

Continuities of Public Service Innovations (PSIs) in Indonesia's Local Governments' Health Services: Whose Initiative Has a Higher Success Rate?

Pratiwi¹, Shafiera Amalia², Agus Wahyuadianto³, Masrully⁴, Candra Setya Nugroho⁵

¹National Graduate Institute for Policy Studies (GRIPS), Japan; and National Research and Innovation Agency (BRIN), Indonesia. (Corresponding author, email: doc23152@grips.ac.jp)

^{2,3,4,5} National Institute of Public Administration, Indonesia.

Abstract

Public Service Innovations (PSIs) have improved public services and increased public values. However, previous studies have shown that public servants saw PSIs as risky interventions because of the perceived uncertain outcomes, lack of support and recognition, opposition against incumbent culture, and negative public scrutiny in case of failure. These perceived risks have led to risk-averse behaviour in public service and incremental or discontinued innovations. Earlier studies on PSIs' continuity have focused on leadership, engagement, collaborations, and organisational cultures in developed countries. However, the mechanism of engagements, collaborations, organisational culture, and leadership types remains unclear. This study aims to investigate the characteristics of sustainable PSIs in Indonesia and how authorities are exercised. In doing so, 11 PSIs in Indonesian health services—facilitated by staff or leaders—are compared and contrasted. The findings indicate that staff-initiated PSIs are prompted by community needs, use routine visits as a collaboration mechanism, and engage more stakeholders. The shortcoming is that the staff-initiated PSIs need more formal team assignments. The advantage is that they strengthen social capital and decrease community health problems. On the other hand, PSIs that were initiated by formal leaders are stimulated by formal antecedents, such as low achievement of development targets. Leaders-initiated PSIs also use capacity development programs to collaborate and increase the achievement of development targets. A novel finding to add to previous studies is that collaborating with other existing programs contributes to PSIs' continuity. The managerial implication of this study is to stimulate front-liners in initiating PSIs.

Keywords:

public sector innovations; community health services; continuity; staff; formal leaders

Introduction

Previous works of literature have identified the impacts of Public Service Innovations (PSIs), such as public service quality enhancement, citizens' well-being, and satisfaction (Irawady & Rufaidah, 2016; Kusumasari et al., 2019; Salge & Vera, 2012). PSIs introduce changes in public organisations, which require the implementation of ideas to improve performances and deliver public values such as efficiency, effectiveness, and

user satisfaction (Alter, 2016; Chen et al., 2020; De Vries et al., 2016). Before 2000, innovation studies were focused on efficiency in the private sector (Moore, 2000). After 2000, the focus has been on innovation in public services. The shift from the new public management to the new public service approach in public administration in 2000 has brought more technological engagement, transparency, collaboration, and citizen participation in PSIs (De Vries et al., 2016; Sørensen & Torfing, 2017).



Even though PSIs have transformed public services for the better, research has shown that public servants saw PSIs as risky interventions because of the perceived uncertain outcomes, lack of support and recognition, opposition against incumbent culture, and negative public scrutiny in case of failure (S. F. Borins, 2014; Flemig et al., 2016; Hartley, 2013; Torugsa & Arundel, 2017). These perceived risks have led to risk-averse behaviour in public service and incremental or discontinued innovations (S. F. Borins, 2014; Flemig et al., 2016; OECD, 2019). Previous studies have suggested approaches to deal with risk-averse behaviour and institutionalise innovations, such as by building innovation labs (Torvinen & Jansson, 2023), fostering collaborations and active management, and encouraging learning that allows experimentation (Enang et al., 2020; Osborne et al., 2020; Torugsa & Arundel, 2017) and co-creations (Carroll, 2014; McBride et al., 2019). However, these studies were limited to exploring the early stage of PSI planning (Torvinen & Jansson, 2023), the perceptions of public service managerial positions with non-specified innovative projects (Flemig et al., 2016; Torugsa & Arundel, 2017), and unclear performance measurement of governing risks (Flemig et al., 2016). None has investigated the long-term innovative behaviour or innovation continuity more deeply. This gap warrants further investigation because continuity is associated with effective risk management in the service sector (Gupta, 2016).

Chen et al. (2020) systematically reviewed the literature on PSIs and recommended future studies to evaluate the ways and conditions of PSI to deliver continuity to public values. PSI are more likely to sustain when they are user-oriented and bottom-up (Meričková & Muthová, 2021). However, research also found that the lack of user-friendliness and approaches have led to citizens' dissatisfaction (Meričková & Muthová, 2021). Thus, the engagement of front-liners or municipality

employees in PSIs is important because they interact more intensely with users (Meričková & Muthová, 2021).

