# Analyzing the critical factors for innovation sustainability in the public sector: evidence from Indonesia

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# Abstract

**Purpose** – This study examines the critical factors contributing to the different conditions of innovation sustainability after a change in local political leadership.

**Design/methodology/approach** – This study used a multiple case study approach and applied the critical incident technique (CIT) to collect and analyze data from four innovation cases in the two local governments of Indonesia.

**Findings** – The results highlight that the sustainability condition of each innovation after the political regime change is determined by multiple critical factors.

**Research limitations/implications** – First, the data collected through interviews may contain a memory bias. Second, this study was limited to local governments and did not consider innovation taxonomies.

**Practical implications** – The study implies that in order to sustain innovation, public leaders must support innovation legitimacy as a new organizational structure; thus, it can be more durable in the long term. In addition, public leaders need to minimize innovation politicization by authorizing bureaucrats to autonomously manage innovation operationalization.

**Social implications** – Public leaders need to pay careful attention to their innovation sustainability because a non-sustained policy can disappoint the individuals working for it, losing their trust and enthusiasm. This dissatisfaction could become a barrier to mobilizing support for the following policies.

**Originality/value** – Innovation sustainability is a new theme that is overlooked in the public sector innovation literature. Therefore, investigations using different methods and contexts are required, as this study offers. This study also demonstrated the value of CIT in identifying critical factors affecting innovation sustainability in the context of political leadership change.

Keywords Sustainability, Public sector innovation, Local government, Critical incident technique, Indonesia Paper type Research paper

# Introduction

The process of introducing and implementing ideas or practices perceived as new by the public organization (PO), known as public sector innovation (PSI), has increased job satisfaction, the quality of public services and citizen participation (Rogers *et al.*, 2019; Salge and Vera, 2012; De Vries *et al.*, 2016). Despite the significance of the PSI, many studies have revealed that not all public innovations can survive after the initial phase of the innovation process. Borins (1998) discovered that approximately 10% of innovations were terminated



International Journal of Public Sector Management Vol. 35 No. 7, 2022 pp. 733-748 © Emerald Publishing Limited 0951-3558 DOI 10.1108/JJPSM-02-2002-0044

This study was supported and funded by the Indonesian Endowment Fund for Education (Lembaga Pengelola Dana Pendidikan Indonesia), Ministry of Finance, Republic of Indonesia.

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Received 23 February 2022 Revised 1 June 2022 Accepted 1 August 2022 after being nominated or awarded. Van der Panne *et al.* (2003) revealed that only 20% of innovations survived. Pollitt *et al.* (2007) pointed out that approximately 68% of innovations could not be contacted after more than two years of being awarded. Finally, Glor (2015) found that 22% of public innovations were discontinued.

Nevertheless, these studies do not explain the factors behind the fate of innovation sustainability in the public sector. Instead, the most recent PSI empirical research has primarily focused on examining the initial stages of the innovation process in the context of *Anglo-American* countries (Korac *et al.*, 2017; De Vries *et al.*, 2016). The relative lack of empirical studies on the issue of PSI sustainability has led to an inadequate understanding of what happens to innovation once it is incorporated into public organizational routines (Korac *et al.*, 2017; Osborne and Brown, 2011; De Vries *et al.*, 2016).

Studies on innovation sustainability are few in number; they include those by van Acker and Bouckaert (2018) and Cinar *et al.* (2019). Moreover, they have certain limitations. The study by van Acker and Bouckaert (2018) investigated the conditions for innovation sustainability only in the European context. It also acknowledged that the factors of feedback, accountability and learning (FAL) are inadequate for innovation sustainability in government organizations. Similarly, the inquiries made by Cinar *et al.* (2019) discuss the sustenance of innovation only briefly and focus more on the theme of PSI barriers. These limitations highlight the gaps to be addressed by future PSI studies.

This study aims to fill a gap in the PSI literature by responding to the calls from Osborne and Brown (2011), De Vries *et al.* (2016) and Korac *et al.* (2017) for research that focuses on the issue of innovation sustainability in the context of developing countries. The investigation focuses on the Indonesian local government as the site of this study. As a developing country in the Asia–Pacific region, the Indonesian government is endeavoring to promote innovative culture at the local government level (Kusumasari *et al.*, 2019). However, not all innovations can be sustained after a change in political leaders (Kumorotomo, 2012; Lukman, 2021). This phenomenon has prompted many governmental agencies to shift their focus to the innovation sustainability issue rather than intensify the process of generating innovation (Kompas, 2020; Utomo, 2016). Consequently, Indonesia may be an appropriate place to examine innovation sustainability phenomena in the local government setting.

This study differs from earlier research conducted by van Acker and Bouckaert (2018) in the following two measures. First, the latter investigated innovation sustainability in contexts wherein innovations were already nominated or awarded. In contrast, this study describes the critical factors for innovation sustainability in the context of changes in political leadership. It argues that the transition of political executive is a critical incident (CI) in organizational change and influences the fate of innovation sustainability (see Apriliyanti *et al.*, 2021; Cinar *et al.*, 2019). Additionally, the association between the political leadership concept and PSI process is yet to be explored (Cinar *et al.*, 2019). Second, the earlier study used the survey method, while this study adopted the critical incident technique (CIT) approach, which has not been fully utilized to investigate organizational phenomena (Bott and Tourish, 2016). Third, the previous study was contextualized in developed European countries, while this study is set in the context of developing Asia–Pacific countries, which contemporary scholars of PSI have not explored adequately (van der Wal and Demircioglu, 2020).

The contributions of this study are threefold. First, it identifies CIs for successful innovation sustainability in developing countries. Second, this study provides empirical evidence regarding innovation survival after the change in local political regimes and reveals the relationship between several key factors that determine the differences in public innovation sustainability, a feature overlooked in the existing PSI literature. Third, this investigation was conducted in Indonesia, a developing country, by considering innovations under two local governments with differences in geographical context (west and east) and capacity. These represented diversity in the Indonesian context.

