growth in Indonesia's public sector. Environmental change is also a key determinant in public sector innovation in Indonesia. Creating innovation was one of the responses to environmental change, wherein 14.1% of public sector innovations in Indonesia were determined by this key factor.

Determinants	Total Amount	%
Leadership commitment	127	32.1%
Organizational commitment	106	26.8%
Environmental change	56	14.1%
Lack of standard operating procedures	40	10.1%
Public demand	22	5.6%
Regulatory mandate	19	4.8%
Need for regional competitive advantage	19	4.8%
Continuous professional development	6	1.5%
Lack of resources	1	0.3%

Table 1. Determinants of Public Sector Innovation

Source: Research result, 2018

Another factor is the lack of standard operating procedures. This factor encouraged public organizations to fill the gap by creating innovations. As much as 10.1% of innovations were created based on this factor. Next is regulatory mandate: in Indonesia, innovations can occur because they are mandated by laws and regulations. Based on the results of desktop study, as much as 4.8% of innovations were initiated due to regulatory mandate. Regions across Indonesia also compete with one another to gain a competitive advantage. This subsequently urges subnational governments to innovate as indicated by 4.8% of innovations having been brought about by this factor. Two factors that minimally determined the creation of public sector innovation in Indonesia were continuous professional development and lack of resources. Certain professional organizations, such as those of teachers and civil servants, need to have a strategy to develop their profession and become more competent in delivering public services. This is indicated by our

research indicating that 1.5% of innovations have been created as a strategy to conduct continuous professional development. Lastly, lack of resources such as financial and human resources were factors that led to 0.3% of innovation creation. As stated by Borins (2002), there is a close relationship between innovation in the public sector and leadership. Leaders are found to respond to crises and changes in an organization's direction by innovating. Also, leaders determine the type of strategies used to respond to these crises by creating visions and defining priorities. Before creating innovation, leaders usually conduct a thorough search for information, hold consultations, and select viable options to resolve problems. This study corroborates prior studies in stating that innovation is determined by the leadership factor (Brown 2010; Torugsa and Arundel 2016; Lewis, Ricard, and Klijn 2017; Ricard et al. 2017; Borins 2002; Meijer 2014).

Aside from observing determinants of public sector innovation, the study also examined the spread of innovations between regions inside and outside of Java. The island of Java is where Indonesia's capital is located, and development in Java is relatively more advanced when compared to the other islands. This difference in infrastructure results in most innovations being created in Java, which is responsible for as much as 67%. Conversely regions outside of Java, which are relatively underdeveloped, have produced only 33% of innovations - considerably less than those in Java. This study has also categorized the themes of public sector innovations in Indonesia. Public sector innovations in Indonesia are mostly found in the health sector. Innovations in the health sector indicate the government's commitment to increasing the quality of public service in this area. Innovations in this sector amounted to 25.2% of the total number of innovations. The second most common realm where innovation occurred was in the government administration sector, wherein most of the innovations were used to improve the quality of human resources and administrative performance. Innovations in this sector amounted to 20.9%. This is followed by innovations in licensing, which aim to encourage better licensing quality in the regions, with as much as 15.4% of innovations falling into this category. The education sector also contributed to public sector innovations in Indonesia, amounting to as much as 11.4% of innovations. The environmental sector contributed as much as 9.2% of public sector innovations in Indonesia, in which most of the innovations were related to waste management in support of the reduce, reuse, and recycle movement. Innovations focused on the economic sector contributed to as much as 7.6% of all innovations. In this sector, most of the innovations were aimed at directly improving people's income. Innovations in the poverty sector are innovations that aim to alleviate poverty, and they account for 6.0% of public sector innovations in Indonesia. This is then followed by innovations in the population sector, which accounted for 3.5% of the innovations. In this sector, innovations are made with the aim of accelerating the process of filing civil registry documents. The remaining sectors, totaling 8.1% of innovations, comprise of the security, infrastructure, employment, transportation, and tourism sectors.