PSI initiators influence the institutions involved and the networks for innovations. The hierarchy of bureaucracy also affects political support and influences the policymaking (Mangset & Asdal, 2019). Demircioglu (2021) suggested that bottom-up PSIs, or those initiated by front-liners, lead to more support for policies and innovations. However, Lovio and Kivisaari (2010) found the opposite view that decision-makers initiate more innovations and shape them, yet the study also encouraged bottom-up PSIs.

The question is whether decision-makers are more likely to get more collaborative support in policy-making. In an Indonesian context, Rini et al. (2021) elaborated on innovations initiated by political leaders in waste management. The findings show that when collaborations and stakeholder roles were not clear, waste management could not solve public waste problems (Rini et al., 2021). Similarly, Sufianti et al. (2021) showed that when top leadership positions did not receive support from the networks and resources, PSIs may not be sustainable. The study also suggested other factors than leadership to support PSI continuity, such as community involvement, policy support, and an innovative environment that encourages collaboration and inclusiveness (Sufianti et al., 2021). Collaboration and inclusiveness are crucial for continuity. However, Sufianti et al. (2021) did not elaborate more on the collaboration mechanisms that stimulate inclusiveness.

In a European context, van Acker and Bouckaert (2018) emphasized that cultures of feedback, accountability, and learning are important for PSI continuity. The study also highlighted leadership as a separate factor for PSI continuity, complementary to cultures of feedback, accountability, and learning (van Acker & Bouckaert, 2018). The recommendation

for future studies is to investigate other aspects of organisational cultures that support PSI continuity (van Acker & Bouckaert, 2018).

In the context of Asia, collaboration is important for innovation continuity (Rini et al., 2021; Sufianti et al., 2021). In Europe, research has shown that leadership, engagement of front-liners (Meričková & Muthová, 2021), and organisational cultures are important for PSI sustainability (van Acker & Bouckaert, 2018). However, the mechanism to engage, build collaboration and organisational culture, and types of leadership were not clearly defined. Zhang and Zhu (2020) suggested future research to investigate whether horizontal assignments affect innovation adoption. Therefore, this study's research question is: How do initiators' formal positions implement longterm PSI differently in terms of antecedents, collaborations, stakeholders, organisational cultures, and impacts?

PSIs in Asia face challenges in institutional capacity to develop interventions for different demands and inter-organizational relationships (Alter, 2016; Sufianti et al., 2021). In Indonesia, the challenges include the lack of political support, fragmented policies, unclear collaboration mechanisms, and gaps in resources and competencies (Alter, 2016; Sufianti et al., 2021). Studies on PSI are mostly in developed countries, indicating the lack of studies in Southeast Asian countries (Pradana et al., 2022). Investigating PSIs in Indonesia will provide insight into how enhancement in public services can be achieved amid different institutional challenges.

One of the regencies in Indonesia that has shown a significant development of PSIs is the Garut Regency, despite its limited resources. Since 2017, the Government of Garut Regency has been rewarding and supporting its innovative front-liners (Afandi & Dawud, 2019). As such, government innovation is initiated and stimulated. This study takes the case of healthcare services, especially

community health centres (CHC/Puskesmas) in Garut Regency. CHCs are formally assigned by the Ministry of Health in Indonesia to villages and urban sub-districts to provide health services. Investigating innovation cases at the CHCs as the smallest health service unit and the closest to the community in Garut Regency, will give an overview of how innovation actors can maintain PSI continuity with limited resources at a local government level. This study aims to cover the gaps in previous research by investigating interventions useful for PSI continuity in an Indonesian context.

This paper is organised in the following direction: 1) an introduction that describes the research gap and the reasoning for choosing the research locations, 2) a literature review that explains what is known and not known in PSI continuity, 3) a method that demonstrates the research approaches and how the interviewees are selected, 4) findings that describe general interview results, 5) discussions that indicate the different pattern of continuity between PSIs initiated by staff and formal leaders in terms of antecedents, collaborations, leadership, impacts, and cross-comparison analysis, and 6) conclusion that answers the research question and shows the study limitations.

Literature Review

Previous literature discussing PSI continuity is still limited. Several works describe PSI as a continuous, long-term improvement for better public values based on user needs (Dutta et al., 2021; Maharani & Andhika, 2021). Other studies emphasise that continuous innovation is future-oriented, whose output gradually increases organisational performance (Boons et al., 2013). Karlsson and Björk (2017) highlight that continuous innovation is related to continuous, better implementation of products, services, management, competencies and different organisational dynamics. Ramdani et al. (2019) believe that continuous innovations are associated with core service changes and

integration into the system.