IJPSM 35.7 The rest of the article is structured as follows: Literature review, methodology, results, discussions, limitations and scope for future research and conclusion.

#### Literature review

Scholars argue that an innovation can be considered sustainable if embedded in the routine activities of the organization (Cobian and Ramos, 2021). Therefore, we define PSI sustainability as the stage of continued innovation in the organizational routine (van Acker and Bouckaert, 2018; Stirman *et al.*, 2012). Literature on PSI highlights four major factors for a successful innovation process (Borins, 2001; Lapuente and Suzuki, 2020; De Vries *et al.*, 2016), presented in Figure 1.

The first factor is politics. This factor's value for PSI can be explained from the public entrepreneurial perspective, which regards a political actor as an innovation champion (IC) or sponsorship (IS) for driving change or empowering employees to be more innovative (Bankins *et al.*, 2017; Bartlett and Dibben, 2002). Moreover, the agency theory puts forth that politicians, as principals, are authorized to decide on the policies and behavior pursued by agents (administration) according to their interests; therefore, power over the future of innovation lies with politicians (Frederickson *et al.*, 2016; Sørensen *et al.*, 2021). Political factors include political support (Bartlett and Dibben, 2002; Cinar *et al.*, 2019), individual attributes and interactions between political leaders and their environments (Meijer, 2014; Wynen *et al.*, 2014).

The second factor is public management, which most scholars consider critical for successful innovation (Walker, 2014). Public management factors include the role of public manager as an IC (Bartlett and Dibben, 2002), the organization's culture (Wynen *et al.*, 2014), implementers' aspects such as stability, professionalism, autonomy and incentives (Demircioglu, 2021) and other financial and regulatory aspects (Cinar *et al.*, 2019).

The third factor includes the characteristics of innovation. In a study by De Vries *et al.* (2016), attributes are asserted as important antecedents of the innovation process; these include usefulness, performance (Lyver and Lu, 2018) and the integration of innovation into a stable programs ecosystem (Goodson *et al.*, 2001; Johnson *et al.*, 2004).

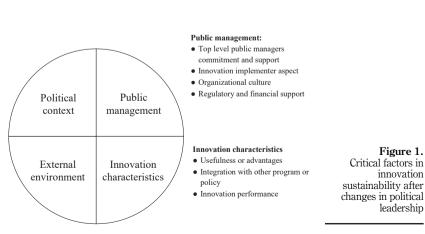
The fourth factor is the external environment. Scholars argue that turmoil in the external environment demands organizations to innovate, thus spurring innovation in POs (Clausen *et al.*, 2020; Walker, 2014). External environmental factors include collaboration (Cinar *et al.*, 2022; Sørensen *et al.*, 2021), the pressure of top-down political mandates or policies

#### Political context

- Interactions between political leaders and their environments (e.g., political nuances during innovation process, or political situation during local election competition)
- Support from political official
- Individual attributes of political leaders

#### External environment

- Effectiveness of collaborative/ partnership aspect
- Top-down regulatory and resources support
- Policy or social trend issue in global or local discourse



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(Andersen and Jakobsen, 2018) and the context of trends in social issues or policies at the global or local level (Korac *et al.*, 2017).

#### **Research methods**

This study adopted a multiple case study approach, because it examines several cases for exploring the factors behind innovation sustainability in various contexts (formal and informal) (Yin, 2017). This approach also facilitated developing patterns of association between factors, both within and across cases (Eisenhardt and Graebner, 2007). Finally, the multiple case study method enabled producing a larger theoretical framework, by comparing cases according to the uniqueness of their respective contexts, to discover the logical similarities that feed the phenomenon of interest (Yin, 2017).

#### Research context

The context of organizational change in this study is the Indonesian Government's implementation of a decentralization policy, based on Law No. 22/1999 for local governments. Decentralization refers to the "assignment of fiscal, political and administrative responsibilities to lower levels of government" (Litvack *et al.*, 1998, p. 4 as cited by Susanto *et al.*, 2018). Law No. 22/1999 underwent two revisions, one in 2004 (Law No. 32/2004), and the other in 2014 (Law No. 23/2014).

According to Law No. 32/2014, particularly Article 1 of Section 8, decentralization refers to the Central Government handing over the charge of certain affairs to autonomous regions, based on their degree of autonomy. Meanwhile, according to Article 1 of Section 6, regional autonomy is the right, authority and obligation of an autonomous region to regulate and manage its government affairs and cater to the local community's interests according to the functioning of the Unitary State of the Republic of Indonesia.

Based on those policies, the people directly elect a major or regent as the local government's chief executive for a five-year term, who can be re-elected for one term. For administrative purposes, local governments hold authority over various affairs, except for absolutely government affairs like foreign policy, defense, security, justice, national monetary and fiscal policy and religion (Article 9 and 10, Law No. 23/2014).

Moreover, local governments have the power to formulate, implement and evaluate policies for the exercise of their authority. The majors or regents are authorized to manage staffing, such as appointments, transfers, supervision and enforcement of discipline (Lele, 2019). Due to these powers, local political leaders, in the capacity of chief executives, can intervene in the fate of innovation, causing its implementers and stakeholders to subjectively experience either satisfaction or dissatisfaction.

#### Case selection

The case selection was based on three criteria. First, we select the local governments that implement innovations. Second, we choose local governments with differences in capacity, context and geographic locations, representing the western and eastern parts of Indonesia. Local governments in Java (western part of Indonesia) generally have better financial and human resource capacities than their counterparts in eastern Indonesia (see Firdaus, 2013; Nurhayani, 2014). This selection allowed us to develop a prosperous and diverse understanding of the multiple factors critically affecting innovation sustainability. Third, we select cases of public innovation experiencing changes in local political regimes. We argue that a political regime change at the local level can potentially affect the fate of innovation in the long term, resulting in positive or negative feelings toward political administration performance. Consequently, four cases were chosen from the Yogyakarta municipality,

representing the western part of Indonesia, and the Kupang municipality, representing the eastern part of Indonesia, as presented in Table 1.

