



Reconstructing Innovation Diffusion in Public Health Services: Evidence from Post-Treatment Care Policy in Bengkulu City

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Received: March 05, 2025 Revised: March 07, 2026 Accepted: 09 March 2026 Available online: April 21, 2026	This study aims to analyze the process of health service innovation diffusion in the Bengkulu City Government, analyze the supporting and inhibiting factors in the process of health service innovation diffusion in the Bengkulu City Government, recommend the right model for the process of health service innovation diffusion in Bengkulu City. This type of research is qualitative with a descriptive approach, involving informants from the community and 5 service officers. The data sources in this study consist of primary and secondary data, with data collection techniques through observation, in-depth interviews, and documentation carried out directly by the researcher. Data analysis techniques include data condensation, data presentation, and drawing conclusions. Data validity testing uses data triangulation techniques. This study proves that health service innovation diffusion is determined by the knowledge and persuasion stages, which directly improve decision-making certainty, implementation effectiveness, and accurate confirmation of expected health service outcomes. In addition, community acceptance and understanding of innovation are also important findings that must be encouraged through various outreach and mentoring activities in the field. As organic intellectuals, communities hold a strategic role not merely as recipients but as active triggers and initiators of innovation, underscoring the need for policies that systematically mobilize community capacity to drive sustainable health service innovation diffusion.
KEYWORDS	
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INTRODUCTION

The quality of public health services in Indonesia remains one of the most persistent challenges in local governance, particularly in regions outside Java where service infrastructure, information dissemination, and community health literacy are unevenly distributed (Bastian, 2003; De Vries, 2016). Despite a series of legislative reforms — most notably Law No. 25 of 2009 on Public Services and Law No. 23 of 2014 on Regional Government — significant gaps continue to exist between the formal introduction of health service innovations and their actual uptake by the communities they are designed to serve.

In Bengkulu City, this gap is acutely visible. Since 2013, the local government has introduced multiple health service innovations — including mobile patient pick-up services, 24-hour antenatal care, post-treatment salon services, and Universal Health Coverage programs — yet diffusion of these innovations to the broader public has remained limited, uneven, and poorly documented (see Table 1). Service information is largely confined to institutional channels, community awareness is low, and many eligible residents remain unaware of, or unable to access, these services (Borins, 2001; Black, 2005). The case of post-treatment health services at the Hope and Prayer Hospital (RSHD) Bengkulu City is particularly telling: introduced in 2017, the service remains accessible only to VIP-class inpatients, and its existence is largely unknown beyond the hospital environment.

The mechanisms through which health service innovations are communicated, accepted, and embedded in local community behavior have not been adequately theorized for the Indonesian subnational context. Existing studies on innovation diffusion in Indonesian public health (Sipayung et al., 2022; Pratama & Adianto, 2022; Mardiyanti, 2020) have documented diffusion failures but have not sufficiently explained why individuals fail to

progress from awareness of an innovation to its adoption — a question that requires attention to individual behavioral and attitudinal factors that lie beyond Rogers' (1983) original institutional framework. Today, innovation is a practical method that makes governments everywhere the most rational and protects countries from failure. Indeed, innovation is no longer an option, but rather a duty and necessity for government officials at all levels. It is no exaggeration to say that innovation is the solution to all problems facing the public sector (Behn, 2008). In general, the definition of innovation is Damanpour (1991) explains that innovation includes new products and services, new production process technology, management structures and systems new, new organization, and new plans for the members.

Likewise, Rogers (1983), one of the authors of *The Innovation Book*, stated the definition of innovation. According to the definition of Damanpour (1991) and Rogers (1983), in the public health context, innovation extends beyond technical novelty to include new service delivery modalities, community engagement strategies, and institutional arrangements designed to improve health outcomes and service equity (De Vries, 2016). The challenge, as this study demonstrates, is not the absence of innovation, but the failure of innovation to diffuse effectively beyond its point of origin. The world of service cannot be separated from human life. Everyone has received service in the form of food and prayer since the fetus. Services (transportation infrastructure, health centers and hospitals, nurses and doctors) are also needed in the process of a mother giving birth (Deby Febriyan, 2017).

Ultimately, humans grow, develop, and live daily lives, but they also receive services in this process. As a next step, they also receive special services after death, including burial and funeral processes. Therefore, the world of service is closely related to

human life (Rahmalia, 2020); (Acikgov, Elwalda, & Oliveira, 2023); (Ajibola, 2008).

Local governments are starting to do better and more innovative things regarding local problems. The issuance of Law no. 23 (2014) concerning Regional Government has shown the importance of innovation, providing opportunities for local governments to innovate. "Local governments can innovate to improve their performance", according to Article 386. This means increasing efficiency, improving the quality of services, carried out openly, oriented towards the public interest, fulfilling appropriate values, and being responsible for the results achieved not for personal interests (Patrisia & Anwar, 2021). The following table shows the health index in Bengkulu from 2012 to 2021, based on data from the Bengkulu City Central Statistics Agency:

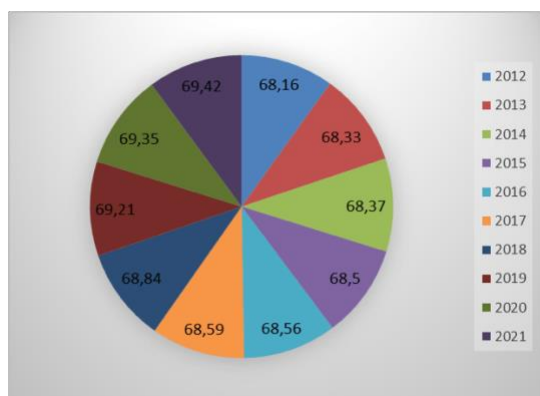


Figure 1. Health Index in Bengkulu City for the 2012-2021 Period
 Source: Bengkulu City Central Statistics Agency, 2021

There is an upward trend in health conditions in the city of Bengkulu. With this data, it can be seen that the health status of the people of Bengkulu City from the 2012-2021 period was 1.26%. Health services are one of the basic needs of society and are an important factor in determining the quality of health services on the Human Development Index (HDI) of a country or region, so innovations in the provision of health services need to be studied scientifically (De Vries, 2016). Success in regional health management is also an important variable in achieving community welfare which is the essence of decentralization policies (Bastian, 2003); (Akenroye, 2015); (Akomolafe, 2011).

A systematic review of twelve empirical studies on innovation diffusion — spanning public health, local government, environmental management, and technology adoption contexts (Sipayung et al., 2022; Wang et al., 2021; Schwabe et al., 2021; Fichter & Clausen, 2021; Febrian & Kumorotomo, 2017; Pratama & Adiarto, 2022; Palm, 2022; Artikasari et al., 2019; Rohmah et al., 2022; Sukardi et al., 2021; Mardiyanti, 2020; Trischler et al., 2020) — reveals three analytically distinct clusters of diffusion failure that recur across settings and sectors.

innovation diffusion failures in the public health sector are not primarily technological or logistical — they are behavioral. They stem from a failure to understand, anticipate, and address the psychological, attitudinal, and social factors that shape individual decisions to adopt or reject new health services. This insight is the foundational premise of the present study and the primary rationale for integrating Rogers' diffusion framework with the Theory of Reasoned Action. The first cluster concerns communicative and structural barriers to diffusion. Across the reviewed studies, diffusion consistently failed to reach beyond

narrow institutional or digital channels: social media dissemination remained limited in scope (Sipayung et al., 2022; Mardiyanti, 2020), internet infrastructure constrained access in peripheral regions (Schwabe et al., 2021; Rohmah et al., 2022), and budget and human resource shortages prevented the scaling of otherwise promising innovations (Sukardi et al., 2021; Febrian & Kumorotomo, 2017). These findings confirm that structural conditions — communication infrastructure, institutional capacity, and resource availability — are necessary but not sufficient conditions for successful diffusion.