In sum, previous studies agree that continuous innovation produces better results in the long run. Each innovation has a different process, so it is important to understand the context of PSI continuity. This study defines continuous innovation as an innovation that is sustainable after one or two years of implementation and continuously increases output and user satisfaction. Therefore, this study focuses on innovations that have run and delivered impacts for two budgeting years or more. In 2016, Garut Regency, with the facilitation of the National Institute of Public Administration (NIPA), initiated the Innovation Laboratory for one year for the design and implementation. Therefore, reviewing the achievements and sustainability of innovation in Garut Regency took at least two years.

In the United States, with the data from four years of implemented innovations in the early 1990s, S. Borins (2000) found that staff or career public servants initiated PSIs earlier before politicians and managers. At the end of the 1990s, middle managers were noted as the frequent initiators (S. Borins, 2000). The study also shows that internal challenges drove innovations. Innovations initiated by staff were associated more with the support given by their direct managers rather than political and higher officials. Meanwhile, innovations initiated by managers were associated with support from political and business officials (S. Borins, 2000). Although the study comprehensively describes sources of hundreds of innovations in the US, it did not provide empirical data on policy interventions or institutions that prompted entrepreneurial public servants to innovate in the long run.

De Vries et al. (2016) indicated there are several antecedents of the process of PSI, such as 1) external demands, which include the demands of the media and policy community, collaboration with other agencies, and competition with other organisations;

2) organisational conditions, which include lack of resources and infrastructure, leadership, opportunities for learning within the organisation, organisational conflict, organisational structure, and innovation incentives; 3) individual conditions in the organisation, which include employee independence to make a decision, employee mobility, competence, creativity, age, gender, satisfaction with performance, acceptance of innovation and understanding of organisational norms. De Vries et al. (2016) did not elaborate on which aspects contribute to innovation continuity, diffusion and adaptability. However, they highlighted the organisational culture that favoured innovation.

Using Likert scale instruments in some north-western European countries, van Acker and Bouckaert (2018) also suggested that organisational cultures are crucial for innovation continuity. These included a culture of feedback, accountability, and learning that contribute to the continuity of innovation. The cultures were manifested in talking about disagreements openly, giving constructive criticism in discussions, not penalising mistakes, encouraging experimentation, providing transparency platforms, fostering continuous improvements, and monitoring (van Acker & Bouckaert, 2018). Nonetheless, these findings from European countries may not apply to Asia. Hierarchical and communality values are more prevalent and influential in public sectors, so open and interactive communication has to be encouraged between managers and staff (H. J. Lee et al., 2020). The culture of learning may also be different. A study conducted in Indonesia found that local knowledge applied as the primary value in public service delivery contributes to PSI continuity (Savira & Tasrin, 2018). Another study suggested the key to PSI continuity in Indonesia is meeting local needs (Permatasari & Dellyana, 2021). Meanwhile, in South Korea, participatory planning from the initiation stage enabled participants to learn from each other (H. J. Lee et al., 2020).

Other than organisational cultures, shared goals are important for PSI continuity (Cinar et al., 2022), which can be fostered through bottom-up and top-down collaboration. The different contexts might require different ways to collaborate, such as bottom-up and top-down, and can be contextual in different countries; however, the studies that define the best way to collaborate are still insufficient (Cinar et al., 2022). Collaborations in PSI can be implemented in at least three forms. The first is user-oriented collaboration. This form of collaboration considers user needs. For example, in building applications for citizens or farmers, innovators should consider users' digital literacy, their system, and their needs to thrive (Dutta et al., 2021; Simelton & McCampbell, 2021). Stakeholders can be supported with resources and knowledge to solve continuity problems and meet their needs (Grunwald et al., 2021; Permatasari & Dellyana, 2021). The second is agile processes of publicprivate partnerships through open innovation platforms, open data platforms, participatory planning, and service integrations (J. H. Lee et al., 2014). The third is participatory action research to define local potential and develop local people's competency (Rampisela et al., 2018). Collaboration with citizens involving local leaders and local knowledge and inculcating creative culture can also increase the continuity of innovation (Savira & Tasrin, 2018). To support continuous innovation, it is also important to build reciprocal, open, and decentralised cooperation (Karlsson & Björk, 2017).

Policy support requires a collaboration mechanism, which includes e-government system regulation, the obligation to implement e-government platforms, and the adoption of an impactful e-government platform on a larger level. These are necessary to provide legitimacy when stakeholders and innovator teams experience dynamic changes (Lu &

Marcelo, 2021; Sufianti et al., 2021). Sufianti et al. (2021) put institutionalisation as a way to disseminate the culture of innovation through policy implementation. In doing so, it is necessary to consider the overall framework, process, and measurement of innovation. Thus, the dimensions of the innovation institutions consist of policy support for innovation cultures, innovation training, recognition, and rewards (Moussa et al., 2018). To sustain innovation, human resources competencies can be improved by sharing knowledge between the public and private sectors (Ponsiglione et al., 2018) through assignment programs, mentorships, workshops, seminars, and training (Ononye & Igwe, 2019). A study in an African context recommended knowledge sharing in the public sector in collaboration with other sectors (Ononye & Igwe, 2019).