#### Sampling method

Using the purposive technique, we interviewed 36 informants about the four innovations (see Table 2). The selection of participants was based on two criteria: their involvement in the innovation process both as implementers and beneficiaries and their experiences of satisfaction or dissatisfaction with changes in innovation sustainability, such as complaints, praise and negative or positive emotions. Flanagan (1954) explained that no definite number of samples could be considered sufficient for the CIT. CIT is a qualitative tool for investigating unusual or unpleasant feelings resulting from change in organizational phenomena (Bott and Tourish, 2016; Viergever, 2019). Thus, the number of informants depends on data saturation.

#### Data collection and analysis

The application of CIT facilitated research on particular events that resulted from change (Viergever, 2019). This study categorizes change in political leadership as a critical event for the sustainability of PSI, because it carries the equal possibility of an innovation either failing or surviving in organizational routines, accordingly causing satisfaction or dissatisfaction among members involved in the process. Therefore, CIT was the appropriate method for investigating PSI sustainability in the context of transition of local political leadership.

Data were collected from May to August of 2021. Primary data were collected through semi-structured interviews with informants, conducted both face-to-face and on online platforms like Zoom or WhatsApp. The average duration of interviews was 45–90 min; all of them were recorded and transcribed.

After the data collection process, we used content analysis as an analytical method, following previous studies that employed the CIT approach in the data reduction process (e.g. Grace, 2007; Nadia *et al.*, 2020). The critical events (CIs) identified were categorized using NVivo 12 software into concepts as the first order, themes as second-order and aggregate dimensions as third order.

Innovation/type	The purpose of innovation	Actors involved	Issue domain/local government
Sepeda Kanggo Sekolah lan Nyambut Gawe (Sego Segawe)	Encourage citizens to use bicycles to go to school and work as eco-friendly vehicles. Thus, it can help to reduce air pollution and a global warming effect in the urban area	Government and cycling communities/ collaborative	Environment/ Yogyakarta municipality
Yogyakarta emergency service 119 (YES 119) Kupang green and clean (KGC)	Provide costless evacuation and medical services for emergency patients in the urban area Encourages the habituation of citizens to plant trees, as well as maintaining cleanliness in the urban area	Government, Indonesian Red Cross, hospitals and academia/partnership Government, mass media and local community leaders/collaborative	Public health/ Yogyakarta municipality Environment/ Kupang municipality
Brigade Kupang Sehat (BKS)	Provide costless evacuation and medical assistance for emergency patients in the urban area	Government and state public hospitals/ partnership	Public health/ Kupang municipality

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Table 1. Research cases

IJPSM 35,7	Innovations	Category	Position	Role	Informants
55,7	Sego Segawe	Bureaucratic internal actors	Political official	Champion or sponsor	2 informants
			Public officials and employees	Implementer	4 informants
738		External actors of bureaucracy	Community members	Implementers and beneficiaries	3 informants
			NGO member Academics	Beneficiaries Implementers and beneficiaries	1 informant 1 informant
	YES 119	Bureaucratic internal actors	Political official	Champion or sponsor	2 informants
			Public officials and employees	Implementer	4 informants
		External actors of bureaucracy	Community members	Beneficiaries	4 informants
		·	NGO member Academics	Implementer Implementers and beneficiaries	1 informant 1 informant
	KGC	Bureaucratic internal actors	Political official	Champion or sponsor	2 informants
			Public officials and employees	Implementer	4 informants
		External actors of bureaucracy	Mass media member	Implementer	1 informant
			Community members	Implementers and beneficiaries	4 informants
			Academics	Implementers and beneficiaries	1 informant
	DVG		NGO member	Beneficiaries	1 informant
	BKS	Bureaucratic internal actors	Political official	Champion or sponsor	2 informants
			Public officials and employees	Implementer	4 informants
		External actors of bureaucracy	Community members	Beneficiaries	4 informants
Table 2. Informants			Academics	Beneficiaries	1 informant

Finally, data, sources and theory triangulation were applied to ensure the trustworthiness of the research. Data triangulation was conducted by verifying certain information collected from interviews and data sources with other informants regarding each innovation and contrasting it with data from secondary sources.

## Results

The results of this study are presented in two sections. The first finding described the fate of the survival of the four innovations after they were routinized in organizational activities. The second finding explains the critical factors that distinguish the innovation sustainability condition after a change of local political regime by comparing four innovations: Sego Segawe, YES 119, KGC and BKS.

### Innovation sustainability conditions

The case analysis revealed the condition of innovation sustainability after the change of political leaders, divided into three categories: non-sustained, sustained on a small scale,

sustained on a full scale and institutionalized as a new organizational structure, as illustrated in Figure 2.

When this study was conducted, Segawe was discontinued after a new mayor was elected in 2012. Although Sego Segawe had been stopped, the innovation delivered policy lessons for public managers to generate other innovations, such as Monalisa (enjoying Jogja with five bicycle routes) in 2021. This indicates that non-surviving innovations can help future policies.

Although proved successful, we found that the KGC movement experienced a decline in sustainability. Innovation was suspended for almost two years (2013–2014) after the change of political leaders. It was re-implemented in 2015 but on a small scale.

Regarding YES 119 and BKS, our study found that this innovation had survived and evolved into a new agency named Public Safety Center 119 (PSC 119) despite two changes in local political leadership. Our study also revealed that the YES 119 and BKS innovation received an award and regulatory support from the central government in 2016 and expanded its service scale for coronavirus disease 2019 (COVID-19) patients.

#### Critical factors in innovation sustainability

This study successfully identified multiple critical factors or events (CIs), that can either spur or hamper the success of innovation sustainability. These CIs are categorized into four factors: politics, public management, innovation characteristics and the external environment (see Figure 3).