The second cluster concerns perceptual and cognitive barriers at the individual level. Several studies found that diffusion stalled not because of structural obstacles, but because potential adopters lacked clarity about the relative advantage of the innovation over existing alternatives, or perceived the innovation as incompatible with their existing values, practices, or health-seeking behaviors (Artikasari et al., 2019; Palm, 2022; Wang et al., 2021). Fichter and Clausen (2021) and Trischler et al. (2020) further found that the ability to use technology and interpret innovation characteristics significantly shaped how individuals evaluated new services. Taken together, these studies indicate that adoption decisions are mediated by subjective cognitive appraisals — a dimension that structural diffusion models alone cannot adequately explain.

The third cluster concerns behavioral and social-normative factors. Pratama and Adiarto (2022) and Mardiyanti (2020) found that even when structural access and cognitive awareness were present, individuals still failed to adopt innovations unless supported by ongoing guidance, visible leadership endorsement, and social reinforcement from their immediate community. This points to the role of behavioral intention — shaped by personal attitudes and perceived social norms — as a critical and undertheorized mediating variable between innovation awareness and actual adoption behavior.

Crucially, what these twelve studies share — beyond their individual findings — is a common theoretical limitation: all either explicitly apply or implicitly rely on Rogers' (1983) Diffusion of Innovations framework as their primary analytical lens. While Rogers' five-stage model (Knowledge → Persuasion → Decision → Implementation → Confirmation) provides a robust account of how innovations travel through social systems, it was not designed to explain why specific individuals, at each stage, choose to advance or disengage from the adoption process. Rogers' framework treats the individual adopter largely as a rational processor of innovation-related information, without theorizing the role of attitudes, subjective norms, emotional responses, or behavioral intentions that shape the decision at the point of adoption (Greenhalgh et al., 2004; Berwick, 2003).

This theoretical gap has direct empirical consequences. In the context of post-treatment health services in Bengkulu City, the failure of diffusion cannot be explained by structural barriers alone — the service exists, the infrastructure is in place, and early recipients have responded positively. What is absent is a framework capable of explaining why individuals who become aware of the service do not progress to adoption, and why community-level behavioral norms have not developed around the service. Rogers' model identifies the stages through which adoption should progress; it does not explain the behavioral mechanisms that determine whether an individual will actually traverse those stages.

It is precisely this gap that the Theory of Reasoned Action (TRA), formulated by Fishbein (1967) and extended by Ajzen and

Fishbein (1980), is designed to address. TRA posits that an individual's intention to perform a behavior — in this case, to seek or adopt a health service innovation — is jointly determined by: (a) their attitude toward the behavior, defined as their personal evaluation of the expected outcomes of performing it; and (b) subjective norms, defined as their perception of social pressure from significant others to perform or not perform the behavior. Behavioral intention, in turn, is the most proximate determinant of actual behavior (Fishbein & Yzer, 2003). By embedding these constructs within Rogers' five-stage diffusion framework, it becomes possible to explain not only what stage an individual has reached in the diffusion process, but why they advance or stall at each stage — a question that the existing literature on health service innovation diffusion in Indonesia has not yet adequately answered.

The present study therefore addresses a clearly identified gap in the diffusion of innovations literature: the absence of an integrated behavioral-structural model capable of explaining individual-level adoption decisions in the context of local government health service innovation in Indonesia. By reconstructing Rogers' (1983) framework through the lens of TRA (Fishbein, 1967; Ajzen & Fishbein, 1980), and by incorporating the cultural and community dimensions specific to Bengkulu City, this study proposes the Be For Dions (Behaviour for Diffusion of Innovations) model as an original theoretical contribution to the field.

Table 1. Types and Conditions of Health Service Innovation in Bengkulu City

Innovation name	Year of creation	Present condition
Take the sick home and be healthy	2013	<ul style="list-style-type: none"> ➢ Superior health services ➢ Currently it not only meets the needs of the health service sector, but also contributes to various other community needs ➢ People are still confused about how to access services
Excellent 24-hour antenatal care (ANC) car service	2016	<ul style="list-style-type: none"> ➢ Pick up the ball in registering and serving pregnant women ➢ Only focus on services for pregnant women and childbirth ➢ The scope of media information is limited to the Bengkulu City Media Center
Post treatment of the patient	2017	<ul style="list-style-type: none"> ➢ Post-treatment services, run if the patient wants to receive services only

HD Maternity Program	2022	<ul style="list-style-type: none"> ➢ Only available in the RSHD environment, specifically for VIP patients ➢ Service information is not widely available ➢ The number of treatment personnel and facilities is not in accordance with needs ➢ New innovation, not yet widely known by the public ➢ unclear rules for obtaining HD maternity services ➢ The scope of media information is limited to the Bengkulu City Media Center
Free BPJS program through Universal Health Coverage (UHC)	2022	<ul style="list-style-type: none"> ➢ New innovation, not yet widely known by the public ➢ Unclear rules for obtaining the BPJS program through UHC ➢ The scope of media information is limited to the Bengkulu City Media Center

Source: Results of previous research; Initial research data

Based on the description above, it is known that information on health service innovation is not widely distributed, service information is still limited within the scope of the Bengkulu City media center, there are also services that are limited both in information and in terms of service priority. This results in many people still not knowing about the available health services (Borins, 2001). Only people who are pro-active, most of them know about it. Meanwhile, people who are less responsive and insensitive certainly do not know about this innovation. This means that society does not prepare itself to receive health services, even though health service innovations exist (Black, 2005). Sometimes people already know about this health service innovation, but don't know who to contact to get this service (Farazmand, 2004); (Cristiansen, 2000). This is where the innovation diffusion process is important to carry out. The diffusion of innovations makes it possible to see how innovations and new things are accepted or rejected by certain individuals and social groups. This is important to remember when trying something new and trying to influence certain groups (Benington, 2010); (Allers, Eijkenaar, Raajj, & Schut, 2023); (Barrenho, Miraldo, Propper, & Walsh, 2021).

Based on Table 1. which presents the types and conditions of several health service innovations in Bengkulu City, it turns out that there are innovations that are not working well based on the implementation of health services and health service needs. So this research is more focused on the process of diffusion of health service innovations, the post-treatment innovation diffusion process (Capuno, 2010); (Evans, 2010). There are several reasons for choosing post treatment innovation, namely that it is an innovation in the form of post-treatment services provided to patients who have completed treatment at the hospital and specifically for VIP class inpatients only.

Furthermore, the selection of post-treatment health service innovations in this case is so that research can focus more on analyzing health services. Based on the implementation and need for services, early detection of services that have not yet been diffused can be obtained through things including information, desire to use services, access to health services and the need for post-treatment health services.

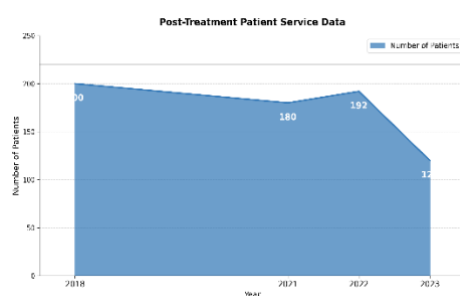


Figure 2. Post Treatment Innovation Patient Data Those Served in 2018, 2021-2023

Source: Research data from researchers, 2023

Figure 2. explains patient service in post treatment services in Bengkulu City. Based on this data, if averaged, the number of patients served by post treatment services is approximately 15-20 people per month, the majority of patients served are women. Based on the data, this number is influenced by the patient's desire to accept or not post-treatment services when offered by service staff. Based on the description above, researchers found problems including many health service innovations that have not been properly diffused, many people who have not been able to access health services, people's mindset in adopting health service innovations is still low, many people do not fully understand the benefits of services without additional education (Cepparulo & Zanfei, 2021); (Cobben, Ooms, & Roijackers, 2023).

