
CO-CREATION AS PUBLIC SERVICE INNOVATION IN BANDUNG CITY

¹Ezra Khagi Himura, ²Tomi Setiawan

^{1,2} School of Social and Political Sciences, Padjadjaran University

email: ¹ezra20002@mail.unpad.ac.id, ²tomi.setiawan@unpad.ac.id

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ABSTRACT

This research describes co-creation as innovation in public services. Co-creation places the citizen not only as beneficiaries but also as collaborators. This research aims to describe the process of co-creation in The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City through the creation of an innovation environment, and the extent of citizen engagement in the co-creation process based on the engagements of explorer, ideator, designer, and diffuser. This research used a qualitative approach with data collection techniques through study literature, observation, and interview. Data analysis was carried out through data condensation, data display, and data verification. This research found the application of co-creation as service innovation in The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City through the creation of an innovative environment was quite good and the engagement of the citizen in the co-creation of The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City was still focused on citizen engagement as explorers and ideators, while engagement as designers and diffusers was relatively still limited. The recommendation from this research is that engages the citizen by strengthening their role as designers and diffusers so that the citizen can be fully engaged in implementing the services provided.

A. INTRODUCTION

Public services are currently important, considering that the implementation of public services can accommodate various needs of the citizen. In Law Number 25 of 2009, it is stated that public services are regulated in statutory regulations to meet the needs of services to the citizen, which include goods, services, and administrative services (Law Number 25, 2009). Public services must be of high quality because through public services the rights public to receive protection, their preferences and values are respected, and their voices heard can be upheld. If malpractice occurs in services, the citizen also has

the right to evaluate, reject and prosecute anyone who has political responsibility as a public services provider (Kurniawan, 2017).

The current era of digital technology has greatly influenced the development of public services, the government is no longer taking the dominant role holder in public services. Synergy, compromise, interaction, negotiation, and collaboration are needed with the citizen as users of public services (Osborne et al., 2013). The citizen expects various conveniences in meeting their needs, including in obtaining public services, because currently public is used to digital technology. Digital technology is very important in providing broader benefits and access to services. With e-government and public innovation, many public service providers are looking for ways to use digital technology in their service systems (OECD, 2020). Currently, public services are required to be able to compete. Public service providers can only survive if they can create effective and creative ways of dealing with various public problems through innovation (Hamdam, dkk., 2020).

Ministerial of States Apparatus Utilization and Bureaucratic Reform Regulation Number 7/2021 explains that public service innovation is a breakthrough type of public service through creative ideas and modification/adaptation (Ministerial Regulation Number 7, 2021). Public service innovation can also be defined as a process of developing and implementing new ideas to increase and/or create public value. Departing from that definition, public service innovation is emphasized on three attributes, namely novelty, development and implementation, and the innovation environment (ecosystem) (Chen et al., 2020). Novelty refers to various new ideas to be applied in public services (Torugsa & Arundel, 2016). Development and implementation highlight innovation as a process and need to be informed to all parties in the innovation environment. The innovation environment refers to the actors who need to be engaged in co-creation (Lusch & Nambisan, 2015). The need to do innovation in public services is marked by the fact that public service providers are currently facing significant challenges. This is indicated by the need to provide better services with relatively fewer resources. Communities need public services that are integrated, user-friendly, and easily accessible. With these challenges, the active engagement of service users as co-creators is an innovative solution for improving the quality of public services (Torfing et al., 2019).

Co-creation in public services can be understood as a process of solving problems, challenges, or shared tasks to increase public or service value through the constructive exchange of various kinds of ideas, competencies, knowledge, and resources (Torfing et al., 2019). Co-creation is a relatively new innovation strategy and can be seen as a specific form of a collaborative process between public service providers and the citizen (Voorberg et al., 2015). Co-creation requires public service providers and citizens to be engaged in the service innovation process. Co-creation emphasizes shifting from service delivery based on professional knowledge to customizing services by listening to experts. The citizen is not only positioned as beneficiaries but also as collaborators whose needs must encourage initiatives to get engaged in designing and implementing services (Jalonen et al., 2021).