According to Omachonu and Einspruch (2010), innovations in the health sector were actually in response to consumer needs. Health institutions had to innovate to improve the quality of their public service in accordance with consumer demand. Innovation in the health sector does not necessarily indicate that organizations are conducting research

and development activities. Innovation in the health sector may also be dependent on the creativity of health personnel and teamwork.



Figure 1. Innovations in ICT and Non-ICT Sectors

This study has also arranged these innovations into ICT and Non-ICT sectors. Figure 1 shows a comparison of ICT and Non-ICT innovations, wherein ICT innovations are innovations that utilize information and communication technology in public service provision. In sum, the number of innovations utilizing ICT continued to drop from 40% to 26% between 2014 and 2016, but it increased by 3% from the previous year in 2017. Meanwhile, Non-ITC innovations continued to rise from 60% to 74% between 2014 and 2016. It had, however, experienced a small decrease of 3% and rested at 71% in 2017.

The availability of organizational resources such as human resources and ICT facilities becomes a determining factor in public sector innovation. Organizations that lack resources have the opportunity to come up with creative ideas with the limited resources that they have (Walker, 2006). In addition to that, public organizations often lack the necessary budget and capacity to resolve the problems they confront (Bhatti et al. 2011). The lack of adequate resources also becomes one of the factors that can trigger public sector innovations (Maranto and Wolf 2013). Moreover, this research has also confirmed the desk view results indicate that the leadership factor is the key determining element of public sector innovation in Indonesia. In the cases found in the study locations, the leaders were confronted with two problems. The first problem was the low level of public service quality, resulting in issues such as high malaria rates, low use of statistical data, and high maternal and infant mortality rates. The second problem relates to the region's geographical conditions and the low quantity and quality of human resources, which consequently exacerbates the first problem. A transformative leader would then find a solution by creating particular innovation solutions to address the problem.

Innovations on the island of Java tend to be driven by the government's intent to improve the quality of public service. Before those innovations had been introduced, there was no significant issue with the public services provided in their respective institutions. Specifically speaking, the innovations in DIY were brought about by an individual or organizational desire to provide the best services possible to the public. Innovations in DIY were initiated because individuals and organizations wanted to provide maximum services. Those wanting to provide maximum services had subsequently sought for the most efficient and best service means and models possible. The Yogya Emergency Service 118, which is one of the public service innovations in Java, was initiated based on the commitment of the Yogyakarta Municipality Health Office to providing emergency services (accidents and life-threatening medical conditions) within the city quickly and effectively. Meanwhile, the Special Health Insurance for People with Disability also demonstrates the government's commitment to increasing the quality of public service for people with disabilities. The Special Health Insurance for People with Disability is considered an improvement measure that gets the target group closer to the service location. The integrated special health insurance for people with disability not only serves as an outreach effort to increase access to service, but is also a one-stop-service where patients who go there are concurrently offered various types of services in order to make obtaining services easier, and shorten the time of service provision to the point where it can be completed within a single day. The Danurejan District created an innovation called one in five out. This innovation was aimed at providing mothers of newborn babies the five necessary civil registry documents - namely the maternal and child health handbook, single identity number (NIK), child identity card, birth certificate, and civil register - just by undergoing the processing period once. This innovation shows the commitment of Danurejan District to improving the quality of service in providing civil administration documents. The findings of this study are in line with the findings of previous research studies which state that organizational commitment influences innovation in the public sector (Moon 2000; Perry 1996; Agarwala 2003). According to Damanpour and Schneider (2009), commitment then influences the adoption of an innovation. It is the organization's belief in the substantial impact of innovation which helps the organization in accomplishing its strategic goals and achieving its performance target.