*The political context of the host organization.* In this study, the political context of a host organization refers to the factors originating from the political leaders' attributes affecting the sustainability of innovation, including their leadership role, characteristics and interactions with political stakeholders that occur in host organizational settings. We found that the political factors encompass: (a) the political nuances of innovation, (b) the local political situation during the public election, (c) the commitment of political officials, (d) support for other political agendas and (e) individual attributes of a political leader, including his personal preference for a particular policy issue and attitudes toward innovation.

Our study revealed that the five themes were interrelated in their effect on innovation survivability. Innovations that have a robust political nuance due to the active involvement of political leaders during innovation processes, such as Sego Segawe and KGC, have experienced a decline in sustainability conditions after the change in local political regimes. In contrast, the sustainability conditions of YES 119 and BKS, which are dominated by the active managerial-technical involvement of civil servants, are not affected by changes in local political administration.

After the change in political regime, our analysis revealed that the decline in Sego Segawe and KGC sustainability was caused by political events that induced conflict between former

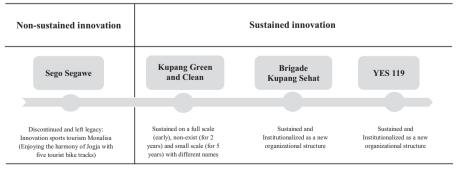
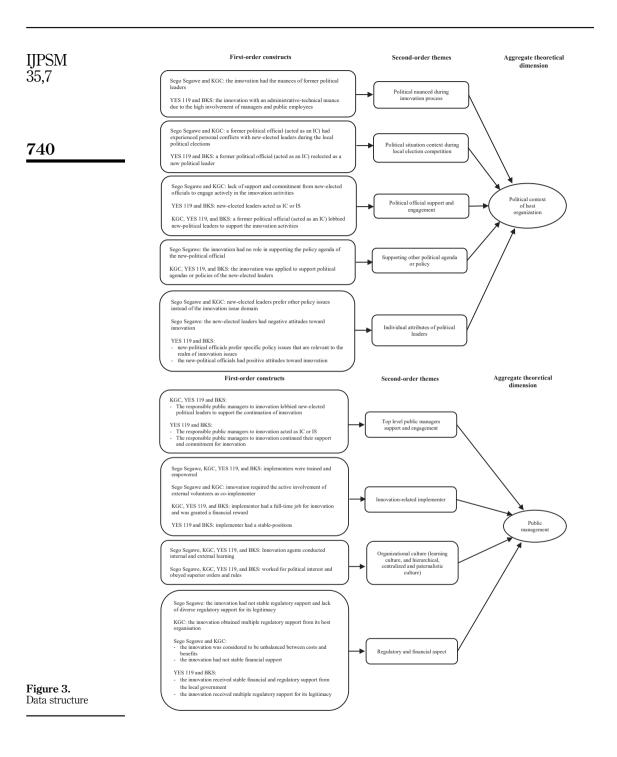
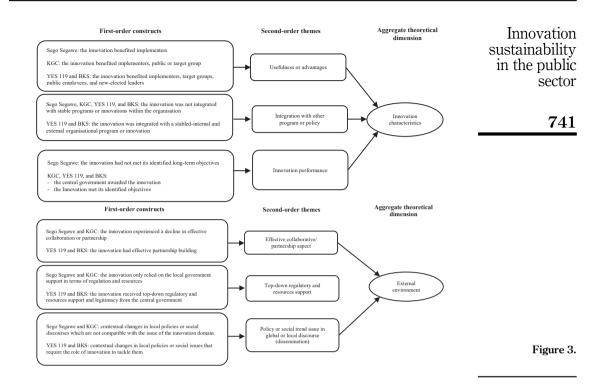


Figure 2. The fate of innovations in sustainability continuum

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and newly elected political officials during the public election process. These political events included the reluctance of former political officials to support newly elected leaders due to differences in political alliances, leading to competition among them. Thus, innovations attributed to the image of former political leaders tend to be discontinued by successors. In contrast, our observations on YES 119 and BKS found that former political officials who acted as ISs managed to survive and were re-elected. Therefore, the fate of political officials who act as ICs or ISs and the potential conflict between political officials are critical in predicting the sustainability of PSI.

Additionally, the informants argued that innovations supporting the political agenda of newly elected leaders tend to be more sustainable, such as YES 119 and BKS innovations that assist health service policies in handling the COVID-19 pandemic (Informants 12, 14, 15, 33, 34 and 35). By contrast, Sego Segawe and KGC did not play a significant role in supporting the policy agendas of newly elected political officials, negatively affecting their sustainability conditions.

Finally, the significant theme for innovation sustainability is the personal preferences and attitudes of new political leaders toward particular policy issues and innovation. Our analysis showed that the positive perceptions of political leaders toward economic and health issues and their negative perceptions toward innovation led to a decline in the sustainability of KGC and Sego Segawe. As the new officials' attention shifted to other policies, their collaborative efforts in implementing Sego Segawe and KGC decreased, causing the implementation process to be slowly disrupted and prompting the waning and subsequent disappearance of sustainability.

*Public management.* Our findings suggest that the critical public management factors for innovation sustainability involve the role of public managers as ICs and their role in lobbying

new political leaders in support of innovation. We observed that innovations that received public management support survived longer in organizational routines such as KGC, YES 119 and BKS.

Another crucial factor of innovation sustainability is organizational culture. Informants argued that innovations with a strong political nuance (e.g. Sego Segawe and KGC) received a more negative impact from a hierarchical and paternalistic culture than innovation with a managerial-technical nuanced. These innovations relied heavily on the involvement of political leaders, meaning that bureaucrats' support was based on hierarchical obedience for political interests. Hence, with the decline of political executives' commitment, public management support for innovation is reduced.