In the context of digital transformation, co-creation is identified as an accurate strategy for transforming digital technology-based services (Dugstad et al., 2019). Co-creation implemented through the use of digital technology can reduce the gap between service providers and the citizen (Jalonen et al., 2021). Utilization of digital technology can increase the citizen's intention to take part in the co-creation process (de Jong et al., 2019). In co-creation as a service innovation process, the citizen is engaged as explorers, ideators, designers, and diffusers. Explorers mean that the citizen can contribute to the process of identifying problems based on understanding the context of public services, helping find problems through public data, or articulating problems (leading to practical solutions). Ideators mean that the citizen can contribute by suggesting ideas to improve services or solve existing problems or provide ideas (as solutions) to address broader problems. Designers mean that the citizen can contribute by helping turn innovative ideas into solutions that can be implemented or by developing "design sketches" that can be used as solutions. Diffusers mean that the citizen can

contribute by helping each other to adopt or diffuse new services or helping each other between communities to understand the perceptions of new services (Nambisan & Nambisan, 2013).

Research on co-creation in the context of public services in Indonesia is still rare. However, many international journals have conducted this research. In Slovenia and Croatia, co-creation in public service is considered a promising breakthrough in forming strong relations between the state and its communities. But, if the service provider organization is not sufficiently prepared to implement co-creation, the implementation of co-creation may fail (Hržica et al., 2021). So that the use of digital technology needs to be carefully planned because it can have an impact on the co-creation process. By utilizing digital technology, it can build direct interaction between service providers and the citizen, bring resources to the service, motivate the citizen to participate in co-creation, and share power in decision-making between the citizen and the service provider organization (Lember et al., 2019). Prototyping of online co-creation tools can be done through web portals (Bharosa et al., 2020). In Slovakia, it was found that co-creation as innovations were mostly initiated by non-governmental parties. Some local governments choose to be neutral or even negative towards innovation proposals created together (Meričkova et al., 2015).

The role of The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City is very fundamental in population services for the citizen, it must make adjustments to existing developments, namely innovating services by getting closer to the citizen (Fadhil, Muhammad Ilham, 2019). The Population and Civil Registration Agency of Bandung City are one of the agencies that are innovating by utilizing digital technology in its service system. Online service innovation at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City is realized by making various services both through the website and through applications. Administration services through the online system is its form of service innovation created to provide services to the citizen of Bandung City in making population documents. Complaints, criticisms, and suggestions to The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City can also be made through online media. Concerning co-creation, it works when public service providers improve the quality of public services with good results through the participation and insight of the citizen. Including improving the quality of complaint-handling procedures and service completion (Allen et al., 2020).

The innovations carried out by The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City face various problems. The citizen is still confused about how to make the population documents because they do not understand the flow of services, so The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City seems to have not fully anticipated the goals of the policy implementation. In addition, due to limited facilities and infrastructures, such as seating in the waiting room and parking area, the innovations that have been carried out have not been fully implemented. Regarding the guarantee of time to provide certainty for the completion of document processing, there are still various complaints from the citizen (Sabilla, 2021). Another problem is indicated by The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City which has not been fully successful in disseminating information about online service innovations to the citizen (Ota, 2019). So, it indirectly shows that The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City has not fully heeded the consideration of the opportunity factors for the success of that innovation. Remembering that to increase the chances of success of co-creation, public service providers need to evaluate their readiness or maturity before implementing it, because co-creation is not just copying innovative practices from traditions that are currently being carried out (Hržica et al., 2021).

B. METHOD

This research aims to explain and analyze the implementation of co-creation of The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City by focusing on how the service innovation environment through strengthening transparency, communication, collaboration, and strengthening

supervision and improving service quality and how far the citizen is engaged as explorers, ideators, designers, and diffusers in co-creation of services. This research used a qualitative approach with a descriptive design. Qualitative research is conducted by exploring and understanding the meaning of research problems by collecting data that reflects the views of participants on the research problem being studied (Creswell, 2014). Data analysis of the results of this study is outlined in the form of a description. In a descriptive design, research is conducted by analyzing the data obtained and then describing it (Babbie & Roberts, 2018).