Strategy for Replicating Public Sector Innovation in Indonesia

This study also aims to understand strategies for replicating public sector innovations in Indonesia. Out of the four study locations, the most replicated innovations are, among others, YES 118, Malaria Control using the EDAT System, and the 2H2C Program. These innovations have been replicated by numerous subnational governments throughout Indonesia at the provincial, regional, and municipal levels. In Indonesia, replication of public sector innovations is a transfer of knowledge in order to enhance improvement in public service quality. The Ministry of Administrative and Bureaucratic Reform facilitates the transfer of knowledge pertaining to public service innovations. This transfer of knowledge is meant as a form of learning from one governmental organization to another regarding practices that have proven effective in resolving public issues. The essence of transferring knowledge about public service innovation is to adapt and internalize a public sector innovation within a new environment. There are several forms of information being transferred from one institution to another. They consist of the technical, informational, and managerial elements. The technical aspect involves the transfer of skills, technology, and business process of public sector innovation. Informational aspects refer to the transfer and exchange of ideas as well as solutions for a potential problem. Lastly, managerial aspects refer to the decision making and allocation of resources that contribute to the success of the transferred innovation. There are three methods used in transferring knowledge about public sector innovation in Indonesia. The most frequently used method is the field visit. By conducting a field visit, the government looking to innovate will directly observe the conditions in the field. During field visits, there are also peer-to-peer learning activities, which is the second method of knowledge transfer. This method is a direct learning activity conducted between the founding institution and the accepting institution.

The success of public sector innovation in addressing public issues in Yogyakarta, East Flores, and Teluk Bintuni has led to numerous field visits to the founding institutions and presentation invitations to regions interested in replicating their innovations. During these visits, the process of innovation transfer occurs between the founding institution and the accepting institution. This is also the case with the YES 118 innovation. This innovation is the first reporting mechanism with insurance provided for handling cases of medical emergency, and it is a pioneer in emergency services in Indonesia. The process of innovation transfer for this initially begins with an informational transfer. Additionally, the transfer process can also be done by giving out guidebooks, as conducted by the Bintuni Regional Health Office, which published a book entitled Menuju Bintuni Bebas Malaria 2020 [Heading toward Malaria Free Bintuni 2020]. The book contains documentation of their innovation journey as they sought to prevent malaria by using the EDAT system, from its conception to the point where the innovation was able to reduce the malaria morbidity rate. The book was then distributed to all the Health Offices in West Papua Province and the Ministry of Health, so that it could be distributed to other locations. This innovation has been adopted by the Ministry of Health at the national level and has become a part of the National Malaria Control Program Strategic Plan 2015-2019 to be implemented throughout Indonesia.

Lastly, when the accepting institution has decided to adapt or make modifications to the innovation, they may request technical assistance, which is the third method of transferring innovation knowledge. This method is used by the founding institution to provide mentoring assistance to the accepting institution. Mentoring is carried out to monitor, in particular, technical and managerial issues that may surface while implementing the innovation at the accepting institution. In further detail, the initial step that the accepting institution usually takes to adopt an innovation is by drafting a regional regulation that controls the innovation process. The success of YES 118 has become an inspiration and reference that has driven other regions to develop such a service. The opportunity to replicate a similar provision in other regions is seen as readily achievable. This is proven with the case of Bantul Regency, which has succeeded in replicating YES 118 and initiating BESS 118 (Bantul Emergency Services Support) in 2011, which was established through the Bantul Regent Regulation No. 40/2011.

Meanwhile, the 2H2C program has been replicated in 21 Regencies in the East Nusa Tenggara Province and several Regencies in Aceh, West Java, and Papua. The transfer process undertaken by the founding institution and the accepting institution employs a framework established by the Ministry of Administrative and Bureaucratic Reform as stipulated in the Ministry of Administrative and Bureaucratic Reform Regulation No. 30/2014 on Public Service Innovation Guide, which consists of four stages. The first stage is to bring the supply of the founding institution and the demand of the accepting institution together. At this stage, the accepting institution must identify potentially transferrable practices, draft a request regarding the innovation that would be adopted by the institution, analyze the institution's capacity to implement the innovation, and establish a task force. Meanwhile, the founding institution must document their innovation practice, draft a cooperation agreement between the two who is tasked with the dissemination of innovation practices through various forms of activities, and who is the liaison that facilitates communication between the founding and accepting institutions.