Another crucial aspect of policy support is leadership. PSIs require transformative leaders who support the team (Maharani & Andhika, 2021). A survey involving public service managers revealed that leadership drives innovation and external collaboration (Lewis et al., 2018). Leadership in PSIs has several manifestations, such as the capability to motivate, encourage learning, decentralisation, and quality management, strengthen values; and think strategically (Lewis et al., 2018; Marques et al., 2021). This study follows Demircioglu's (2021) leadership operationalisation that did not only limit leaders to formal positions but also other innovation initiators, such as employees. Those aspects mentioned above are expected to deliver continuity of public values in PSIs, such as increasing effectiveness, increasing efficiency, solving community development problems, and increasing customer satisfaction and public and private participation.

The studies above have recommended aspects for identifying innovations. Still, these studies have limitations in selecting literature bias and do not describe the sector context and organisational level. For instance, De Vries

et al. (2016) did not explore further how the antecedents in PSIs contribute to the continuity. Van Acker and Bouckaert (2018) did not explore the mechanism and what source of innovation fosters favourable organisational cultures for innovation continuity, even though the study mentions leadership as a complementary factor. Additionally, in Asian contexts, Savira & Tasrin, (2018) and H. J. Lee et al., (2020) did not explore other aspects that contribute to PSI continuity other than using local knowledge and a participatory approach. Furthermore, an investigation in China by Zhang and Zhu,(2020) questioned if bottom-up or topdown approaches can stimulate innovation adaption. From previous studies above, this study aims to fill the gap by investigating PSI

Table 1.
Aspects of PSIs' Continuity for Qualitative
Coding

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Aspects	Sub-aspects			
Antecedents (encouraging or challenging events for PSI)	Budget constraints, policy demands, e-government demands, community demands, external inspiration			
Source of innovation	Managers, staff, best practices from other organisations, consultant recommendations, and service users			
Collaborations	The forms of collaborations, trust- building mechanisms, and roles			
Leadership and policy support	Styles of leadership and types of support; compliances and the strength of the policy, and rewards; other institutional supports			
Organisational culture	Culture of feedback, accountability, and learning			
Impacts	Increase access to information, increase user satisfaction, speed up service processes, improve public welfare, and expand user reach			

Source: Authors' summary from previous studies (Cinar et al., 2022; De Vries et al., 2018; Dutta et al., 2021; Karlsson & Björk, 2017; H. J. Lee et al., 2020; Lu & Marcelo, 2021; Moussa et al., 2018; Ononye & Igwe, 2019; Permatasari & Dellyana, 2021; Ponsiglione et al., 2018; Rampisela et al., 2018; Simelton & McCampbell, 2021; Sufianti et al., 2021; van Acker & Bouckaert, 2018)

continuity in Indonesia using some aspects, as shown in Table 1.

Method

To investigate the mechanism and characteristics of different PSI initiators in health service provisions, this study employs a multi-case study method using a qualitative approach, with data collected through interviews with initiators of 11 PSI in CHCs in Garut Regency with at least two years of experience. The multiple case study method is a comparison of several cases to obtain a comprehensive description of the differences and similarities of several phenomena (Sinha & Hanuscin, 2017). The multi-case study allows scholars to answer what, why, and how questions and reach a more robust (Aberdeen, 2013).

This study aims to comprehensively understand all continuing PSI in healthcare services in the Garut Regency. The qualitative approach is useful for investigating informants' perceptions and gaining further understanding, particularly in innovation continuity and mechanism (Dangelico & Pujari, 2010). CHCs were chosen as unit analysis in this study to describe cases in a crucial sector that plays an important role in citizens' well-being and development index. Initially, researchers gathered data on PSIs in all departments in the Garut Regency from 2015 to 2022 from the Bureau of Organizations and Governance in Garut Regency. This study further sorted out the data by limiting PSIs in CHCs lasting more than two years. After going through the innovation identification process and calling all the initiators for screening, 11 innovations from health centres in Garut Regency were identified to have run their innovations since 2018 or before 2018 to 2021. This study focused on the innovation initiators to understand the process of innovation performances. Therefore, all of the interviewees were innovation initiators, both staff, such as midwives, facilitators, and

sanitarians and formal leaders, such as heads of CHCs. The complete description of the unit of analysis is described in Table 2, which shows two types of innovations from CHCs: PSIs initiated by staff and PSIs initiated by formal leaders. This study compared organisational factors that represented PSI continuity between CHC innovations that were started bottom-up and top-down.