Data collection was carried out through literature studies, observations, and interviews. A literature study is carried out by building theory and serves as a basic reference for this research. Obtaining data through literature study is used as a theoretical basis that guides conducting this research. Observations were made by conducting research through online pages and direct service at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City location. The interviews used a purposive sampling technique with the selected subjects from The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City, namely the section head and three staff in the field of service innovation as the subjects of this study. The interviews were also conducted with snowball sampling technique to eight citizen service users who were at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City location. This research used primary and secondary data. Primary data was obtained through observation and interviews conducted directly at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City, and secondary data was obtained through various documents that are closely related to service innovation and citizen engagement in the context of co-creation.

Data analysis was carried out through three steps, namely data condensation, data display, and data verification (conclusion). Data condensation is the process of selecting or simplifying the data obtained for further presentation of the data. Data display refers to data that has been condensed in order to be able to verify or make a conclusion on the data obtained as well as being the final process of data analysis (Miles et al., 2013).

C. RESEARCH FINDING AND DISCUSSION

Creating an Innovation Environment in the Co-Creation Process

In the co-creation process, the innovation environment is one of the fundamental things that need to be developed (Nambisan & Nambisan, 2013). An innovative environment in the context of co-creation can be defined as an effort to build a transparent organizational structure to build collaboration with the citizen or stakeholders to make service innovation successful and solve various problems, including conducting socialization and coordinating services (Lusch & Nambisan, 2015). The creation of an innovative environment can be done in many ways, one of which is through transparency, collaboration, and good communication (Irianti, 2015). Supervision is also needed as the first step of co-creation as a service innovation (Bharosa et al., 2020).

a. Information Transparency

Law Number 14/2008 concerning public information disclosure states that every user of public information can access public information because public information should be transparent (Law Number 14, 2008). In the organization, transparency is not possible as a whole considering that every organization has its own privacy (Weissinger et al., 2004). The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City have made efforts to be transparent in building an innovative environment. This is marked by the transparency of public information that is carried out. The beginning of transparency as a bridge for co-creation began with informing various data, service standards, and service submission requirements through a website which was then developed through other platforms by utilizing digital technology. In Law Number 14/2008 concerning public information disclosure, it is also stated that information relating to financial reports must be announced (Law

Number 14, 2008). The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City conducts transparency of financial performance through SIRUP (General Procurement Planning Information System).

The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City also provides a service mechanism for facilitating information that answers various public questions, namely through information distribution and complaint services. Complaint services can be done face-to-face by opening an information and complaint counter located at the office and can be through social media (Email, Twitter, Instagram, Fanspage, Lapor application, Whatsapp, and Video Calls). To improve the quality of information distribution, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City always upload the latest information via the website and social media.

b. Services Communication

Law Number 25 of 2009 Article 34 regulates the communication of public service providers. The article explains that in terms of serving the citizen's requests for public information, public service providers cannot convey information that is not correct and must be proactive in finding the fulfillment of the interests of the citizen (Law Number 25, 2009). In terms of communication, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City uses digital technology by communicating information through digital media, such as websites and social media. The data or information provided by The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City is closely related to population services.

In the context of personal communication, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City does it in various ways, one of which is by submitting the progress of population documents submitted by the citizen. However, the delivery of information about the progress of documents there is considered to be still not optimal, marked by information on the progress of the data which cannot be obtained every day so the citizens still have to come to the office to check the progress of the documents submitted (Gumilang et al., 2021). Based on the results of interviews conducted with one of the communities who became informants in this study, the digitization of services carried out does indeed have good intentions, but it also needs to be followed by good distribution of information to all elements of the citizen. Not a few communities do not understand the procedure of online services. As said by the informant, "Now, *Disdukcapil* services are completely online, it will be great if the socialization continues to be encouraged so that all people can know because there are still people who don't know the procedures." So, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City needs to be addressed immediately to show the seriousness of innovating services to the citizen.