The second stage of the innovation transfer process is determining the scope, designing the method, and composing the transfer work plan. At this stage, the accepting institution must determine the scope or aspects that need to be transferred and adapted in accordance with the needs/desire of the institution, design the transfer method, identify activities that need to be undertaken during the transfer process – such as technical assistance, field visit, peer-to-peer learning, and others – compose a work plan, and build a partnership with the founding institution. Meanwhile, the founding institution must conduct an assessment on the availability of time, budget, human resources, and facilities that can be provided during the transfer process, and make a formal agreement with the accepting institution specifically concerning resources provision. At this stage, transfer facilitators have an equally vital role in assisting in the organization of activities to bring the two institutions together and help draft the cooperation agreement.

The third stage is adapting the innovation to the accepting institution's environment. At this stage, the role of the accepting institution is to ensure that the work plan has been properly arranged and followed by formal assignment to the official/staff and ready-touse budget, present the work plan to the party involved, and make improvements. The founding institution must then provide inputs regarding the work plan made by the accepting institution and ensure unhindered information exchange relating to the ongoing adaptation and transfer process. Subsequently, the transfer facilitator must provide input to ensure the process runs smoothly and give recommendations on the technical aspects of the innovation transfer (if necessary).

The last stage is implementing and evaluating the transfer. At this stage, the accepting institution holds the crucial role of implementing certain aspects of the transfer in stages, while also involving other stakeholders as best they can in the transfer process. They are also tasked with conducting capacity building of staff and organization, establishing effective communication with the founding institution and facilitator, and documenting the process properly. In addition to this, they must manage changes and conflicts that may arise, conduct monitoring with measured indicators, request inputs from various

parties and take necessary improvement measures, and finally conduct an evaluation of achievements based on a clear time frame. Although the accepting institution is the most engaged at this stage, the founding institution and transfer facilitator still have a number of tasks. The founding institution must provide support to the accepting institution through periodical field visits, and the facilitator institution must maintain an effective information exchange process and assist in the documentation and evaluation of the transfer process.

The success of public sector innovation encourages various organizations to replicate these successes in order to resolve public issues in a different region (Coletti 2015). The findings in this research are in line with prior findings which state that dissemination is the most effective mechanism for replicating public sector innovations. Dissemination itself is a process of describing proper examples and best practices of public sector innovation (Albury 2005; Greenhalgh et al. 2004). To be specific, dissemination will be more effective when conducted with the following considerations: (1) attention being paid to the needs of the accepting institution, particularly concerning the cost they have to spend and the benefit they gain; (2) differences in demographics, culture, and social structure between the accepting and founding institutions; (3) the evaluation and monitoring process should be constantly observed by the founding institution.

Conclusion

- Innovation developments in the public service sector in Indonesia have mostly occurred on the island of Java. The health sector receives the most attention from the government in terms of service innovation development. This is followed by innovations in developing the internal resources of government organizations, which are implemented to improve performance and responsibility of civil servants.
- 2. Utilizing sample cases from a number of regions in Indonesia, this study suggests that there are nine determinants in the creation of innovation in government organizations. Out of the nine variables, the desk review shows that the commitment of the organization's leadership is the most influential element in creating public service innovations
- However, it can also be observed that the lack of interest in the professional development of human resources within an organization is the least influential driver. Professional development is vital to becoming more competent in the provision of public services.
- 4. Concerning replication strategy, the most important point to consider is the transfer of knowledge, which consists of technical, informational, and managerial aspects. At this stage, the accepting party should identify practices that are potentially replicable in developing their innovation. The ensuing stage is to determine the scope, method of arrangement, and program implementation. Subsequently, the work plan is implemented by delegating responsibilities to authorized personnel. At this stage, budget allocation for the program should already be determined. Last is the evaluation stage, in which the process is dominated by the transfer recipient.

