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The Paradox of E-Office Adoption in Indonesian Public Service with 24.000 Apps: Innovation or Prestige?

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Abstract

This study examines the adoption process of e-office systems in Indonesian government agencies, driven by the ZI WBK/WBBM competition aimed at promoting corruption-free bureaucratic areas. The research reveals that during the confirmation stage of e-office implementation, the focus shifted from assessing true innovation to merely obtaining the WBK/WBBM designation. This emphasis on the title undermines the core goal of e-office—improving public service delivery through e-governance. The study identifies five key stages in the adoption process: knowledge acquisition, persuasion, decision-making, implementation, and confirmation. It suggests that stakeholders may prioritize the incentive of the ZI title over a deeper understanding of the technology's benefits. Additionally, conflicting regulations present challenges that hinder successful implementation. The study concludes that a revised approach is needed, one that prioritizes user experience, public service improvement, and the core functionalities of the e-office. By focusing on these elements, stakeholders can ensure the system enhances government transparency and efficiency. This qualitative research uses case-based analysis, drawing on interviews with government employees and IT personnel involved in the ZI WBK/WBBM implementation.

Keywords: *adoption; innovation; application; ZI WBK/WBBM; Case Base Analysis, Bureaucratic Reform, public service delivery*

Introduction

Indonesia's e-government landscape presents a paradox of plenty. As Finance Minister Sri Mulyani Indrawati highlighted, the number of government applications (24.000) suggests a robust technological infrastructure. However, this abundance masks underlying inefficiencies that threaten to undermine the potential benefits of e-government. This paper argues that the current approach, characterized by application proliferation and a potential focus on self-promotion, leads to budgetary strain and hinders the development of a user-centric e-government system. The lack of multifunctionality and siloed databases across agencies, as observed by Sri Mulyani, creates a fragmented e-government ecosystem. This redundancy necessitates the maintenance of numerous applications, significantly straining the state budget. Studies by Moon (2002) and Layne (2002) support this argument. Moon (2002) demonstrates how fragmented e-government initiatives can

lead to higher information technology (IT) infrastructure costs and lower overall efficiency. Layne (2002) emphasizes the importance of interoperability and data sharing in e-government, highlighting the cost benefits of a more unified approach. Digital expert Anthony Leong's observation regarding agencies' desire for self-promotion aligns with the bureaucratic performance enhancement (BPE) concept identified by Yang and Zhao (2018). BPE can lead to the prioritization of application quantity over long-term sustainability. However, as Leong suggests, this focus neglects crucial considerations like financing and maintenance. Studies of Ashraf et al. (2016, 2021) reinforce this point, emphasizing the importance of post-implementation support for e-government initiatives.

The ubiquitous nature of mobile technology has spurred governments worldwide to explore innovative ways to improve public service delivery and citizen engagement. Indonesia has taken a particularly ambitious approach by embarking on a project to develop and promote a staggering 24,000 mobile applications across diverse sectors like healthcare, education, transportation, and agriculture. While this initiative signifies a potential commitment to technological advancement, questions arise regarding the underlying motivations. Is this primarily driven by a genuine desire to foster innovation and improve governance (innovation), or is it motivated by a desire to enhance national prestige on the international stage (prestige)?

This paper investigates the factors driving the adoption of app creation within government agencies. It explores the case of Indonesia's Integrity Zone (ZI) program, specifically the ZI Towards Corruption-Free Areas and Clean and Serving Bureaucratic Areas (WBK/WBBM) initiative, as an example of how mandated policy can indirectly influence app development. Encouraging innovation adoption often involves embedding specific attributes within the process. One such attribute is using mandates, particularly in social organizations such as governments (Rogers, 2003). This paper examines how mandated policies can indirectly drive app creation in government agencies. This research is unique because it attempts to identify trends from various cases regarding application development that do not always emerge in a single case. The study aims to use existing cases and compare them with findings from the field. This research will also help to understand the point of view and understanding of government units about the need to use or develop applications.

The Case of Indonesia's ZI WBK/WBBM Program, launched in 2014 through Regulation Number 52 2014 by the Ministry of Administrative Reform and Bureaucratic Reform (Kemenpan-RB), exemplifies how mandated policy can influence app development. The ZI program awards the ZI WBK and WBBM titles to government agencies, demonstrating a commitment to bureaucratic reform, anti-corruption efforts, and improved public service delivery (Kemenpan-RB, 2014). The ZI program, mandatory for all government agencies at all levels, assesses agencies based on an Evaluation Worksheet (LKE) containing leverage and outcome component indicators. The LKE incorporates an e-office aspect with four key criteria for maximum score: (1) Utilizing information technology (IT) in performance measurement systems. (2) Utilizing IT in HR management operationalization. (3) Utilizing IT in public service provision. (4) Monitoring and evaluating IT usage in performance measurement, HR operationalization, and public service provision.