Aspects related to implementers are also vital for sustainable innovation. Unsustainable innovations are marked by the absence of dedicated, responsible implementers and reliance on the active involvement of external volunteers; this is observed in the cases of Sego Segawe and KGC. The study also found that autonomy and incentives for innovation implementers played a significant role in the survival of innovation, by supporting their motivation and professionalism.

Lastly, our study found budget and regulatory support stability to be important factors in innovation durability. Our informants stated that "YES 119 and BKS received financial and regulatory support annually, and obtained external regulatory legitimacy from the central government, allowing them to continue despite changes in political leaders" (Informant 12, 13,14, 15, 33, 34 and 36). In contrast, Sego Segawe and KGC did not acquire external legitimacy and relied solely on internal regulation, thereby experiencing a decline when there was a dynamic change in political administration.

*Innovation characteristics.* Our study identified (1) the benefits of innovation, (2) the integration of innovation with other programs and (3) innovation performance, as critical factors contributing to successful innovation survival.

Innovation advantages are essential for the survival of those that directly benefit political leaders compared to implementers, employees and the public. Our participants also mentioned that integrating innovation with stable programs or policies supported innovation durability. For instance, YES 119 and BKS were integrated with well-established internal programs, such as smart cities and regional health insurance. Meanwhile, Sego Segawe and KGC were integrated with government programs subject to change, such as programs related to tourism promotion or reforestation activities.

Innovation performance is also important for predicting innovation sustainability. We found that the three surviving innovations won awards from the central government and achieved their short-term or long-term goals and objectives. In contrast, Sego Segawe had not yet achieved the expected innovation target in building people's awareness and habituation to using bicycles for transportation (Participants 4, 6, 8 and 9).

*External environment*. Innovation sustainability requires external environmental factors, including (1) the effectiveness of collaborative or partnership aspects, (2) top-down regulatory and resource support and (3) trends in policy or social discourse at the global and local level.

Sego Segawe and KGC showed a decline in innovation sustainability after a weakening of their multi-actor collaborative effectiveness, due to the new political leaders' lack of commitment to the collaborative process. Our study also found that changing trends in locallevel social issues, that combine conflicting interests with innovation domain issues, can negatively affect innovation sustainability, such as in the cases of Sego Segawe and KGC. In the policy realm, environmental discourse cannot coexist with economic issues of construction or manufacturing investment that harm the urban environment. In comparison, YES 119 and BKS benefited from the popularity of economic issues, because economic activities are supported by health services in high-density, mobile urban communities.

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IJPSM 35.7 The last vital factor for innovation sustainability is pressure on top-down policies or regulations from the central government. Our interviewees explained that *the ratification of Regulation Number 19 of 2016 regarding the Integrated Emergency Management System from the Ministry of Health positively impacted YES 119 and BKS institutional status, which obligated every local government to form an emergency service unit beginning in 2016* (Informants 14, 15, 33 and 34). However, the Sego Segawe and KGC cases did not have this feature, making them more vulnerable to internal political instability, such as during transition of political leadership (see Figure 3).

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### Discussion

## The condition of innovation sustainability

Our findings reveal that each innovation has different sustainability conditions following a shift in the local political regime. Sego Segawe was discontinued. The KGC experienced fluctuations in sustainability activities from being fully implemented, suspended and reimplemented, but with a small-scale activity after the local political regime changed. The YES 119 and BKS were institutionalized as new administrative structures. These findings explain that sustainability is not a single consistent concept but a multilevel concept to a certain continuum degree in organizational routines (Savaya *et al.*, 2008; Savaya and Spiro, 2012).

#### Critical factors in innovation sustainability

Our findings describe critical factors in innovation sustainability that originate from the political context, public management, innovation characteristics and the external environment of the host organization.

In the political context, innovations with high political nuances of the former political leader were negatively influenced by the change in political administration regarding their degree of sustainability. The vulnerability of politicized innovation is typically caused by political authorities' excessive control over innovation activities, which undermines bureaucrats' capacity to intervene in the innovation process with their competence and expertise, which are often lacking in political executives (Demircioglu, 2021). Moreover, innovations rely on the extent to which political officials are disrupted by instability due to changing political executives, which is often followed by changes in governmental agenda, such as in policy priorities and selection (Apriliyanti *et al.*, 2021; Cinar *et al.*, 2019).

Interestingly, our investigation also revealed that the fate of innovation could be predicted long before the change in political administration by examining the political situation during local public elections. The presence of conflicts between former political officials who functioned as IC or IS and newly elected leaders are elements within innovations that have declined in sustainability, such as Sego Segawe and KGC. The re-election of a political leader acting as an IS as the next mayor is a feature in sustainable innovations such as YES 119 and BKS. These findings show that innovation is also a political problem, prone to being influenced by the interactions between political individuals and the environment; thus, political-executive entrepreneurship is necessary, as it can legislate changes and formulate mandates or policy reforms for creating a supportive environment for innovation (Bartlett and Dibben, 2002; Clausen *et al.*, 2020).

Another crucial aspect of innovation survivability is the commitment of new political executives to continue and be involved in innovation activities, their perceptions and personal preferences regarding the domain issue of innovation. The theory of reasoned action and planned behavior explains these phenomena by outlining that innovation's survival depends on how influential actors in the organization (e.g. colleagues and top managers) view and evaluate the innovation positively and satisfactorily (see Ajzen, 2020; Jung Moon, 2020).

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In public management, top managers who act as an IC via the lobby and negotiate with new political leaders for securing support, are essential for ensuring innovation survival; their professional experience allows them to rationally persuade politicians to grant legitimacy to innovation (Bartlett and Dibben, 2002; Korac *et al.*, 2017). Moreover, the heavy reliance on external volunteers as their leading implementers is the reason behind the decline in Sego Segawe and KGC sustainability, because maintaining the emotional connection and trust among external volunteers is challenging (Stirman *et al.*, 2012).