During the evaluation stage, the relevant organizations must be able to assess and observe the changes and resistances that arise when the innovation is implemented, so that it can then be used for improving the program.

5. Although numerous studies have focused on public sector innovations, most have concentrated on the issue of how service innovations can develop in the public sector, particularly in developing countries that have more complex public issues. This research fills the gap in the theoretical discussion of public service studies by presenting a strategy to replicate innovative organization in the public sector in organizations requiring it.

References

- Adenskog, Magnus. 2018. "After the Equilibrium: Democratic Innovations and Long-Term Institutional Development in the City of Reykjavik." *Analyse Und Kritik* 40 (1): 31–53. doi:10.1515/auk-2018-0002.
- Agarwala, Tanuja. 2003. "Innovative Human Resource Practices and Organizational Commitment: An Empirical Investigation." *International Journal of Human Resource Management* 14 (2): 175–197. doi:10.1080/0958519021000029072.
- 3. Agger, Annika, and Eva Sørensen. 2018. "Managing Collaborative Innovation in Public Bureaucracies." *Planning Theory* 17 (1): 53–73. doi:10.1177/1473095216672500.
- Agolla, Joseph E., and J. B. Van Lill. 2013. "Public Sector Innovation Drivers: A Process Model." *Journal of Social Sciences* 34 (2): 165–176. doi:10.1080/09718923 .2013.11893128.
- Ahmed, Khosro Mohammad, and John Campbell. 2015. "Citizen Perceptions of E-Government in the Kurdistan Region of Iraq." *Australasian Journal of Information Systems* 19: 1-29. doi:10.3127/ajis.v19i0.1201.
- Amri, Mulya. 2015. Innovative City Governments: A Transaction Cost Approach to Explain Public Innovation in Mid-Sized Cities of Indonesia and the Philippines. http://nus.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwnV1L-S8NAEB5svYgH6wsfFQY8pzabbR5exGqrxaOevJTN7rYEahJNKuJP8Fc7m0dbLPTgLUtgyLKbL19mZ74PwGGdrvUHExgLpOCBr1xXBbbgng65HUyMIZzrsa-Jbut9nz6_O4Mmpm_pNpqBc7RokC-RWiTRJ8yv60Pg2J37Bb9J3y9hImePWylOjAdsEAYER039.
- Andhika, Lesmana Rian, Heru Nurasa, Nina Karlina, and Candradewini Candradewini. 2018. "Logic Model of Governance Innovation and Public Policy in Public Service." *Policy & Governance Review* 2 (2): 85-98. doi:10.30589/pgr.v2i2.86.
- Arundel, Anthony, Luca Casali, and Hugo Hollanders. 2015. "How European Public Sector Agencies Innovate: The Use of Bottom-up, Policy-Dependent and Knowledge-Scanning Innovation Methods." *Research Policy* 44 (7): 1271–1282. doi:10.1016/j.respol.2015.04.007.
- Bason, Christian. 2018. Leading Public Sector Innovation (Second Edition). Bristol: Bristol University Press. doi:10.2307/j.ctv1fxh1w.