This study uses two types of instruments: interviews and secondary data. Creswell and Poth (2016) recommended six types of data sources in case studies: documents, archives, structured and unstructured interviews, direct observations, participatory observations, and physical artefacts. Primarily, the interviews in this study explored the identification of

innovation and innovation continuity. The researchers compiled the list of interview questions based on the aspects recommended by previous studies regarding the continuity of innovation, as described in Table 1. The secondary data collected in this study are the leadership training change project reports, the Garut Regency Medium-Term Development Plan (RPJMD), the Garut Regency Regional Government Work Plan (RKPD), and the Strategic Plan and accountability report of each regional department (PD), as well as regional policies.

At the data analysis stage, Creswell and Poth (2016) suggested some steps in case studies, namely combining the transcripts, coding the transcripts, and interpreting the

Table 2.
The List of PSI and Community Health Centres Involved in This Study

No.	The name of The Innovation	The Name Community Health Centre (CHC)	Initiator	Covered Services Including	Year of Accreditation by the Ministry of Health
1	Integrated Healthcare Services for Teenagers (Posyandu Remaja)	Cibatu CHC	Staff	IC, PONED	2019
2	Mental Health Volunteers (Relawan Sehat Jiwa/ Relasi)	Cibatu CHC	Staff	IC, PONED	2019
3	Integrated Movement for Antenatal Care (<i>Gerakan Rempugan Antenatal Bersama</i> / <i>GRAB</i>)	Sukasenang CHC	Staff	-	2018
4	CHC Motorcycle Delivery and Electronic Services (<i>Top De Amor</i>)	Cihurip CHC	Staff	PONED	2018
5	Scheduled Informal Community Hearing on Health Issues (Ngobrol Rahayat Ameh Sehat Bari Aya Juntrunganna/ Ngobras)	Citeras CHC	Staff	-	2017
6	Pre-marital Health Certification (Nikah Sehat dengan Imunisasi/ Nisa De Imut)	Siliwangi CHC	Formal leader	-	2019
7	Free weekly medical check-up for non- transmissible diseases every Friday (Pemeriksaan Penyakit Tidak Menular Ba'da Jumat/ Papadamat)	Siliwangi CHC	Formal leader	-	2019
8	Awareness Movement to Build Household Hygienic Latrines (<i>Gerakan Sadar Bangun Jamban Keluarga</i> / <i>Rasa Bangga</i>)	Sindangratu CHC	Staff	IC, PONED	2017
9	Islamic Student Health Awareness Movement (Laskar Santri Peduli Kesehatan/ Sapake)	Bayongbong CHC	Staff	PONED	2018
10	Community-based pick-up service for pregnant mothers (<i>Jemput Antar Ibu Hamil/ Jamilin</i>)	Kersamenak CHC	Formal leader	-	2019
11	Integrated Community-based pick-up service for pregnant mothers (Laskar Jelanis)	Lembang CHC	Staff	PONED	2018

Note: IC provides facilities for in-patients' care, PONED provides facilities for obstetric, emergency, and neonatal services

Source: Interview Results, Secretariat Office, and Department of Health, Garut Regency, 2021



coding based on the guided literature review. Hence, this study merges all of the interview transcripts on Atlas.ti coded the transcript into some sub-aspects guided by the literature review, and interpreted the data based on the research aspects and the research question. Finally, this study presents the analysis in a table of comparison. The interpretation of this study is chronological, direct, and guided by the literature review. This study is also open to new findings that might contribute to PSI continuity other than what has been explained in the literature review. This study used Atlas. ti software to help organise and document transparent interpretations. Conclusions, policy implications, and verification are drawn by looking at the data following the formulation of the problem that has been stated.

Results

The interview results showed that both PSIs initiated by formal leaders and staff were dominantly motivated by low organisational performance. For staff-initiated PSIs, the low organisational performance was the most frequent reason mentioned by informants, followed by the expectations from the grassroots community, the lack of infrastructures to deliver healthcare services in remote areas, and the policy mandatory to innovate both from the Ministry of Health and the Regency Mayor. For leadersinitiated PSIs, the only motivation that stimulated PSIs was low organisational achievements. Besides low organisational achievements, frontliners-led PSIs may be prompted by intensive interaction with the community or users and mandatory innovation.

For front-liners, routine visits and informal interactions with users are dominantly marked as an enabling aspect for collaboration, followed by building a memorandum of understanding with hospitals, schools, and other departments, community engagements, and capacity development such as delivering extension programs for reproduction and

mental health for teenagers. One staff mentioned that because the program of reproductive health consultation was conducted at school once a week, high school teenagers were more aware of their reproductive and mental health. The consultation was seen as a safe place for teenagers to tell the staff about their problems. As a result, more teenagers engage in the consultation program and become change agents. The engagement helped the staff to understand users' problems and needs better. Therefore, the program stimulated innovations to prevent anaemia and teen pregnancies. For the PSIs initiated by formal leaders, capacity development was the most frequently mentioned in the interview to initiate collaborations, followed by community engagements and establishing a memorandum of understanding (MoU) with external organisations.