Monetary incentives for frontline implementers are important antecedents of innovation sustainability because they act as intrinsic motivational stimulants for employees to engage in innovation-related tasks, thereby enhancing the organization's overall capability for innovation (Clausen *et al.*, 2020; Susanto, 2021). Uniquely, the political nuances of a hierarchical and paternalistic culture negatively influence innovation, such as in the cases of Sego Segawe and KGC. This is not a surprising phenomenon, since Indonesian bureaucrats have a long history of patronage and clientelism, leading them to serve political interests (Scott, 2019; Winters, 2016). This is due to a politicized bureaucratic culture in terms of a civil service system, that makes the recruitment and promotion of public officials greatly dependent on their political masters and connections (Lapuente and Suzuki, 2020). Thus, bureaucrats have low independence in determining the fate of public policies, which are mostly driven by political interests (Etzioni-Halevy, 1985).

Another crucial factor in continued innovation is stability and sufficient funds, since future needs of innovation are related to resource allocation (Cinar *et al.*, 2019; Walker, 2014). Furthermore, all sustainable innovations require stable yet diverse regulatory support. The perspective of bureaucratic legalism explains that the significance of regulation in innovation rests in its capacity to guard against political arbitrariness and receive financial allocation from the organization (Lapuente and Suzuki, 2020).

Regarding innovation characteristics, the ability of innovation to provide tangible benefits to political officials and achieving primary goals is features of sustainable innovation because they can increase policymakers' trust in the value of innovation (Lyver and Lu, 2018).

In terms of the external environment, innovations experiencing a decline in sustainability, such as Sego Segawe and KGC, fail to maintain the effectiveness of collaborative relationships with key social partners, resulting in the loss of mutual understanding and shared goals; thereby reducing their support and active involvement (Cinar *et al.*, 2019; Sørensen *et al.*, 2021). Moreover, the change in policy discourses related to innovation affects innovation sustainability because the trend of a particular social issue drives politicians to respond by enforcing current policy innovation or changing it with another policy (Agolla and Lill, 2013; Zhou and Wu, 2018).

Finally, coercive policy pressure from the central government leads to the betterment of innovation's institutional status, such as YES 119 and BKS. Our findings complement prior studies (e.g. Andersen and Jakobsen, 2018; Jordan and Huitema, 2014) that hold top-down policies as the key to initiating and promoting higher institutionalization of innovation. Thus, innovation is more sustainable in organizational routines.

This study's results complement van Acker and Bouckaert's investigation (2018) by highlighting political context as the most influential element, since all factors in innovation sustainability were found to be related to a political event and leader (support, authority, personal preference, attitudes, involvement and policy priority) in local government settings of Indonesia, a developing country.

#### Limitations and future research

This study has several limitations. First, we collected data through interviews that may be subject to memory bias. However, we anticipated this risk by interviewing multiple informants with related questions and positions on innovation activities. Second, our analysis

is limited to innovation sustainability phenomena in local governments. Third, the selection of innovation cases did not consider variations in innovation typologies but focused on the differences in the continuum of innovation sustainability.

Future research can focus on examining the phenomenon of innovation sustainability at the central government level and consider different typologies of innovation that assist in evaluating the generalizability of the findings of this study. Future studies can also explore the phenomenon of innovation survival in developing countries with different settings, in terms of political situations, systems and national administrative cultures.

Conclusions

The scarcity of empirical PSI studies investigating innovation sustainability in developing countries presents a gap in the existing literature. This research used Indonesia because of the shortage of research related to innovation sustainability published in reputed international journals (Horton, 2016).

The novel findings from this study are related to 12 CIs that increase the probability of innovation sustainability in the public sector. These CIs are (1) lack of politicization in operationalizing an innovation, (2) the absence of conflict between former political officials (who acted as IC) and new political leaders, (3) the survivability of IC or IS in top management positions, (4) the capacity of an innovation to adapt and respond to policy agendas of new political leaders, (5) commitment of the new top manager to act as IC, (6) the capacity of IC to gain political support from newly elected leaders through negotiation, (7) stability and professionalism of implementers, (8) tangible benefits of innovation for political officials, (9) stable budget and regulatory support for innovation, (10) the integration of innovation with a stable program or policy, (11) effective collaboration or partnership and (12) the presence of top-down policy to support innovation legitimacy.

#### References

- Agolla, J.E. and Lill, J.B.V. (2013), "Public sector innovation drivers: a process model", *Journal of Social Sciences*, Vol. 34 No. 2, pp. 165-176.
- Ajzen, I. (2020), "The theory of planned behavior: frequently asked questions", Human Behavior and Emerging Technologies, Vol. 2 No. 4, doi: 10.1002/hbe2.195.
- Andersen, S.C. and Jakobsen, M.L. (2018), "Political pressure, conformity pressure, and performance information as drivers of public sector innovation adoption", *International Public Management Journal*, Taylor & Francis, Vol. 21 No. 2, pp. 213-242.
- Apriliyanti, I.D., Kusumasari, B., Pramusinto, A. and Setianto, W.A. (2021), "Digital divide in ASEAN member states: analyzing the critical factors for successful e-government programs", *Online Information Review*, Vol. 45 No. 2, doi: 10.1108/OIR-05-2020-0158.
- Bankins, S., Denness, B., Kriz, A. and Molloy, C. (2017), "Innovation agents in the public sector: applying champion and promotor theory to explore innovation in the Australian public service", *Australian Journal of Public Administration*, Vol. 76 No. 1, pp. 122-137.
- Bartlett, D. and Dibben, P. (2002), "Public sector innovation and entrepreneurship: case studies from local government", *Local Government Studies*, Vol. 28 No. 4, pp. 107-121.
- Borins, S. (1998), Innovating with Integrity, Georgetown University Press, Washington, DC.
- Borins, S. (2001), "Encouraging innovation in the public sector", *Journal of Intellectual Capital*, Vol. 2 No. 3, pp. 310-319.
- Bott, G. and Tourish, D. (2016), "The critical incident technique reappraised: using critical incidents to illuminate organizational practices and build theory", *Qualitative Research in Organizations and Management: An International Journal*, Vol. 11 No. 4, doi: 10.1108/QROM-01-2016-1351.