Personal communication is also carried out by the citizen through complaints, criticism, and suggestions which then receive feedback from The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City by accommodating complaints, criticisms, or suggestions which are then transformed into service innovations. Whereas in the context of group communication, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City did it by socializing various service innovations to various parties and holding various meetings, such as a meeting entitled Evaluation of Population Data Utilization by inviting all institutions that have collaborated with them.

c. Collaboration

Based on the results of an interview with Policy Analyst Young Expert Sub-Coordinator of Service Innovation at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City, in terms of collaboration as the first step of co-creation, they collaborated with regional parties which include districts, sub-districts, hamlet, and neighborhood forums. In addition, they also collaborate with citizen organizations, such as the Indonesian Midwives Association (*Ikatan Bidan Indonesia*), Family Welfare Empowerment (*Pembinaan Kesejahteraan Keluarga*), and Youth Organization (*Karang Taruna*). Concerning the equal distribution of service information, The Population and Civil Registration

Agency (*Disdukcapil*) of Bandung City has collaborated with State Electricity Company Distribution Main Unit (abbreviated as *PT. PLN UID*) west java through outreach regarding population administration documents, especially those relating to birth certificates. They also collaborated with an example of an organization, namely the Indonesian Midwives Association (*Ikatan Bidan Indonesia*). Collaboration with IBI is carried out through cooperation in making population documents with three-in-one (3in1) products, namely Family Cards (*Kartu Keluarga*), Birth Certificates, and Child Identity Cards (*Kartu Identitas Anak*).

The Data Utilization and Innovation Program in the Population Sector to collaborate with other agencies also marks a collaborative effort carried out by The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City. In addition, collaboration is also carried out through receiving working visits from various parties such as *Disdukcapil*, Provincial Legislative Council (*DPRD*), and Regional Apparatus Organizations (*Organisasi Perangkat Daerah*). The purpose of receiving a working visit as a collaborative step is to hold discussions to improve the quality of population administration and civil registration services. As a form of good cooperation with the citizens/stakeholders, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City takes steps by always conducting evaluations through quarterly meetings and engaging stakeholders in making service announcements. Likewise, in service innovation meetings, stakeholders are always engaged, namely from the regional level (Neighborhood and hamlet forums), the Communication and Information Service (*Diskominfo*), and the Citizen Empowerment Institute (*Lembaga Pemberdayaan Masyarakat*).

d. Strengthening Supervision and Service Quality Improvement

In the process of developing the Clean and Serving Bureaucratic Area, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City made changes to various areas, one of which was strengthening supervision and improving the quality of public services. Supervision is needed as the first step in the journey of co-creation as a service innovation (Bharosa et al., 2020). Improving the quality of public services is inseparable from the innovations carried out. So, the service innovations carried out have a significant effect on the quality of their services. Quite a lot of communities have used that online media (Table 1).

Table 1. Online Service Users Based on Unique User

No.	Applications	Amount
1.	Salaman/Pemuda	204.431
2.	e-Puntun	9.278
3.	e-Spasi	262.261
4.	Anjungan KIA	1.388
Total		477.358

(Source: The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City)

The Citizen Satisfaction Index value for The Population and Civil Registration Agency (*Disdukcapil*) of Bandung in the second quarter of 2022 is counted at 90.96 (SKM Data of Bandung City). It means that the service innovation carried out has been quite good. Through service innovation by utilizing digital technology, the citizen of Bandung City can easily access population data. Innovation in population administration services is mentioned in Bandung Mayor Regulation Number 90/2022 which regulates the terms and methods for administering population administration explaining that

the Population Administration Information System (*Sistem Informasi Administrasi Kependudukan*) is a system by utilizing communication and information technology that is intended as a population information management facility in The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City (Bandung Mayor Regulation Number 90, 2022). Another example is an online administrative application, namely the Salaman. Salaman is an application made to make it easier for the public to process MCH documents, birth certificates, letters of moving out of Bandung City, and death certificates. The application was made because of evaluations of the citizen who want to get easier services.