Rogers' (1983) Diffusion of Innovations (DoI) theory has been the dominant framework for analyzing how innovations spread through social systems. Its five-stage model - Knowledge, Persuasion, Decision, Implementation, and Confirmation - offers a structured account of how individuals move from first awareness of an innovation to its sustained adoption. However, a critical limitation of Rogers' framework is that it treats innovation adoption primarily as a process of information dissemination and communication, without sufficiently accounting for the psychological and attitudinal determinants that shape individual decision-making at each stage (Greenhalgh et al., 2004; Berwick, 2003).

This limitation is particularly salient in the context of health service innovation, where adoption decisions are not purely rational responses to information but are mediated by personal

attitudes toward health-seeking behavior, subjective social norms, and perceived behavioral control (Ajzen & Fishbein, 1980; Fishbein & Yzer, 2003). The Theory of Reasoned Action (TRA), originally formulated by Fishbein (1967) and later extended by Ajzen and Fishbein (1980), provides precisely this behavioral dimension: it posits that an individual's intention to perform a behavior — in this case, to seek or adopt a health service innovation — is determined by their attitude toward the behavior and the subjective norms they perceive from their social environment.

The integration of Rogers' DoI framework with TRA is therefore theoretically motivated and empirically necessary. Rogers' model explains the diffusion trajectory at the social system level, while TRA explains the individual-level behavioral intentions that determine whether a given person will traverse that trajectory. Prior studies in health communication and public health innovation (Dearing, 2009; Fishbein & Yzer, 2003) have demonstrated that models combining structural diffusion mechanisms with behavioral intention constructs yield substantially greater explanatory power than either framework applied in isolation. Despite this, no published study has applied such an integrated model specifically to the context of local government health service innovation in Indonesia — a context distinguished by its cultural specificity, institutional fragmentation, and the role of community-level organic intellectuals in shaping health behavior.

It is against this theoretical and empirical backdrop that this study proposes the Be For Dions (Behaviour for Diffusion of Innovations) model — an integrated framework that reconstructs Rogers' (1983) five-stage diffusion model by embedding TRA's behavioral intention constructs within each stage, and by incorporating cultural and community dimensions specific to the Bengkulu City context. The central research questions guiding this study are: (1) How does the post-treatment health service innovation at RSHD Bengkulu City progress through Rogers' five diffusion stages? (2) What individual behavioral and attitudinal factors mediate adoption at each stage? (3) What supporting and inhibiting factors shape the overall diffusion trajectory? And (4) what model of innovation diffusion best captures and advances this process in the Bengkulu City context?

METHOD

Bangka Belitung was chosen as the study site due to its distinctive characteristics as a resource-dependent province. The region relies heavily on extractive industries, particularly tin mining and monoculture plantations, which have significant environmental implications. At the same time, the province has relatively decentralized village governance structures, making it a relevant setting to examine how institutional and infrastructural factors influence conservation behavior. These contrasting dynamics—between ecological vulnerability and local autonomy—make Bangka Belitung a strategic case for studying bottom-up environmental governance in the Global South context.

The approach method is descriptive qualitative (Creswell, 2017). The research was carried out from February 2023 to August 2023. Data sources are primary and secondary data. Primary data was taken through in-depth interviews with five informants, namely one competent key informant, for example the Director of Bengkulu City RSHD and three informants, for example nurses and post-treatment therapists and users of this service.

Secondary data comes from the official Bengkulu City RSHD website documents.

Informants were selected through purposive sampling, a non-probability sampling strategy widely employed in qualitative research where the goal is not statistical representativeness but the deliberate selection of information-rich cases capable of illuminating the phenomenon under study in depth (Creswell, 2017; Patton, 2002). Purposive sampling is the appropriate strategy for this study because the research aim is to examine the diffusion process of a specific, institutionally bounded innovation — post-treatment health services at RSHD Bengkulu City — from the perspectives of those with direct, substantive knowledge of its design, delivery, and reception. Random or convenience sampling would not yield the depth of institutional and experiential knowledge required to address the four research questions guiding this study.

The five informants were selected to ensure coverage of all three levels at which the innovation diffusion process operates: the policy level, the service delivery level, and the community beneficiary level. This multi-level selection is consistent with the analytical requirements of Rogers' (1983) framework, which posits that diffusion involves interactions between innovation sources (institutional actors), communication channels (service providers), and the social system (community recipients). The specific rationale for each informant is presented in Table 2 below.

Table 2. Informant Selection Matrix — Roles, Positions, and Sampling Rationale

No.	Informant	Role / Position	Sampling Rationale
1	Director, RSHD Bengkulu City	Key Informant (Policy level)	Primary decision-maker for post-treatment innovation; holds institutional knowledge of policy design, resource allocation, and diffusion strategy
2	Nurse 1, RSHD	Frontline service provider	Direct interface with patients; knowledge of service delivery, patient responses, and day-to-day diffusion barriers
3	Nurse 2, RSHD	Frontline service provider	Cross-validation of nurse-level implementation experience; triangulation of

4	Post-Treatment Therapist, RSHD	Specialist service provider	Unique technical knowledge of service modality; insight into patient behavior and attitude during and after treatment
5	Service Recipient (Patient/Community)	End-user / beneficiary	Direct experience of all five diffusion stages (Knowledge through Confirmation); source of behavioral and attitudinal data consistent with TRA constructs

Source: Research data from researchers, 2025

This composition ensures that the dataset captures institutional design intentions (Director), frontline implementation realities (nurses and therapist), and end-user adoption experiences (service recipient) — the three knowledge domains essential for a comprehensive analysis of the diffusion process across all five Rogers' stages.

Data saturation — the point at which additional data collection yields no new themes, categories, or insights — was achieved within the five-informant dataset. Following the principle of theoretical saturation as articulated by Glaser and Strauss (1967) and operationalized in qualitative health research by Guest et al. (2006), the researcher conducted a progressive thematic analysis after each interview, tracking the emergence of new codes and categories. By the fourth interview, no substantively new themes were emerging across the five analytical dimensions of Rogers' framework. The fifth interview — with the service recipient — served primarily as confirmatory data, reinforcing themes already established through the institutional and provider-level interviews rather than generating new analytical categories.

This pattern of early saturation is consistent with findings from qualitative studies conducted within bounded institutional settings, where the phenomenon under investigation is organizationally circumscribed and informant roles are clearly defined (Morse, 1995; Hennink & Kaiser, 2022). In such contexts, saturation is typically achieved with six or fewer informants, particularly when purposive sampling has successfully identified information-rich cases at each level of the phenomenon.

The adequacy of five informants for this study must be evaluated against the specific epistemological purpose of the research, which is not to generate statistical generalizations about a population but to develop and test a conceptual model of innovation diffusion — the Be For Dions (Behaviour for Diffusion

of Innovations) model — grounded in a theoretically defined case. In qualitative research oriented toward conceptual or theoretical development, sample size adequacy is determined by the richness and analytical depth of the data rather than by the number of participants (Lincoln & Guba, 1985; Yin, 2014).

This position is supported by an established body of methodological literature. Mason (2010), in a review of 560 qualitative studies, found that the median sample size for interview-based qualitative research was seven participants. Fugard and Potts (2015) demonstrated that for theory-driven qualitative studies — where the analytical framework is predefined and the research aim is conceptual elaboration rather than grounded theory development — samples of three to eight are routinely sufficient. More specifically, Yin's (2014) case study methodology, on which this study partially draws, argues that a single bounded case with multiple embedded units of analysis (in this study: policy, delivery, and beneficiary levels) provides sufficient analytical leverage for conceptual contribution, provided that within-case data are rich, triangulated, and theoretically sampled.