- Bekkers, Victor, and Lars Tummers. 2018. "Innovation in the Public Sector: Towards an Open and Collaborative Approach." *International Review of Administrative Sciences* 84 (2): 209–213. doi:10.1177/0020852318761797.
- Bhatti, Yosef, Asmus L. Olsen, and Lene Holm Pedersen. 2011. "Administrative Professionals and the Diffusion of Innovations: The Case of Citizen Service Centres." *Public Administration* 89 (2): 577–594. doi:10.1111/j.1467-9299.2010.01882.x.
- Bloch, Carter, and Markus M. Bugge. 2013. "Public Sector Innovation-From Theory to Measurement." *Structural Change and Economic Dynamics* 27: 133–145. doi:10.1016/j.strueco.2013.06.008.
- Borins, Sandford. 2002. "Leadership and Innovation in the Public Sector." *Leadership & Organization Development Journal* 23 (8): 467–476. doi:10.1108/01437730210449357.
- Borins, Sandford. 2014. The Persistence of Innovation in Government A Guide for Innovative Public Servants. https://www.innovations.harvard.edu/sites/default/ files/3252703.pdf.
- Brown, Louise. 2010. "Balancing Risk and Innovation to Improve Social Work Practice: British Journal of Social Work." *British Journal of Social Work* 40 (4): 1211–1228. doi:doi:10.1093/bjsw/bcq013.
- Choi, Taehyon, and Susan Meyers Chandler. 2015. "Exploration, Exploitation, and Public Sector Innovation: An Organizational Learning Perspective for the Public Sector." *Human Service Organizations Management, Leadership & Governance* 39 (2): 139–151. doi:10.1080/23303131.2015.1011762.
- Cinar, Emre, Paul Trott, and Christopher Simms. 2018. "A Systematic Review of Barriers to Public Sector Innovation Process." *Public Management Review* 21 (2): 264-290. doi:10.1080/14719037.2018.1473477.
- Coletti, Paola. 2015. "Public Policy Design: How to Learn from Failures." World Political Science 11 (2): 325–345. doi:10.1515/wps-2015-0008.
- Damanpour, F., and M. Schneider. 2009. "Characteristics of Innovation and Innovation Adoption in Public Organizations: Assessing the Role of Managers." *Journal of Public Administration Research and Theory* 19 (3). Oxford University Press: 495–522. doi:10.1093/jopart/mun021.
- David Albury. 2005. "Fostering Innovation in Public Services." Public Money & Management 25 (1): 51–56. doi:http://dx.doi.org/10.1111/j.1467-9302.2005.00450.x.
- De Vries, Hanna, Victor Bekkers, and Lars Tummers. 2016. "Innovation in the Public Sector: A Systematic Review and Future Research Agenda." *Public Administration* 94 (1): 146–166. doi:10.1111/padm.12209.
- Djellal, Faridah, and Faïz Gallouj. 2015. Taking into Account Hidden Innovation in Innovation Networks: The Role of Public-Private Innovation Networks in Services. Clersé (France). https://halshs.archives-ouvertes.fr/halshs-01191137.
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., and Kyriakidou, O. 2004. "Diffusion of Innovations in Service Organizations: Systematic Review and Recommendations." *The Milbank Quarterly* 82 (4): 581–629. doi:10.1111/j.0887-378X.2004.00325.x.