With the Salaman application, the citizen does not need to come to the office to apply for population administration, but simply use a gadget and upload all the requirements, then the public will receive the product in pdf format to their e-mails. Through this Salaman application, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City is considered responsive in providing services, this can be seen from the responsiveness that is carried out so that the citizen of Bandung City is quite satisfied with the Salaman application service system (Ramadhan, 2020). This is indirectly an effort to make co-creation successful because the use of digital technology can increase people's intentions to take part in the co-creation process (de Jong et al., 2019). However, one of the service users who became an informant still complained about the online services, because it had been closed due to maintenance for quite a long time. While in the Covid-19 Pandemic situation these online sthe services are needed. So, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City needs to be more serious in overcoming such problems.

Citizen Engagement in the Co-Creation Process

Law Number 25/2009 which regulates public services can be used as a basis for citizen engagement in public services. The law emphasizes participatory service (Law Number 25, 2009). The law also regulates the relationship between service providers and the relationship between service providers and other parties. In general, co-creation at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City is carried out to increase the citizen's contributions to the services provided, facilitate the delivery of information about population administration, and facilitate the achievement of population administration targets. In Ministerial of States Apparatus Utilization and Bureaucratic Reform Decree (*Kepmen PAN*) Number 63/2003 which regulates the General Guidelines for the Implementation of Pubis Services, there is a provision that states citizen engagement is needed to create quality public service delivery (Ministerial Decree Number 63, 2003). The citizens in that context are all parties who get externalities from the services performed, which can be in the form of an institution, organization, group, individual, or other agency (Irianti, 2015).

Contribution can be interpreted as an engagement given by a party, in this case is the citizen (Irianti, 2015). The citizen's contribution to the co-creation of The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City has seen an increase, including in providing complaints, criticisms, and suggestions about the services provided. The handling of complaints, suggestions, and input from the public also has a service unit index of 3.907 (Table 2). That index is quite high, and at the same time marks the efforts of improving complaints, suggestions, and criticism procedures. Co-creation can be done when public service providers improve the quality of public services with good results through citizen participation and insight. Including improving the quality of complaint-handling procedures and service completion (Allen et al., 2020).

Table 2. Service Element Index

No.	Service Units	Service Index Units
E1	Requirements	3,553
E2	Procedures	3,720
E3	Service Times	3,667
E4	Service Securities	3,627
E5	Service Products	3,600
E6	Service Providers Competency	3,667
E7	Service Providers Behavior	3,700
E8	Facilities and Infrastructure	3,307
E9	Handling Complaints, Suggestions, and Feedback	3,907

(Source: *The Population and Civil Registration Agency (Disdukcapil) of Bandung City*)

In co-creation as a service innovation process, the citizen can be engaged as explorers, ideators, designers, and diffusers (Nambisan & Nambisan, 2013).

a. Citizen as Explorers

As explorers, the citizen of Bandung City contributes by analyzing the problem, including identifying service problems based on their (the citizen) experience, such as explaining the complicated requirements for making population documents and explaining data consolidation (undetected Family Card Numbers in other public services). But citizen engagement as explorers still needs to be improved. These efforts can be carried out by expanding the use of digital technology, so the public can exchange information about problems more effectively and efficiently (Nambisan & Nambisan, 2013). In addition, transparency is important to encourage citizen engagement as explorers, because the citizen can find information about The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City services. So, it will be easier to identify existing problems. The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City carry out transparency by providing various data, service standards, and requirements for submitting services through the use of digital technology.