In the present study, all three conditions for methodological adequacy in conceptual development are met. First, the data are rich: each informant provided extended in-depth interview data directly addressing all five diffusion stages, producing a dataset of sufficient analytical depth for multi-stage model development. Second, the data are triangulated: institutional documents from the RSHD website and field observation records were used alongside interview data to cross-validate findings and reduce single-source bias (Denzin, 1978). Third, the data are theoretically sampled: each informant was selected because of their unique and non-duplicable epistemic position in relation to the innovation diffusion process, ensuring that all theoretically relevant perspectives are represented within the dataset.

It is therefore argued that five purposively selected, information-rich informants, supported by documentary and observational data and monitored for saturation, constitute a methodologically defensible empirical base for the conceptual development objective of this study. The contribution of this research lies not in the breadth of its sample but in the analytical depth and theoretical coherence of its integrated Rogers-TRA diffusion model — a contribution that qualitative depth, rather than quantitative breadth, is uniquely positioned to deliver (Denzin & Lincoln, 2011).

Data were analyzed using descriptive methods to provide an overview of best practices in the implementation of public service diffusion according to Rogers' (1983) theory of diffusion of innovation. The following are seen in the aspects: Knowledge, Persuasion, Decision, Implementation, Confirmation. The analysis stages include data condensation, namely the researcher processes the selection, focuses his attention on simplifying, abstracting, and transforming rough data from research notes. Presenting the data is the process of creating a research report from the collected data so that it is easy to understand and then analyzing until the goal is achieved (Moleong, 2005). In conclusion, at this stage the researcher makes a summary taken from the results of the analysis in the research discussion (Sugiyono, 2018). The verification stage means that researchers can determine the truth of existing research results using empirical methods and scientific testing. (Miles, 2014). Below is the presentation of the Interactive Analysis Model diagram, corresponding to the researcher's analysis stages:

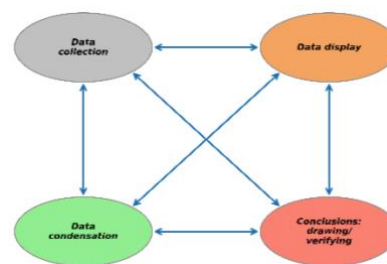


Figure 3. Interactive data analysis model
Source: Research data from researchers

RESULTS AND DISCUSSION

The research results are presented based on the results of interviews and field observations carried out by researchers. From the five indicators used in the field, namely Knowledge, Persuasion, Decision, Implementation, Confirmation, it was found that this post treatment health service was a form of initiation from the Mayor of Bengkulu together with the Director of the Hope and Prayer Hospital (RSHD) in 2017 in Bengkulu. Providing this facility is one of the Government's initiatives to improve public services for the people of Bengkulu in accordance with the mandate of Law no. 25 of 2009 concerning Public Services. This finding is consistent with Rogers' (1983) conceptualization of innovation as a process driven by leadership and institutional support, wherein a change agent—in this case the Mayor—plays a pivotal role in initiating and legitimizing new practices within a social system (Rogers, 2003, p. 27). As explained in one interview session below:

"The beginning of this post treatment innovation was a brilliant idea initiated by Mayor Helmi Hasan in 2017 together with the Director of RSHD in the hope of improving services health in Bengkulu City. Regarding how to let the public know about the presence of this post treatment innovation, in fact, banners have been displayed in the RSHD area for promotion to the public. It's just that perhaps its position is less visible so that its existence is not realized..." (Interview, 21 August 2023).

Observation results show that post-treatment health service innovation makes an important contribution to handling health problems, with the hope that patients who have recovered will look as fresh as ever. This aligns with Nutbeam's (2000) health literacy framework, which emphasizes that patient-centred post-care services contribute to both functional and communicative health outcomes. This is because when patients go home after treatment, they may look dull, sullen, always lying down and, of course, uncomfortable in their body condition.

The results of interviews in the field showed results in the form of positive responses from the community, this was related to the receipt of post-treatment services at the hospital. Similar things were conveyed by the community as recipients of post-treatment health services that:

"We are very happy with this post treatment innovation which provides salon-like care for us and it's free too... Information about this service was conveyed by the nurse when we were going home, so we didn't know if this service existed..." (Interview with community, 20 August 2023)

Post-treatment health service innovation diffusion process

The implementation of post-treatment health service innovation diffusion in Bengkulu City, in terms of innovation diffusion attributes based on Rogers (1983), namely: Knowledge,

Persuasion, Decision, Implementation, Confirmation, as well as supporting and inhibiting factors can be explained as follows: Rogers' (1983) Diffusion of Innovations theory provides the primary analytical lens for this study, offering a systematic framework to examine how new ideas spread through social systems over time. This theoretical grounding distinguishes the present study from earlier descriptive analyses of local health service delivery in Indonesia (see Trisnantoro, 2014; Rokx et al., 2010), which did not employ a structured diffusion framework.

1. Stages of Knowledge

The research results found that this post-treatment health service innovation was a breakthrough post-treatment service innovation that had a positive response from the people who received the service. More than that, it is a regional policy based on local wisdom in society. However, access to this service is currently restricted to VIP-class patients only, which structurally limits who can acquire knowledge about it. This constitutes an eligibility restriction: individuals who are ineligible cannot obtain firsthand experience of the service, and therefore cannot develop knowledge about it through participation. In this regard, the limited public knowledge is not solely the result of a communication failure, but is partly a structural consequence of restricted access. In the future, it is hoped that RSHD can expand this service so that all post-treatment patients may benefit equally. This limited accessibility reflects what Rogers (1983) identifies as the 'knowledge stage' barrier, wherein awareness of an innovation remains confined to a narrow segment of the potential adopter population. Comparable inequities in health service diffusion have been documented in developing-country contexts by Greenhalgh et al. (2004), who found that innovations embedded within institutional hierarchies frequently fail to reach lower socioeconomic groups due to structural gatekeeping.

The suitability that researchers can see in terms of knowledge is by comparing the researcher's observations in the field with the conditions that actually occur. In post-treatment services, the knowledge of the community, both service recipients and the general public, is appropriate, that knowledge is formed exclusively at the point of service delivery — that is, individuals only become aware of this innovation upon receiving it, not through prior information exposure. This pattern is characteristic of a communication failure: the absence of proactive and systematic outreach means that knowledge remains confined within the walls of RSHD, inaccessible to the broader public who have never encountered the service.

The analysis above reveals that limited public knowledge about post-treatment services stems from two simultaneous but distinct barriers. The first is an eligibility restriction: because the service is only available to VIP-class patients, the pool of individuals who can develop experiential knowledge is inherently limited. The second is a communication failure: even among those eligible, awareness is formed reactively at the point of service rather than through proactive dissemination. These two barriers require different solutions — policy expansion to address the eligibility gap, and investment in diffusion infrastructure to address the communication gap. From the RSHD side, it carries out more diffusion through the RSHD environment itself, limited to the RSHD environment and territory and sometimes occasionally covered on the Bengkulu City RSHD Instagram. This finding is consistent with Berwick's (2003) observation that knowledge diffusion in healthcare settings tends to be passive and locally bounded unless actively

mediated by external communication channels. The absence of multi-channel dissemination—such as community health workers or digital media campaigns—represents a significant gap when compared with best practices identified in comparable Indonesian health innovation studies (Mahendradhata et al., 2017). Diffusion involving other social media, such as online news or the information media center in Bengkulu City, has not been seen as in the innovation of taking the sick and healthy home. In the future, it is necessary to involve other elements such as the Bengkulu City Diskominfo to be involved in helping with promotions on social media such as the Bengkulu City media center and other media. The following is one of the reports related to post treatment at IG RSHD Bengkulu City:



Figure 4. Bengkulu City RSHD IG Regarding Post Treatment Services
 Source: Instagram RSHD Bengkulu City

2. Stages of Persuasion

Observation results show that developments in technology and information are actively utilized by public service personnel in the RSHD environment, namely in the special IG for the Bengkulu City RSHD, especially post-treatment health services so that the goals of a healthy and religious city can be realized together. Rogers (1983) emphasizes that the persuasion stage requires prospective adopters to form a favourable or unfavourable attitude toward the innovation, a process that is heavily influenced by peer networks and subjective norm. The present findings diverge from studies of more successful health innovation diffusion—such as the JSPS programme examined in parallel—where interpersonal communication and social proof markedly accelerated persuasion (cf. Valente, 1996). With the belief that currently people in Bengkulu City are actually able to access various information disseminated by the local government through social media, where the average community has communication tools, namely cellphones and internet access to help with daily activities.