Even though front-liners were reported to interact with users more frequently than managers, the dominant stakeholders that engaged in staff-led PSIs were other local government organizations, citizens that played roles as agents, volunteers, and users were marked as the second most frequent stakeholders, followed by local figures, financial intermediary, non-government organizations (NGOs), local entrepreneurs and international aid organizations. For leaders-initiated PSIs, other local government organizations were reported as the dominant collaboration partners.

Other than the types of stakeholders engaged in collaborations, PSI continuity was associated with policy support. Formal team assignments, recognitions and promotions, and infrastructure support appeared to be the dominant policy support for staff-initiated innovations. For formal leader-initiated innovations, informants expressed that recognition motivated them most. Lastly, other than policies as formal institutions, the culture of feedback as informal institutions

has also contributed to PSI continuity. This is built through routine internal discussions and integration with incumbent programs.

Discussions

Antecedents of Innovation

Five antecedents of innovations were found in this study: community demands, unachieved development targets, lack of infrastructure, mandatory regulation to perform PSI, and low participation in health services. Those five events corroborated by De Vries et al. (2016), suggesting that external demands, organisational factors, and individual conditions stimulate innovations. Among those supporting events, informants frequently mention improving the achievements of development targets. Informants reveal there was still a high number of mother and infant mortality and a high number of infectious diseases. In addition, many households did not own basic sanitation facilities like latrines. Those problems arose because those villages were remotely located, and there were no resources of reliable transportation to reach them. The findings showed three of the informants from leaders-initiated PSIs acknowledged that unachieved development targets prompted their innovation programs. One of them also perceived that the low participation of citizens in an early detection program for infectious diseases was also the reason that stimulated the innovation. A lower percentage of actors in staffinitiated PSIs perceived that low development achievements stimulated their innovations. This finding indicated that formal-leader PSI initiators consider organisational performance goals more than staff-initiated PSI.

The second most-cited antecedent was the demand from the citizens, such as teenagers who were anxious about family problems and their reproductive health problems. In most villages, talking openly about reproductive health was seen as a taboo topic. As a result, problems related to reproductive health experienced by teenagers were not reported. Staff-initiated PSI interviewees explained that the more frequently they interact with the citizens, the more problems and demands they address because the citizens trust them to talk about their experiences. Three of the informants from the staff-initiated PSIs were stimulated by the community's demands. By contrast, none of the formal leaders expressed their perceptions of the citizens. Staff-initiated PSI interviewees also expressed there was a mandatory task to initiate PSIs in each CHC. Their initiatives were registered as the CHC's innovation. However, the lack of infrastructure made it challenging for them to deliver fast public service. This phenomenon demonstrates that staff-initiated PSI interviewees were more familiar with the citizens and their problems, even though they are not related directly to the organisation's goals. Regarding the source of innovations, the findings also align with De Vries et al., (2016), stating that innovations may come from managers and staff. This study adds a new finding that staff-initiated innovations are more likely to be motivated by their frequent interactions with users, which was not observed by S. Borins, (2000).

Collaborations

Four ways to strengthen collaborations found in this study were routine visits, MoU, community engagement, and capacity development. The findings indicate that different sources of PSIs strengthen social capital differently. In the case of Scheduled Informal Community Hearings on Health Issues (Ngobrol Rahayat Ameh Sehat Bari Aya Juntrunganna/Ngobras), routine visits through CHS programs that were not intended to improve hygiene could facilitate informal talk with the citizens about their problems with sanitary practices. The informant said addressing problems, increasing health awareness, and creating solutions through routine informal talks was easier. Often, citizens were reluctant to speak at formal events.



Another informant from Integrated Healthcare Services for Teenagers also noted that initially, the program aimed to educate teenagers about nutrition. Still, then the participants revealed other problems, such as unwanted pregnancies and depression among teenagers. Therefore, the program started as a support group with experts for teenagers and has expanded to schools with student volunteers. Regarding community engagement, PSIs, initiated by staff and leaders, engage several stakeholders in facilitating the citizens and monitoring the programs' implementations.

Formal leaders seemed to provide capacity development for their employees and external stakeholders, or they networked with external stakeholders to provide competency development. For instance, USAID provided additional training for innovative health services to support CHC Motorcycle Delivery and Electronic Services innovation for pregnant mothers.