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IJPSM 35,7	Cinar, E., Simms, C. and Trott, P. (2022), "Collaborative public sector innovation: an analysis of Italy, Japan, and Turkey", <i>Governance</i> , pp. 1-22 (Early view article, first published in January 24th 2022).
	Cinar, E., Trott, P. and Simms, C. (2019), "A systematic review of barriers to public sector innovation process", <i>Public Management Review</i> , Routledge, Vol. 21 No. 2, pp. 264-290.
746	Clausen, T.H., Demircioglu, M.A. and Alsos, G.A. (2020), "Intensity of innovation in public sector organizations: the role of push and pull factors", <i>Public Management Review</i> , Routledge, Vol. 98 No. 1, pp. 159-176.
	Cobian, K.P. and Ramos, H.V. (2021), "A cross-case analysis of developing program sustainability and institutionalization in early stages of a multisite biomedical student diversity initiative", BMC Medical Education, Vol. 21 No. 1, doi: 10.1186/s12909-021-02663-2.
	De Vries, H., Bekkers, V. and Tummers, L. (2016), "Innovation in the public sector: a systematic review and future research agenda", <i>Public Administration</i> , Vol. 94 No. 1, pp. 146-166.
	Demircioglu, M.A. (2021), "Sources of innovation, autonomy, and employee job satisfaction in public organizations", <i>Public Performance and Management Review</i> , Vol. 44 No. 1, doi: 10.1080/15309576.2020.1820350.
	Eisenhardt, K.M. and Graebner, M.E. (2007), "Theory building from cases: opportunities and challenges", <i>Academy of Management Journal</i> , Vol. 50 No. 1, pp. 25-32.
	Etzioni-Halevy, E. (1985), Bureaucracy and Democracy: A Political Dilemma, Bureaucracy and Democracy: A Political Dilemma, Vol. 7, Routledge & Kegan Paul, London, doi: 10.4324/ 9780203707890.
	Firdaus, M. (2013), <i>Ketimpangan Pembangunan Antar Wilayah di Indonesia: Fakta Dan Strategi Inisiatif</i> , Orasi Ilmiah, Institut Pertanian Bogor.
	Flanagan, J.C. (1954), "The critical incident technique", Psychological Bulletin, Vol. 51 No. 7, pp. 327-358.
	Frederickson, H.G., Smith, K., Larimer, C. and Licari, M.J. (2016), <i>The Public Administration Theory</i> <i>Primer</i> , 3rd ed., Routledge, New York, doi: 10.4324/9780429494369.
	Glor, E.D. (2015), "Building theory of organizational innovation, change, fitness and survival", <i>Innovation Journal</i> , Vol. 20 No. 2, pp. 1-167.
	Goodson, P., Murphy Smith, M., Evans, A., Meyer, B. and Gottlieb, N.H. (2001), "Maintaining prevention in practice: survival of PPIP in primary care settings", <i>American Journal of</i> <i>Preventive Medicine</i> , Vol. 20 No. 3, pp. 184-189.
	Grace, D. (2007), "How embarrassing! An exploratory study of critical incidents including affective reactions", <i>Journal of Service Research</i> , Vol. 9 No. 3, pp. 271-284.
	Horton, R. (2016), "Offline: Indonesia - Unravelling the mystery of a nation", <i>The Lancet</i> , Vol. 387, p. 10021, doi: 10.1016/S0140-6736(16)00544-4.
	Johnson, K., Hays, C., Center, H. and Daley, C. (2004), "Building capacity and sustainable prevention innovations: a sustainability planning model", <i>Evaluation and Program Planning</i> , Vol. 27 No. 2, pp. 135-149.
	Jordan, A. and Huitema, D. (2014), "Innovations in climate policy: the politics of invention, diffusion, and evaluation", <i>Environmental Politics</i> , Vol. 23 No. 5, pp. 715-734, doi: 10.1080/09644016.2014. 923614.

- Jung Moon, S. (2020), "Integrating diffusion of innovations and theory of planned behavior to predict intention to adopt electric vehicles", International Journal of Business and Management, Vol. 15 No. 11, doi: 10.5539/ijbm.v15n11p88.
- Kompas (2020), "LAN upayakan sinergi antarlembaga Pemerintah untuk Jamin Keberlanjutan inovasi", Kompas, 28 February, available at: https://nasional.kompas.com/read/2020/02/28/ 12324521/lan-upayakan-sinergi-antarlembaga-pemerintah-untuk-jamin-keberlanjutan?page=all (accessed 27 October 2020).

Korac, S., Saliterer, I. and Walker, R.M. (2017), "Analysing the environmental antecedents of innovation adoption among politicians and public managers", *Public Management Review*, Vol. 19 No. 4, pp. 566-587, Routledge.