However, of course, building a sense of trust in the community is not easy to do, especially when it comes to health matters. If the JSPS service is via the Bengkulu City media center which is managed by the Bengkulu City Diskominfo, the health service movement "take the sick home to be healthy" is informed

and disseminated on social media. In contrast to post-treatment services, the experiences of post-treatment service users are not detected, as is the case with JSPS services. With the JSPS service, people can see, monitor, hear and learn from the experiences of other people as service recipients because this service is very active and widespread in people's lives. This contrast supports Ajzen's (1991) Theory of Planned Behaviour, which posits that behavioural intention is shaped not only by attitude toward the behaviour but also by subjective norms derived from social referents. The weak social proof surrounding post-treatment services consequently suppresses community intention to seek out the service, a pattern consistent with Nutbeam's (2000) argument that communicative health literacy is a prerequisite for service uptake. The need for JSPS services is quite high.

In post treatment things like this were not found, because they were only in RSHD and limited to the RSHD environment. That people who have received the service feel very happy with the presence of this after-care service can only be known by visiting the service by asking questions and looking at the after-care service. At this stage, whether we realize it or not, the efforts made to create a sense of trust, increasing public confidence in post-treatment services are less than optimal.

This testimony is analytically significant for two reasons. First, it demonstrates that when VIP-class patients do reach the decision stage, their response is predominantly positive — initial confusion (likening the service to a salon) gives way to acceptance and satisfaction. This suggests that resistance is not ideological but informational: once experienced, the service is well-received. Second, and more critically, this positive experience belongs to a structurally privileged subset of patients. The decision to accept or reject this service is not equally available to all community members. For the general public — non-VIP patients — the structural filter imposed by eligibility restriction means the decision stage is never reached. Their 'non-adoption' of this service is therefore not a reflection of behavioural intention but of structural exclusion. Any analysis of community decision-making in this context must account for this pre-decisional barrier before drawing conclusions about public acceptance or rejection.

3. Decision Stages

Observation results show that in post-treatment services, people's opportunities to use post-treatment health services are very limited, because they are only intended for VIP class patients. Before analysing community decision-making, it is analytically necessary to recognise that the VIP-only eligibility policy functions as a structural filter that operates prior to the decision stage entirely. In Rogers' (1983) framework, the decision stage presupposes that an individual has progressed through knowledge and persuasion. However, for the majority of Bengkulu City's patient population, the structural condition of VIP exclusivity prevents entry into this progression. These individuals are not choosing to reject the service — they are structurally excluded from the opportunity to decide. The decision stage is therefore only accessible to a small, pre-selected subset of patients. Any interpretation of 'community acceptance' must account for this pre-decisional barrier before drawing conclusions about public willingness or behavioural intention. As stated by people who receive benefits from post-treatment services, that:

"The positive side that is felt by this post-treatment health service is just a glimpse. However, this service is quite pleasing to us patients who have

finished post-treatment. I am happy with this service, even though at the beginning I was confused when entering was like a salon..." (Interview with community beneficiaries of the service on 20 August 2023)

Rogers (1983) categorises the decision stage as a mental activity during which an individual chooses to adopt or reject an innovation. The participant's initial confusion—likening the service to a commercial salon—illustrates what Rogers terms 're-invention', where the adopter mentally reframes the innovation to align with existing cognitive schemas (Rogers, 2003, p. 180). This re-invention dynamic has been similarly observed in studies of community-based rehabilitative care in Southeast Asia, where patients initially resisted non-clinical post-discharge services before ultimately valuing them (Atun et al., 2010). Importantly, this testimony originates exclusively from VIP-class patients — the only group structurally permitted to reach the decision stage. Their trajectory from confusion to acceptance demonstrates that decision-stage resistance in this context is informational rather than ideological: the unfamiliarity of the service format (salon-like environment) creates initial hesitation, but direct experience resolves it positively. This finding has a direct policy implication: the barrier to adoption among eligible patients is not attitudinal resistance but insufficient prior information. For the general public — who never access the decision stage due to eligibility restrictions — the challenge is categorically different and cannot be addressed through persuasion alone; it requires structural policy change to expand eligibility.

4. Implementation Stages

The results of Action observations regarding acceptance of post-treatment health service innovations are willingness to accept and implement these services. So far, people who have received post treatment services receive information when they will be served at RSHD Bengkulu City, apart from that they do not know about the post treatment service. This is normal because post treatment service activities only exist within the RSHD environment. Apart from that, unlike other JSPS services, information is more or less obtained from other people's experiences in the form of stories/statements from people who have received JSPS services. Meanwhile in the post treatment service this was not found.

Therapeutic service equipment is also quite adequate, for therapists they only have 2-3 therapists who are also occasionally assisted by RSHD officers/nurses themselves. Sometimes therapists can also enjoy sufficient holidays when there are no patients in the VIP class, such as when researchers visit RSHD and it coincides with the absence of VIP patients, so the salon and therapists can take a day off. The sparse staffing model reflects the broader challenge of sustaining health service innovations in resource-constrained settings, a phenomenon extensively documented by Fixsen et al. (2005) in their synthesis of implementation science research. Fixsen et al. argue that implementation fidelity is dependent on adequate staff training, ongoing supervision, and organisational support structures—elements that appear underdeveloped in the current post-treatment service model. This represents a point of originality in the present study: whereas prior research on innovation diffusion in Indonesian hospitals has focused predominantly on technology adoption (Handayani et al., 2017), this study highlights the human resource dimension as a critical implementation variable.



Figure 5. Post Treatment Service Salon at RSHD Bengkulu City
Source: Research Process August 2023

The suitability that researchers can see in terms of service implementation is by comparing the researcher's observations in the field with the conditions that actually occur. In post-treatment services, the implementation of services in the community, both service recipients and the general public, is appropriate, that the desire to use the service is in accordance with the community's needs. It is felt that post-treatment services are not a need in a large and urgent scope of society but are more of a consumable service for the patient's personal post-treatment needs.

1. Confirmation stage

The observation results show that the confirmation side of post-treatment health services is an output/result obtained from an effort/performance, namely health services that are felt and experienced by the community naturally, inwardly, which is filled with trust and comfort in using the service. The confirmation given can be positive or negative, starting from curiosity or expectations before use to creating feelings from using the post treatment service.

Similar to what was conveyed by one of the nurses at RSHD Bengkulu City, that:

'The ultimate goal of health service innovation is in accordance with the Mayor's mission, which is to create a city of Bengkulu that is religious and has happy people. One measure of happiness is the creation of this post-treatment health service. People are happy to be treated by a therapist, to arrive home fresh...' (Interview on 20 August 2023).

The suitability that researchers can see in terms of service confirmation is by comparing the researcher's observations in the field with the conditions that actually occur. In the post-treatment service, confirmation of the service to the community, both service recipients and the general public, is indeed appropriate, that the community confirms by giving a positive response to the existence of the post-treatment service but not to the usefulness of the service. It is felt that post-treatment services are not an urgent need, because the people who receive the services have not been able to confirm the wider usefulness of the services. This discrepancy between positive experiential confirmation and perceived non-urgency is theoretically significant. It mirrors the 'attribute paradox' described by Moore and Benbasat (1991), wherein an innovation may be evaluated favourably on affective grounds yet fail to achieve widespread adoption because its relative advantage over existing alternatives is not clearly communicated. The post-treatment service's

confinement to VIP patients further limits the accumulation of confirmation experiences in the broader population, echoing Greenhalgh et al.'s (2004) finding that limited trialability is a major inhibitor of sustained innovation diffusion in health systems.