In terms of involving stakeholders, PSIs, both initiated by staff and formal leaders, mostly involved stakeholders from the external CHC but were still within the government organisations. The findings show that staffinitiated PSIs received more support from the citizens, NGOs, local entrepreneurs, and international aid. They approached the citizens through informal meetings and routine interactions. The finding suggested that direct, informal, and routine interactions with citizens can foster innovative ideas and support. Leaders-initiated PSI get more support from other government organisations and a respected informal local leader such as a person who is trusted most in the community.

The findings align with Dutta et al. (2021) and Simelton and McCampbell (2021), stating that user-oriented collaboration was associated with continuity. However, unlike Rampisela et al. (2018) and Savira and Tasrin (2018), most PSIs' collaboration mechanisms found in this study were still at the stage of

program planning and problem identification, and most PSIs did not engage citizens actively to implement the innovations. Citizens were seen as customers, not active collaborators. Only in one staff-initiated PSI were citizens engaged as change agents.

Leadership and Policy Supports

Institutional support found in this study includes formal team assignments, further collaborations to replicate innovative ideas, promotions, recognitions, infrastructure, and clear Standard Operating Procedures (SOP). The findings demonstrate that all formal leaders-initiated PSIs received recognition, for instance, advice from their supervisors and innovation awards. Front-liner informants expressed that their supervisors allowed them to explore innovative ideas by connecting to other actors who could help with the innovation implementation. The finding added more detailed suggestions from what Lewis et al. (2018) and Marques et al. (2021) have offered: motivating leaders could be assessed from their willingness to help and connect with resources. Some staff members who initiated PSI were engaged in activities that fostered promotion. Other staff-initiated PSIs gave formal team assignments to guarantee that the PSIs would continue even though the people were moved to other organisations. Other forms of support include infrastructure support and recognition, such as being replicated by other CHCs, winning innovation awards, and moral support. However, one staff PSI initiator described lacking policy support, particularly from other government organisations.

Staff-initiated PSIs appeared to need more formal team assignments than formal leader-initiated PSI. One informant perceived that they needed a formal assignment to involve other employees in the innovation program to make the innovation continue and legitimate. The data represented that staff might need more experience and encouragement to

motivate others, strengthen values, manage quality, encourage learning, and build trust. Encouraging staff to initiate innovation could be a chance to train staff's leadership and networking.

Organisational Culture

Both staff and leaders initiated PSI, which showed that a culture of feedback helped the initiators to reflect and improve innovation implementations from different perspectives across government organisations and stakeholders. Staff-initiated PSI appeared to be more frequently exposed to the culture of feedback through a more frequent meeting with stakeholders. Meanwhile, leaders-initiated PSIs were more likely to get feedback when the innovation was integrated into other existing programs. An interviewee with an informant from a staff-initiated PSI also described that a culture of feedback is important to sustain the implementation, where the initiator does other assignments. This aligns with Frees et al. (2015) and van Acker and Bouckaert (2018), suggesting that a culture of feedback enables consistent learning and corrections of achievements. The informant engaged colleagues and shared the tacit knowledge and documents needed for others to verify. A culture of feedback was also encouraged by another initiator by asking the citizens to give feedback. Scheduling regular informal meetings was also helpful in fostering a culture of feedback.

One interviewee from a staff-initiated PSI felt they were allowed to experiment, although initially, he did not report the innovation to the supervisor until the results were clear. Other forms of organisational cultures that support innovation found in this study were encouraging more innovation expansion, frequent surveys for problem assessments, and integration with another program, such as an annual survey.

Impact

Strengthened social capital among colleagues and with other government organisations and citizens appeared to be a more pronounced impact mentioned in staff-initiated PSIs. One informant stated that social capital was fostered through a culture of feedback, including institutionalised meetings and community engagement. Even though staff-initiated PSIs were prompted mostly by community demands, informants stated their initiations have contributed to an increase in development target achievements, for instance, increasing immunization participation among the citizens, decreasing number of health problems among pregnant mothers, fewer children infected by Scabies, and more latrines installed.

The formal leader-initiated PSIs were stimulated by goal achievements. In the second year of the innovation implementation, formal leaders described that their initiation increased citizen satisfaction. In addition, health awareness increased income for local citizens and the achievement of development targets. There were not many differences regarding the impacts of staff-initiated and leader-initiated PSIs. Besides, some staff said innovations helped them to learn more about work procedures and guidance and also to deliver faster public services by understanding the problems better.