- Hartley, Jean, and Lyndsay Rashman. 2018. "Innovation and Inter-Organizational Learning in the Context of Public Service Reform." *International Review of Administrative Sciences* 84 (2): 231–248. doi:10.1177/0020852318762309.
- Hutahaen, John Fresly, Abdul Yuli Andi Gani, Cjoirul Saleh, and Sarwono Sarwono. 2018. "The Factors Affecting the Implementation of OpenFreedom Information Policy and Public Service Performance: A Case Study at Jakarta Capital City Government." *International Journal for Researcher Development* 60 (2): 496–504. doi:http://dx.doi.org/10.1108/MRR-09-2015-0216.
- 26. Innobarometer. 2010. Analytical Report Innobarometer 2010 Conducted by The Gallup Organization upon the Request of DG Enterprise and Industry. http://cordis.europa.eu/innovation/en/policy/innobarometer.htm.
- Lewis, Jenny M., Lykke Margot Ricard, and Erik Hans Klijn. 2017. "How Innovation Drivers, Networking and Leadership Shape Public Sector Innovation Capacity." *International Review of Administrative Sciences* 84 (2): 288-307. doi:10.1177/0020852317694085.
- Linders, Dennis. 2012. "From E-Government to We-Government: De Fi Ning a Typology for Citizen Coproduction in the Age of Social Media." *Government Information Quarterly* 29 (4): 446–454. doi:10.1016/j.giq.2012.06.003.
- 29. Local Government Authorities and the National Health Service in the United Kingdom. 2011. *The National Health Service and Public Health Service in England: Secretary of State's Annual Report.* http://www.nationalarchives.gov.uk/.
- Maranto, Robert, and Patrick J. Wolf. 2013. "Cops, Teachers, and the Art of the Impossible: Explaining the Lack of Diffusion of Innovations That Make Impossible Jobs Possible." *Public Administration Review* 73 (2): 230–240. doi:10.1111/j.1540-6210.2012.02626.x.
- Meijer, A. J. 2014. "From Hero-Innovators to Distributed Heroism: An in-Depth Analysis of the Role of Individuals in Public Sector Innovation." *Public Management Review* 16 (2): 199–216. doi:10.1080/14719037.2013.806575.
- Mergel, Ines, and Kevin C. Desouza. 2013. "Implementing Open Innovation in the Public Sector: The Case of Challenge.Gov." *Public Administration Review* 73 (6): 882–890. doi:10.1111/puar.12141.
- 33. Moon, M Jae. 2000. "Organizational Commitment Revisited in New Public Management: Motivation, Organizational Culture, Sector, and Managerial Level." *Public Performance & Management Review* 24 (2): 177–194. http://www.jstor.org/ stable/3381267.
- 34. OECD. 2014. Innovating the Public Sector: From Ideas to Impact. www.oecd.org/ innovating-the-public-sector.
- Omachonu, Vincent K, and Norman G Einspruch. 2010. "Innovation in Healthcare Delivery Systems: A Conceptual Framework." *The Innovation Journal: The Public Sector Innovation Journal* 15 (1): Article 2. http://www.dphu.org/uploads/attachements/books/books_1028_0.pdf.

- Perry, James L. 1996. "Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity." *Journal of Public Administration Research & Theory* 6 (1): 5–22. doi: 10.1093/oxfordjournals.jpart.a024303.
- Ricard, Lykke Margot, Erik Hans Klijn, Jenny M. Lewis, and Tamyko Ysa. 2017. "Assessing Public Leadership Styles for Innovation: A Comparison of Copenhagen, Rotterdam and Barcelona." *Public Management Review* 19 (2): 134–156. doi:10.10 80/14719037.2016.1148192.
- Schumpeter, Joseph A. 2003. Capitalism, Socialism & Democracy. London: Routledge. doi:10.2307/20048211.
- 39. Serrat, Olivier. 2017. "Innovation in the Public Sector." In *Knowledge Solutions*, 559–568. doi:10.1007/978-981-10-0983-9_59.
- Stewart-Weeks, Martin, and Tim Kastelle. 2015. "Innovation in the Public Sector." *Australian Journal of Public Administration* 74 (1): 63–72. doi:10.1111/1467-8500.12129.
- Torugsa, Nuttaneeya Ann, and Anthony Arundel. 2016. "The Nature and Incidence of Workgroup Innovation in the Australian Public Sector: Evidence from the Australian 2011 State of the Service Survey." *Australian Journal of Public Administration* 75 (2): 202–221. doi:10.1111/1467-8500.12095.
- Walker, Gabriela. 2014. "Impact of Ecological Factors on Concern and Awareness about Disability: A Statistical Analysis." *Research in Developmental Disabilities* 35 (11): 2781–2789. doi:10.1016/j.ridd.2014.07.022.
- 43. Walker, Richard M. 2006. "Innovation Type and Diffusion: An Empirical Analysis of Local Government." *Public Administration* 84 (2): 311–335. doi:10.1111/j.1467-9299.2006.00004.x.
- Zhu, Xufeng, and Hui Zhao. 2018. "Recognition of Innovation and Diffusion of Welfare Policy: Alleviating Urban Poverty in Chinese Cities during Fiscal Recentralization." *Governance* 31 (4): 721–739. doi:10.1111/gove.12332.