Supporting and inhibiting factors in the diffusion process of post-treatment health service innovation in Bengkulu City

The research results found that there are leadership aspects that support innovation and the diffusion of innovation as well as the development of innovation teams which are supporting elements of post-treatment health services. Likewise, developing a culture of innovation in post-treatment health services can be carried out not because existing services no longer sell, but because there is a need, so health services are innovated and become daily practice in communities that have a system. These findings are theoretically consonant with Kotter's (1996) model of organisational change, which positions committed leadership and coalition building as foundational prerequisites for successful innovation embedding. Furthermore, the role of an innovation team dedicated to managing social media and service activities aligns with what Greenhalgh et al. (2004) term 'inner context' factors—organisational culture, readiness for change, and absorptive capacity—as critical determinants of health innovation sustainability. Unlike Greenhalgh et al.'s meta-analysis, which drew on evidence from high-income countries, the current study contextualises these dynamics within a mid-tier Indonesian municipal hospital setting, constituting an original empirical contribution. Likewise, post-treatment health services in their implementation require good collaboration between educated workers and trained workers.

Post treatment services require reliable, agile, certified therapists who are competent in their field. So you can carry out your duties as a therapist who provides post-treatment services to patients. The development of an innovation team in the diffusion of post-treatment health service innovation has seen its manifestation in efforts to develop post-treatment services by involving a committed RSHD innovation team, having a team that works solidly according to its portion and responsibilities. This innovation team handles the Bengkulu City RSHD IG, all service activities and other matters relating to RSHD can be seen on its social media. Post treatment, which in its implementation has not been seen to implement a cycle of accountability system to see performance measures in improving health services. It's just in implementation Post treatment services run according to the rules of the leadership, namely the Director of Bengkulu City RSHD, which are outlined in the outpatient service rules.

Diffusion model of post-treatment health service innovation in Bengkulu City

Based on the research results, the model of the process of diffusion of health service innovation in Bengkulu City can be better successful if the concept of diffusion of innovation is used, namely Rogers' theory (1983) coupled with the concept and theory of reason action, namely behavior (behavior) to answer problems regarding health service needs. The policy-behaviour interface of the Be For Dions model is formalised as: (Policy Innovation Capacity × Policy Learning) - Policy Challenge = Policy Outcome. In this formulation, Policy Innovation Capacity refers to the institutional resources and leadership commitment available to initiate and sustain service innovation — operationalised in the RSHD context as the presence of a

dedicated innovation team, director-level mandate, and allocated operational budget. Policy Learning refers to the degree to which prior innovation cycles (such as the JSPS 'take the sick home healthy' programme) inform the design of subsequent innovations — operationalised as evidence of cross-programme knowledge transfer in RSHD documentation.

Policy Challenge refers to structural and contextual barriers — in this case, the VIP eligibility restriction, limited diffusion infrastructure, and low community awareness — each of which can be scored on a measurable scale. When policy challenges (low diffusion, structural exclusion) significantly outweigh innovation capacity and learning, the policy outcome — adoption rate and sustained community uptake — will be negative, as the current post-treatment data demonstrate. This formulation represents a novel theoretical synthesis that extends Rogers' (1983) linear diffusion model by incorporating an interactive policy-behaviour dimension. While Rogers' original framework has been criticised for its pro-innovation bias and over-emphasis on adoption over sustainability (Greenhalgh et al., 2004; Cain & Mittman, 2002), the Be For Dions model addresses this limitation by embedding behavioural and cultural variables as endogenous determinants of diffusion outcomes. This is a distinctive contribution of the present study relative to the existing Indonesian health innovation literature, which has largely applied Rogers' framework in its original form without adaptation to local socio-cultural contexts (see Wardhani et al., 2019). Apart from that, the condition for the success of the health service innovation diffusion process model in Bengkulu City is the involvement of other stakeholders, namely organic intellectuals, one of which is the community which is part of the environmental and cultural value-based subsystem of a region, in this case Bengkulu City.

The aim of the health service innovation diffusion process model in Bengkulu City is to reconstruct the existing innovation diffusion process model by adding the concept and theory of reason action, namely Be For Dions (Behaviour for Diffusion of Innovations). Based on the existing model and several research findings, the researcher recommends a model in the process of diffusion of health service innovations in Bengkulu City, namely "Be For Dions (Behaviour for Diffusion of Innovations) Health Service Innovation Diffusion Process Model." The Be For Dions (Behaviour for Diffusion of Innovations) Health Service Innovation Diffusion Process Model is different from other Health Service Innovation Diffusion Process Models, this model uses the Behavioral Dimension as a form of real community involvement in the diffusion of innovation, namely as one of the organic intellectual parts. Organic Intellectuals themselves can come from environmental orientation and cultural values in each dimension of innovation diffusion. Organic Intellectuals as triggers or initiators of innovation that can come from one of the stakeholder elements. The concept of Organic Intellectuals, drawn from Gramscian social theory (Gramsci, 1971), introduces a sociological dimension absent from most diffusion of innovations frameworks. By positioning community members as organic intellectuals capable of generating and legitimising innovation from the grassroots level, the Be For Dions model challenges the top-down diffusion logic prevalent in classical adoption studies (Valente, 1996; Backer et al., 1986). This represents a significant conceptual advancement, particularly in the context of health governance in decentralised Indonesian municipalities, where community agency and local cultural

authority are increasingly recognised as essential governance resources (Aspinall & Berger, 2001).

The Be For Dions (Behaviour for Diffusion of Innovations) Health Service Innovation Diffusion Process Model has elements of cultural values that belong to a particular area, namely Bengkulu City, so that it is able to have a big influence on the course of the innovation diffusion process and the role of innovation elements in it. In the health care context, the process of diffusion of innovation involves the acceptance and use of new medical technologies, changes in clinical practice, or innovative public health programs. Cultural elements play a very important role in this process, because the values, beliefs and social practices that exist in a society can influence how quickly and to what extent the innovation is accepted. This emphasis on cultural embeddedness aligns with Hofstede's (1980) cultural dimensions theory, and is further supported by empirical research demonstrating that culturally congruent health innovations achieve significantly higher rates of adoption in collectivist societies compared with those imposing externally derived models (Spector, 2004). The integration of cultural value orientation into the diffusion model thus constitutes the principal theoretical innovation of this study, offering a contextually grounded and empirically validated framework applicable to similar mid-sized Indonesian cities undertaking health service reform.

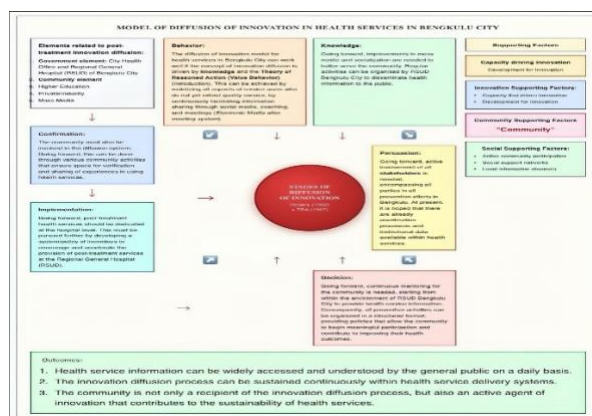


Figure 6. Diffusion model of Post Treatment Health Service Innovation in Bengkulu City
 Source: Research data from researchers, 2025

CONCLUSION

The process of diffusion of health service innovation in Bengkulu City has experienced many adjustments. In the post-treatment service, diffusion of innovation occurs only within the Bengkulu City Hospital, service recipients are informed about the service when they will receive post-treatment services, namely when VIP patients return from their inpatient status. Thus, the process of diffusion of health service innovation has not gone well through several stages of innovation diffusion, namely the knowledge stage, persuasion stage, decision making stage, implementation stage and confirmation stage. This pattern reflects not a failure of community willingness, but a structural diffusion arrest caused by the VIP-only eligibility restriction and the absence of systematic external communication channels – two barriers that must be addressed through policy reform and diffusion infrastructure investment respectively.