Cross Comparison Analysis

Table 3 demonstrates five aspects of PSI continuity among different initiators. In terms of stimulating events, collaborations, leadership and support, organizational cultures, and impact, staff-initiated PSIs appeared to be more varied than formal leaders-initiated PSIs. Antecedents of PSI continuity were not only external demands, organizational conditions, and individual conditions, but this study also found that looking at organizational challenges in achieving its development targets can be a prevalent antecedent too. Formal



leader-initiated PSIs appeared to consider organizational goals as driving events, while staff-initiated PSIs also consider community demands or are stimulated by problems experienced by the citizens the staff meet routinely. Direct interaction with citizens and customers stimulates innovation ideas and may make innovations continue for years. The finding also explained that staff-initiated PSIs received more support from citizens and citizen engagements, NGOs, local entrepreneurs, and international aid in the collaboration aspect. This study indicates that staff-initiated PSIs are more likely to receive support from outside of the organizations. However, they still needed to adjust to top-down strategies to receive more institutional contributions. While staff-initiated PSIs need more formal team assignment letters to implement the innovation, formal leaders

need to coordinate informally with their staff to implement PSIs.

Public organizations appeared to perform continued innovations with a culture of feedback. This study demonstrates a culture of feedback is essential both in staff and formal leaders-initiated PSIs. The culture of feedback among staff-initiated PSIs seemed to be more frequent than in formal leadersinitiated PSIs. Some staff expressed that routine and informal interactions with colleagues and citizens encourage cultures of feedback. Even though cultures of feedback appeared more in staff-initiated PSIs, leaders-initiated PSIs seem to receive more recognition and support from other government organizations. Therefore, staff-initiated PSIs need to adjust their innovation with formal leader strategies to obtain more support.

Table 3.
Cross Comparison Analysis among PSI with Different Initiators

Aspects	Staff-initiated PSI	Formal leaders-initiated PSI
Triggering Events of Innovation	Unachieved development TargetsCommunity demandsLack of InfrastructurePolicy demands	Unachieved development Targets
Collaborations	 Informal routine meetings with citizens MoU Community Engagement Capacity Developments 	Capacity developments
Stakeholders	 Engage more external stakeholders and active citizens. 	 Engage fewer external stakeholders and active citizens.
Leadership and Policy Supports	 Formal team assignments, and recognitions. Further collaborations or innovation adaption, Promotions Clear SOP 	 Recognitions
Organizational Culture	 Culture of Feedback Creating New Innovations A culture of Learning allows experimentation 	
	Frequent surveys of problem assessmentsIntegrating the PSI with another program	Integrating the PSI with another program
Impact	 Increased health awareness Increased development target achievements Decreased health problems Earlier identification of disease leads to the prevention Faster service delivery Guided work Increase of income Replication Strengthen social capital 	 Citizen satisfaction and expanded services Earlier identification of disease leads to the prevention Increased health awareness Increased development target achievements Increased income

Source: Researchers' Analysis, 2022



Conclusion

This study highlights that in the context of CHCs in Indonesia, PSIs were more likely to be stimulated by external environments, such as policy demands, interaction with the community, and unachieved development targets. The scope was bigger when PSIs were initiated by staff as they interacted with citizens directly. This explanation might be relevant also to the primary target of an organisation. The finding can be an alternative explanation to De Vries et al. (2016), stating that the antecedents of PSI are related to the networks of public organisations and frequent interactions of the organisation members.

S. Borins (2000) found that staff are more supported by direct managers, and agency heads are more supported by external higher officials. This study found that staff could also receive more extensive support and collaboration from citizens and international organisations. The frequent interactions contributed to the support for the innovations. This finding encouraged public servants to interact more with external stakeholders, particularly the primary participants, as bottom-up approaches can stimulate more innovative ideas.

This study also contributed to the gap identified by van Acker and Bouckaert (2018), which states that, besides the culture of feedback, both staff and leaders may facilitate more PSIs when they interact with external stakeholders and primary beneficiaries more frequently. Eventually, this research confirms that failing in the first year of PSI implementation did not mean the PSIs have failed. With the encouragement of bottom-up innovations, collaborations, and a culture of feedback, PSIs may take some time to contribute to improving service deliveries and increasing development targets.

This research encourages public organisations to foster more direct interactions with their citizens and strengthen cultures of

feedback by engaging more stakeholders in PSi implementations. However, this study was limited to the qualitative aspects of PSI initiators' perceptions. Therefore, the descriptions and comparisons were derived only from PSI initiators in the organisations. This study did not evaluate how effective a policy is and how observable impacts benefited directly from the citizens' point of view. Therefore, future studies may experiment with citizens as research participants to obtain more comprehensive and empirical results.

Author Contribution Statements

Pratiwi, Shafiera Amalia and Agus Wahyuadianto conceived the presented research idea and gap. Pratiwi, Shafiera Amalia, Agus Wahyuadianto, Masrully, and Candra S. Nugroho contributed equally to the method development, data collection, categorisation, and analysis. All authors discussed the results and contributed equally to the final manuscript.

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