Bevaola Kusumasari, Agus Pramusinto, Anang Dwi Santoso, Cinintya Audori Fathin

Kas formuoja viešojo sektoriaus inovacijas?

Anotacija

Šiuo tyrimu siekiama išanalizuoti sėkmingai diegiamų naujovių lemiamus veiksnius ir suformuluoti viešųjų paslaugų naujovių atkartojimo strategiją. Juo taip pat siekiama užpildyti mokslinių tyrimų spragas, susijusias su viešojo sektoriaus inovacijomis, kurių reikia norint sukurti tvarias, novatoriškas paslaugas ir geriau suprasti kaip inovacijos vystosi viešajame sektoriuje. Šiame tyrime, dokumentų analizės metodu, naudojami Indonezijoje prieinamų viešųjų paslaugų duomenys, skirti įvertinti viešojo sektoriaus paslaugų naujoves lemiančius veiksnius. Be to, buvo surengti interviu ir tikslinių grupių diskusijos (FGD), siekiant geriau suprasti, kaip naujovės gali vystytis viešosios valdžios institucijose. Analizės rezultatai rodo, kad labiausiai dominuojantis inovacijų veiksnys gali tarpti pačių institucijų viduje, nors kiti veiksniai taip pat yra svarbūs. Institucijų vykdomos viešųjų paslaugų inovacijos turi būti įgyvendinamos keliais etapais. Pagrindinė mokslinio straipsnio praktinė nauda yra ta, kad valstybinės institucijos norėdamos pradėti kurti ir įgyvendinti inovacijas savo organizacijose, pasitelkdamos straipsnio autorių analizuotas strategijų stadijas, gali panaudoti šio tyrimo rezultatus.

Bevaola Kusumasari – Indonezijos Gadjah Mada universiteto Socialinių ir politikos mokslų fakulteto Viešosios politikos ir vadybos katedros vyresnioji lektorė, socialinių mokslų daktarė. E. paštas: bevaola@ugm.ac.id

Agus Pramusinto – Indonezijos Gadjah Mada universiteto Socialinių ir politikos mokslų fakulteto Viešosios politikos ir vadybos katedros profesorius, socialinių mokslų daktaras. E. paštas: aguspramusinto@ugm.ac.id

Anang Dwi Santoso – Indonezijos Sriwijaya universiteto Socialinių ir politikos mokslų fakulteto Viešojo administravimo katedros jaunesnysis lektorius.

E. paštas: anangdwi@fisip.unsri.ac.id

Cinintya Audori Fathin – Nyderlandų Groningeno universiteto Tarptautinės Politikos, Ekonomikos ir Menų fakulteto magistrantė.

E. paštas: c.a.fathin@student.rug.nl

Bevaola Kusumasari, PhD, senior lecturer at the Public Policy and Management Department at the Faculty of Social and Political Sciences, Gadjah Mada University, Indonesia. E-mail: bevaola@ugm.ac.id

Agus Pramusinto – professor at the Department of Public Policy and Management, Faculty of Social and Political Sciences, Gadjah Mada University, Indonesia.

E-mail: aguspramusinto@ugm.ac.id

Anang Dwi Santoso – junior lecturer at the Department of Public Administration at the Faculty of Social and Political Sciences, Sriwijaya University, Indonesia.

E-mail: anangdwi@fisip.unsri.ac.id

Cinintya Audori Fathin – Postgraduate student of International Political Economy at the Faculty of Arts, Rijkuniversiteit Groningen, Netherlands Email: c.a.fathin@student.rug.nl