Supporting factors, namely Leadership, which supports the process of diffusion of post-treatment health service innovation is seen from the existence of solutions and involvement from the

Bengkulu City Government in alleviating the problem of health service needs in the Bengkulu City community, by creating health service innovations according to community needs, being involved in health service promotion activities on the health agenda together with the Bengkulu City Health Office, being involved in FGDs (Focus Group Discussions) together with health workers in order to share knowledge and confirm City Government policies in the health sector in Bengkulu City. The development of the innovation team can be seen from the existence of training activities for team members, the establishment of communication within the team.

The inhibiting factors in this research include 1) the lack of development of an innovation culture, 2) the lack of availability of trained workforce and 3) the lack of measurable performance orientation. A further structural inhibiting factor is the VIP eligibility restriction, which limits the diffusion pool to a small subset of patients and prevents the confirmation stage from generating the social proof necessary for wider community adoption. It should be noted that apparent community unresponsiveness to the service is not evidence of weak health awareness; rather, it reflects the absence of accessible information and the structural inaccessibility of the service to the general patient population – conditions that are institutionally produced, not community-generated.

The limitations of this study are that the analysis of the health service innovation diffusion process focuses more on a micro-policy analysis approach or one specific to Bengkulu City, rather than a macro-strategic national policy analysis. Thus, to obtain a more macro-strategic perspective on health service innovation diffusion, further research is needed. The findings are explicitly context-bound to the socio-institutional characteristics of Bengkulu City RSHD — including its decentralised governance structure, VIP-class service design, and local cultural value orientation — and do not claim universal generalizability. The Be For Dions model is proposed as a contextually grounded framework applicable to comparable mid-sized Indonesian municipalities undertaking health service reform, pending empirical validation across other localities and health governance settings.

The principal theoretical implication of this study is that the integration of behavioural intention into Rogers' (1983) stage-based framework is not merely additive but conditioning; behavioural readiness — determined by eligibility structures, cultural value orientation, and policy learning capacity — governs whether individuals can enter and progress through the diffusion stages at all, thereby challenging Rogers' implicit assumption of equal structural access among potential adopters. This finding extends the critique of Rogers' pro-innovation bias (Greenhalgh et al., 2004) by demonstrating that diffusion failure in local government health services is structurally produced before communication dynamics operate. It further supports Muluk's (2008) argument that public sector innovation in Indonesian local governments requires contextually sensitive frameworks that account for the interaction between institutional design and community behavioural agency. Practical implications of this study are Developing measurable performance orientation standards as a method for assessing healthcare service performance achievements. Ensuring that healthcare service information dissemination reaches all social strata of society.

REFERENCES

- Acikgov, F., Elwalda, A. a., & Oliveira, M. J. (2023). Curiosity on cutting-edge technology via theory of planned behaviour and diffusion of innovation theory. *International Journal of Information Management Insights*, 1-15.
- Ainun Nimatu Rohmah, K. Y. (2022). Adoption Of online service innovation at Departement of population and civil registration samarinda city. *Jurnal Komunikasi Pembangunan*, 47-60.
- Ajibola, M. (2008). Innovation and Curriculum Development for Basic Education in Nigeria, Policy Priorities and Challenges of practice and implementation . *Research Journal of International Studies*, 51-58.
- Akadun. (2009). *Teknologi Informasi Administrasi*. Bandung: Alfabeta.
- Akenroye, T. O. (2015). Key Competencies for Promoting Service Innovation; what are implications for the health sector. *The Innovations Journal The Public Sector Innovation Journal*, 1-21.
- Akomolafe, C. O. (2011). Managing Innovations in Educational system in Nigeria; A focus on Creating and Sustenance of Culture of Innovation . *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 47-52.
- Allers, S., Eijkenaar, F., Raaij, E. M., & Schut, F. T. (2023). The long and winding road toward payment for healthcare innovation with high societal value but limited commercial value : A comparative case study of devices and health information technologies. *Technology in Society*, 1-12.
- Artikasari. (2019). Difusi Inovasi Aplikasi Sistem Informasi Malang Online (SINGO) di kelurahan Sawojajar. *Jurnal Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Brawijaya*, 1-12.
- Barrenho, E., Miraldo, M., Propper, C., & Walsh, B. (2021). Innovation : An observational study of laparoscopic colectomy adoption and diffusion in England. *Social Science & Medicine*, 1-8.
- Bastian. (2003). Perkembangan E-Government di Indonesia. *Jurnal Paradigma*, 154-161.
- Behn, R. D. (2008). *The Adoption of innovation ; The Challenge of Learning to Adapt Tacit Knowledge*. Washington, D.C: Brookings Institution Press.
- Benington, J. d. (2010). *Public value; Theory and Practice* . USA: Red Globe Press.
- Black, J. L. (2005). *Regulatory Innovation A Comparative Analysis*. Cheltenham UK: Edward Elgar.
- Bland, S. M. (2012). *Life-cycle Assessment of Energy and Environmental Impacts of LED Lighting Products*. U.S: U.S Department of Energy.
- Bloch, C. &. (2013). Public Sector Innovation from theory to measurement. *Structural Change and Economic Dynamic*. 133-145.
- Borins, S. (2001). *The Challenge of Innovating in Government*. Kanada: University of Toronto.
- Bungin, B. (2007). *Penelitian Kualitatif; Komunikasi, Ekonomi, Kebijakan Publik dan Ilmu Sosial*. Jakarta: Kencana.
- Capuno, J. J. (2010). Leadership and innovation under Desentralization A case study of selected local government in the philippines . *University of the philippines school of Economic* , 2010-10.
- Cepparulo, A., & Zanfei, A. (2021). The diffusion of public eServices in European cities. *Government Information Quarterly*, 1-13.
- Chih Yuang Wang, A. C. (2021). The Implementation of a pharmacy residency program a qualitative study on the diffusion of an innovation. *Exploratory research in clinical and social pharmacy*, 1-8.
- Cobben, D., Ooms, W., & Roijackers, N. (2023). Indicators for innovations ecosystem health: A Delphi study. *Journal of Business Research*, 1-21.
- Creswell, J. W. (2017). *Research Design; Pendekatan Metode Kualitatif, Kuantitatif dan Campuran*. Edisi keempat. Diterjemahkan oleh: Achmad Faraid dan Riayayati Kusmini P. Yogyakarta: Pustaka Pelajar.