- Kumorotomo, W. (2012), "Kegagalan Penerapan E-Government Dan Kegiatan Tidak Produktif Dengan Internet", Working Paper, Yogyakarta, available at: https://kumoro.staff.ugm.ac.id
- Kusumasari, B., Pramusinto, A., Santoso, A.D. and Fathin, C.A. (2019), "What shapes public sector innovation?", *Public Policy and Administration*, Vol. 18 No. 4, pp. 430-446.
- Lapuente, V. and Suzuki, K. (2020), "Politicization, bureaucratic legalism, and innovative attitudes in the public sector", *Public Administration Review*, Vol. 80 No. 3, pp. 454-467.
- Lele, G. (2019), "Asymmetric decentralization and the problem of governance: the case of Indonesia", Asian Politics and Policy, Vol. 11 No. 4, doi: 10.1111/aspp.12493.
- Lukman, I.B. (2021), "Rethinking public sector innovation in Indonesia", Proceedings of the 2nd International Conference on Administration Science 2020 (ICAS 2020), Vol. 564, doi: 10.2991/ assehr.k.210629.012.
- Lyver, M.J. and Lu, T.J. (2018), "Sustaining innovation performance in SMEs: exploring the roles of strategic entrepreneurship and IT capabilities", *Sustainability (Switzerland)*, Vol. 10 No. 2, pp. 1-27.
- 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*, Vol. 16 No. 2, pp. 199-216.
- Nadia, F.N.D., Sukoco, B.M., Susanto, E., Sridadi, A.R. and Nasution, R.A. (2020), "Discomfort and organizational change as a part of becoming a world-class university", *International Journal of Educational Management*, Emerald Group Publishing, Vol. 34 No. 8, pp. 1265-1287.
- Nurhayani, R. (2014), "Studi komperatif ketimpangan Wilayah antara kawasan barat Indonesia dan kawasan Timur Indonesia", Jurnal Manajemen Terapan Dan Keuangan, Vol. 3 No. 1, pp. 456-463.
- 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*, Vol. 89 No. 4, pp. 1335-1350.
- Pollitt, C., Bouckaert, G. and Löffler, E. (2007), "Making quality sustainable: Co-design, codecide, coproduce, co-evaluate", Report by the Scientific Rapporteurs of the 4th Quality Conference, Ministry of Finance.
- Rogers, E.M., Singhal, A. and Quinlan, M.M. (2019), "Diffusion of innovations", in Stacks, D.W., Salwen, M. and Eichhorn, K. (Eds), An Integrated Approach to Communication Theory and Research, 3rd ed., Routledge, p. 20.
- Salge, T.O. and Vera, A. (2012), "Benefiting from public sector innovation: the moderating role of customer and learning orientation", *Public Administration Review*, Vol. 72 No. 4, pp. 550-559.
- Savaya, R. and Spiro, S.E. (2012), "Predictors of sustainability of social programs", American Journal of Evaluation, Vol. 33 No. 1, pp. 26-43.
- Savaya, R., Spiro, S. and Elran-Barak, R. (2008), "Sustainability of social programs: a comparative case study analysis", *American Journal of Evaluation*, Vol. 29 No. 4, pp. 478-493.
- Scott, J.C. (2019), "Handling historical comparisons cross-nationally", in Heidenheimer, A.J. and Johnston, M (Eds), *Political Corruption: Concept & Context*, 3rd ed., Routledge, p. 14.
- Sørensen, E., Bryson, J. and Crosby, B. (2021), "How public leaders can promote public value through co-creation", *Policy and Politics*, Vol. 49 No. 2, doi: 10.1332/030557321X16119271739728.
- Stirman, S., Kimberly, J., Cook, N., Calloway, A., Castro, F. and Charns, M. (2012), "The sustainability of new programs and innovations: a review of the empirical literature and recommendations for future research", *Implementation Science*, Vol. 7 No. 1, pp. 1-19.
- Susanto, E., Lestari, N., Hapsari, M. and Krisdiyatmiko (2018), "Driving factors of deforestation in Indonesia: a case of central Kalimantan", *Jurnal Studi Pemerintahan*, Vol. 9 No. 4, doi: 10.18196/ jgp.9490.

Innovation sustainability in the public sector

IJPSM	Susanto, E. (2021), "Does love of money matter for innovative work behavior in public sector
35,7	organizations? Evidence from Indonesia", International Journal of Public Sector Management, Vol. 34 No. 1, pp. 71-85.

- Utomo, T.W. (2016), Inovasi Sebagai Keniscayaan Baru Dalam Ilmu Dan Praktek Administrasi Publik Di Indonesia, Naskah Inovasi Deputi Inovasi Administrasi Negara, Jakarta.
- van Acker, W. and Bouckaert, G. (2018), "What makes public sector innovations survive? An exploratory study of the influence of feedback, accountability and learning", *International Review of Administrative Sciences*, Vol. 84 No. 2, pp. 249-268.
- Van der Panne, G., Van Beers, C. and Kleinknecht, A. (2003), "Success and failure of innovation", International Journal of Innovation Management, Vol. 7 No. 3, pp. 309-338.
- van der Wal, Z. and Demircioglu, M.A. (2020), "Public sector innovation in the Asia-pacific trends, challenges, and opportunities", *Australian Journal of Public Administration*, Vol. 79 No. 3, pp. 271-278.
- Viergever, R.F. (2019), "The critical incident technique: method or methodology?", Qualitative Health Research, SAGE Publications, Vol. 29 No. 7, pp. 1065-1079.
- Walker, R.M. (2014), "Internal and external antecedents of process innovation: a review and extension", *Public Management Review*, Vol. 16 No. 1, pp. 21-44.
- Winters, J.A. (2016), "Electoral dynamics in Indonesia: money politics, patronage and clientelism at the grassroots", *Bulletin of Indonesian Economic Studies*, Vol. 52 No. 3, doi: 10.1080/00074918.2016. 1236653.
- Wynen, J., Verhoest, K., Ongaro, E. and van Thiel, S. (2014), "Innovation-Oriented Culture in the Public Sector: do managerial autonomy and result control lead to innovation?", *Public Management Review*, Taylor and Francis, Vol. 16 No. 1, pp. 45-66.
- Yin, R.K. (2017), Designing Case Studies, Case Study Research and Applications: Design and Methods, 6th ed., SAGE Publications, Los Angeles.
- Zhou, F. and Wu, Y.J. (2018), "How humble leadership fosters employee innovation behavior: a twoway perspective on the leader-employee interaction", *Leadership and Organization Development Journal*, Vol. 39 No. 3, doi: 10.1108/LODJ-07-2017-0181.

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