b. Citizen as Ideators

As ideators, the citizen of Bandung City suggests various service ideas, which are a follow-up to problem identification, such as ideas for improving complaint services. It received good feedback from The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City, marked by the creation of the Providing Mobile Service (Mepeling). Mepeling is a service for making birth certificates with a ball pick-up system made with the Bandung City Budget by conducting more socialization through social media (Wulandari & Susanty, 2018). This service is carried out to bring services closer to the citizen of Bandung City. The Mepeling service as a service innovation carried out has a level of citizen satisfaction with a percentage of 82% (Nurrasyid & Karsa, 2020). The Mepeling service synergizes with the Ombudsman on the spot service, making it easier for the citizen to access complaint services. Furthermore, the results of the interviews showed that one of the communities who became the informant appreciated the Public Consultation Forum activities carried out by The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City. This activity is intended to accommodate public

aspirations related to the services performed. He hoped that these activities would not be carried out only symbolically, but could truly accommodate public aspirations. To further increase citizen engagement as an ideator, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City can add facilities that accommodate various perspectives of ideas from the citizen of Bandung City.

c. Citizen as Designers

As designers, the engagement of the citizen of Bandung City is still relatively limited, but it does not mean that The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City has closed the citizen's engagement in helping turn innovative ideas into solutions that will be implemented into service innovations. In the engagement as designers, the citizen can contribute to developing various innovative ideas to be implemented as a service. Citizen engagement as designers is also carried out by engaging the citizens who have expertise in designing services to solve problems that occur (Nambisan & Nambisan, 2013). In process of making service designs, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City cooperates with competent parties and is considered able to understand the direction of the services needed, one of the parties engaged is the Communication and Informatics Office (*Diskominfo*).

d. Citizen as Diffusers

Engagement as diffusers enables the citizen to support the diffusion of service innovation (Nambisan & Nambisan, 2013). As diffusers, the engagement of the citizen of Bandung City is still nil. Citizen engagement in the implementation of *Disdukcapil* of Bandung City services is still limited. In other words, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City provides limits on citizen engagement as diffusers. Basically, this engagement focuses on citizen awareness to be engaged in the co-creation process because this engagement is related to the reliability of the citizen to drive change as an effort to service innovation (Nambisan & Nambisan, 2013). However, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City can also make various efforts to increase citizen engagement as diffusers, one of which is by facilitating communities to be able to interact or exchange ideas about *Disdukcapil* of Bandung City service issues through online media.

D. CONCLUSION AND RECOMMENDATION

Conclusion

The application of co-creation as a service innovation at The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City through the creation of an innovative environment is quite good. It is marked by the increasing quality of information transparency, service delivery communication, collaboration, strengthening supervision, and improving the quality of services. Information transparency, service delivery communication, strengthening supervision, and improving the quality of The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City services are carried out by utilizing digital technology. The collaboration was carried out by cooperating with various parties. However, The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City needs to be more agile in overcoming problems that occur and carry out a more massive distribution of information, so that people can fully know and understand the service innovations being carried out.

Citizen engagement in The Population and Civil Registration Agency (*Disdukcapil*) of Bandung City co-creation has increased, including in providing complaints, criticisms, and suggestions regarding the services provided. However, the engagement of the Bandung City citizen is still focused on the role of explorers and ideators, while engagement as designers and diffusers is relatively limited. As explorers, the citizen of Bandung City contributes to conducting problem analysis by identifying service problems based on their experiences. As ideators, the citizen of Bandung City suggests various service ideas as a follow-up to problem identification. Both roles are carried out through complaints, criticism, and suggestions services.

Recommendation

There are several recommendations that researchers can make based on the co-creation process as a service innovation. First, The Population and Civil Registration Agency (*Disdukcapil*) needs to collaborate with the citizen by strengthening the role of the citizen as a designer and diffuser so the citizen can be fully engaged in the implementation of the services provided. Second, considering that public services in Indonesia by utilizing digital technology are still relatively new, the socialization of information and outreach to the citizen is very important. Last, The Population and Civil Registration Agency (*Disdukcapil*) needs to update various existing service innovations so in moving towards co-creation there are no more fundamental problems.

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