- Cristiansen, J. A. (2000). *Building the Innovative Organization: Management System That Encourage Innovation*. New York: Palgrave.
- Damanpour, F. (1991). Organizational Innovation: A metaanalysis of effect of determinants and moderators. *Academic of Management Journal* 34(3), 550-590.
- De Vries, H. B. (2016). Innovation in the public sector A systematic review and future research agenda. *Public Administration*, 146-166.
- Deby Febriyan, W. K. (2017). Inovasi Dalam Sektor Publik (studi kasus proses difusi inovasi aplikasi SIMPUS di kota Yogyakarta. *Jurnal Universitas Gajah Mada*, 1-12.
- Dwiyanto, A. (2008). Mewujudkan Good Governance Melalui Pelayanan Publik. Yogyakarta: Gajah Mada University Press.
- Eggers, W. D. (2009). *The Public Innovator's Playbook; Nurturing bold ideas in government*. Deloitte: Harvard Kennedy School of Government.
- Elcock, H. (2005). *Local Government, Policy and Management in local Authority*. New York: Routledge.
- Evans, M. (2010). *Building the Capacity for local Government Innovation*. Australian Centre for Excellence in local Government.
- Farazmand, A. (2004). *Sound Governance Policy and Administrative Innovations*. London: Praeger.
- Geiler, S. L. (2019). Using Government websites to enhance democratic e-governance a conceptual model for evaluation. *Jurnal Economic Policy*.
- Halvorsen, B. K. (2002). A Systematic Screening of Total Antioxidant In Diethaey Plants. *J. Nutrition*, 461-471.
- Hennala Lea, S. P. (2011). Challenges of multi actor involvement in the public sector front-end innovation processes construction an open innovation model for developing well-being services. *European Journal of innovation management*, 364-387.
- Indarjit, e. r. (2006). Electronic Government; konsep pelayanan publik berbasis internet dan teknologi informasi. Yogyakarta: APTIKOM.
- Jacob Trischer, M. J. (2020). A Service Ecosystem Perspective on the diffusion of sustainability oriented user innovations. *Journal of Business Research*, 552-560.
- Jameson, G., Stoneham, M., Edmunds, M., & Pollard, C. M. (2023). Local government venues sponsorship and signage policies to limit the promotion of harmful products: A Western Australian public health audit. *Australian and New Zealand Journal of Public Health*, 1-7.
- Jong, J. P., Rigtering, C., & Spaans, L. (2023). Heroes of diffusion: Making User innovations widely available. *Research Policy*, 1-14.
- Kalisz, D. E., Khelladi, I., Castellano, S., & Sorio, R. (2021). The adoption, diffusion & categorical ambiguity trifecta of social robots in e-health Insight from healthcare professionals. *Futures*, 1-12.
- Klaus Fichter, J. C. (2021). Diffusion of environmental innovations sectors differences and explanation range of factors. *Journal Environmental Innovations and societal transitions*, 34-51.
- Kurt, Y. (2021). Diffusion of the Airport health accreditation program in the COVID-19 period: An Assessment with institutional logic and legitimacy approach. *Journal of Air Transport Management*, 1-8.
- Lin, X., Lu, L., & Pan, J. (2021). Hospital market competition and health technology diffusion: An empirical study of laparoscopic appendectomy in China. *Social Science & Medicine*, 1-10.
- M Turner & Hulme, D. (1997). *Governance, Administration and Development, Making The State Work*. Kumarian Press, Connecticut.
- Madan, R., & Ashak, M. (2023). AI adoption and diffusion in public: A systematic literature review and future research agenda. *Government Information Quarterly*, 1-18.
- Martin, J. (2000). *Innovation Strategies in Australian Local Government*. Paper in Queensland University Of Technology.
- Martins, J. M., Scheffer, M. C., machado, H. d., Schorner, M. A., & all, L. G. (2022). Spectinomycin, gentamicin, and routine disc diffusion testing: An alternative for the treatment and monitoring of multidrug-resistant Neisseria gonorrhoeae? *Journal of Microbiological Methods*, 1-6.
- McKinlay, J. B., & Marceau, L. D. (2012). From Cottage industry to a dominant mode of primary care: Stages in the diffusion of a health care innovation (retail clinics). *Social Science & Medicine*, 1134-1141.
- Meredith, G. R., Brunson, M. W., & Hardeegree, S. P. (2021). Management innovations for resilient public rangelands : Adoption constraints and considerations for interagency diffusion. *Rangeland Ecology & Management*, 152-160.
- Miles, M. B. (1994). *Qualitative Data Analysis*. London: Sage Publications.
- Mitrawani Naveria Sipayung, S. N. (2022). Difusi Program Bandung Panic Button. *Jurnal Administrasi Negara Universitas Padjadjaran*, 1-12.
- Moleong, L. J. (2005). *Metodologi Penelitian Kualitatif*. Bandung: Rosda.
- Moore, M. H. (1995). *Creating Public Value Strategic Management In Government*. Cambridge, Massachusetts Londong England: Harvard University Press.
- Osborne, S. P. (2005). *Managing Change and Innovation in Public Service Organizations*. New York: Routledge.
- Palm, A. (2022). Innovations System for technology diffusion an analytical framework and two case studies. *Technological Forecasting and Sosial change*, 1-13.
- Patrisia, N. E., & Anwar, F. (2021). Penerapan Transformasi Digital pada Pelayanan Publik di Badan Pengelola Keuangan Provinsi Bengkulu. *Journal of Public Policy and Administration Silampari*, 24-33.
- Paul L. Green, M. R., & Paul E. Plsek, M. (2022). Coaching and leadership for the diffusion of innovation health care: A different type of multi-organization improvement collaborative. *Journal of Quality Improvement*, Vol.28 no.2.
- Pekkarinen Satu, T. T. (2011). Clashes as potensial for innovation in public service sector reform. *International Journal of Public Sector Management*, 507-532.
- Praeger. (2004). *Sound Governance: Policy and Administration Innovations*. Amerika: United States of America.
- Rahmalia. (2020). Difusi Inovasi Pelayanan Publik; Inovasi Pelayanan SAMSAT on the spot di kantor bersama SAMSAT karangplokok kabupaten Malang. *Jurnal Fis. Administrasi Negara*, 1-12.
- Rio Nanda Pratama, A. A. (2022). Difusi Inovasi Program Electronic Traffic Law Enforcement (ETLE) di kota Pekanbaru. *Jurnal Pendidikan dan Sosial Humaniora*, 1-12.
- Rogers, E. M. (1983). *Diffusion of Innovations, Third Edition*. New York: Macmillan Publishing Co. Inc.
- Sandhu, S., Sendak, M. P., Ratiff, W., Knechtle, W., & Balu, W. J. (2023). Accelerating health system innovation : principles and practices from the Duke institute for health innovation. *Patterns Perspective*, 1-13.
- Sangkala. (2013). *Innovative Governance: Konsep dan Aplikasi*. Surabaya: Capiya Publishing.
- Scheplitz, T. (2023). Demonstration and Evaluation of the Digital Health Innovation Interoperability Framework. *Procedia Computer Science*, 1404-1411.
- Schwabe, O. (2021). A Maturity Model for rapid diffusion of innovation in high value manufacturing. *CIRP-2020 8Th CIRP Global Web Conference*, 195-200.
- Sorensen, E. &. (2012). Introduction Collaborative Innovation in the Public Sector. *The Innovation Journal; The Public sector Innovation Journal*, 4.4.
- Sugiono. (2018). Metode Penelitian Kualitatif, Kuantitatif, dan R&D. Bandung: Alfabeta.
- Suk, K. P. (2009). Quality as a Reflection of Innovation ? quality management in the korean Government . *International*

Review of Administrative Science, 421-435.

- Sukardi, S. P. (2021). Implementasi Difusi Inovasi Aplikasi Surat RT sebagai fasilitas pelayanan publik di kelurahan lok tuan kota Bontang. *Jurnal Ilmu Komunikasi*, 85-96.
- Tur, E. M., Zeppini, P., & Frenken, K. (2024). Diffusion in small worlds with homophily and social reinforcement: A theoretical model. *Social Networks*, 12-21.
- Turner, M. &. (1997). *Governance, Administration, and Development making the State Work*. Kumarian Press, Connecticut.
- Vincent, R. C., & Kwadwo, V. O. (2022). Spatial interdependence and spillovers of fiscal grants in Benin; Static and dynamic diffusions. *World Development*, 1-21.
- Wang, L. X. (2022). Global drug diffusion and innovation with the medicines. *Journal of Health Economics*, 1-19.
- Yun, J. J., Park, K., Hahm, S. D., & Kim, D. (2019). Basic Income with high open innovations dynamic: The way to the Entrepreneurial state. *Journal of Open Innovation*, 1-17.
- Zhang, B., & Wang, H. (2021). Network Proximity Evolution of Open innovation diffusion: a case of artificial intelligence for healthcare. *Journal of Open Innovation*, 1-11.