While the ZI program does not explicitly mandate app development, agencies seeking a perfect LKE score are incentivized to implement e-office solutions, often through custom-built apps. It prioritizes quantity over strategic development, potentially leading to a surge of applications with limited functionality and

interoperability. There are several reasons why work units manage to seek a perfect LKE score since it helps them to secure the title of ZI WBK/WBBM, which make them become benchmark for other units (Setiaji et. al, 2023). The ZI WBK/WBBM program in Indonesia demonstrates the indirect influence of mandated policies on government app creation. While the program aims for bureaucratic reform and improved services, the emphasis on e-office implementation can lead to a proliferation of potentially redundant and inefficient applications. This case study highlights the need for a more nuanced approach that balances mandated e-office adoption with user needs, interoperability, and long-term sustainability considerations. The Diffusion of Innovation Theory, proposed by Everett Rogers (2003), provides a valuable framework for understanding the adoption and diffusion of new technologies within societies. This theory suggests a distinct pattern for adoption, with innovators and early adopters leading the way before the technology reaches most of the population. Governments often play a crucial role in facilitating this diffusion process through policy interventions and infrastructure development. However, the extent to which innovation policies are driven by genuine societal needs versus symbolic goals, such as national prestige, remains a subject of ongoing debate.

Several studies have explored the interplay between innovation and prestige in government-led technological initiatives. For instance, (Orr, 2003) examines how a developing nation's pursuit of technological leadership can overshadow practical considerations, leading to projects with limited impact. Conversely, Rusmiarti (2015) highlights cases where government investment in technology has demonstrably improved public services and fostered genuine innovation. Utama (2020) finds that most Indonesian local government websites and apps do not provide online public services and are still manually accessible, except for a few governments e-procurement sites (online tender auctions). These websites are primarily transactional rather than information-driven in their function within the Indonesian government. The Diffusion of Innovation Theory is the cornerstone for analyzing the Indonesian government's app development initiative. Rogers' (2003) framework highlights several key factors influencing the adoption and diffusion of innovations: (1) **Relative Advantage:** The perceived benefits of the innovation compared to existing solutions. (2) **Compatibility:** The degree to which the innovation aligns with existing values, needs, and practices. (3) **Complexity:** The ease with which the innovation can be understood and used. (4) **Trialability:** The opportunity to experiment with the innovation on a limited basis before full adoption. (5) **Observability:** The ability to witness the results of the innovation by others. By applying this framework to the case of Indonesia's mobile applications, we can examine the extent to which these factors contribute to the successful adoption and diffusion of the technology.

Literature Review

Diffusion is how innovations are communicated in a certain way with a time limit between members of a social system/society (Orr, 2003). According to Rogers (2003), there are four elements of diffusion: Innovation, Communication Channel, period, and Social System. Innovations are ideas, actions, or goods that are considered new. The novelty of innovation is measured subjectively according to the views of the individuals who receive it. Communication Channels are tools to convey innovative messages from the source

to the recipient. The period is the process of innovation decisions from when someone finds out to accepting or rejecting innovations. A social system is a collection of functionally distinct units bound together in cooperation to achieve a common goal. The structure within a social system affects the way diffusion occurs.

Based on how someone can accept innovation, there are five categories of Adopters groups (Rusmiarti, 2015): Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. Innovators are individuals who actively seek information about new ideas. Innovators usually get high mass media exposure and have extensive networks. Innovators envision new possibilities due to adopting an innovation and are willing to try. Early adopters use data from implementing and confirming the innovator's innovation to help them make decisions. If they observe that the innovations adopted by the innovator are effective, they will be encouraged to adopt them. Usually, this group is an opinion leader in the community. The early majority adopt innovations before most people do. The early majority usually has strong interactions within their environment but rarely plays an important role in their environment. The early majority group is usually the bridge between the early adopters and the late majority because it is in a unique position right in the middle. The late majority adopt an innovation after most people have already adopted it. It is usually due to economic demands or environmental pressures. The late majority are usually very cautious about innovations and are skeptical. The late group is the last group to adopt the innovation; their way of thinking is mostly still oriented to the past, and there is a lack of information sources that reach them regarding these innovations. So, they choose to be careful and slow in adopting to ensure the innovation will not fail.

Since the decision to adopt an innovation is not collective, each individual will face the decision to adopt the innovation through 5 stages: (1) Knowledge, when Individuals become aware of the innovation and know how it functions. (2) Persuasion is when individuals form an attitude of liking or disliking the innovation. (3) Decision, when Individuals decide to participate in activities that will lead to a choice to adopt or reject the innovation. (4) Implementation is when individuals use the innovation. (5) Confirmation is when Individuals evaluate the results of innovation decisions that have been taken. Diffusion occurs in a social system, so the structure of the social system will affect the diffusion of innovation and other things, namely norms, the role of community leaders, change agents, the type of innovation-decision and the consequences of the innovation itself (Rusmiarti, 2015).

The Indonesian government's ZI (WBK/WBBM) initiative aims to create a corruption-free and service-oriented bureaucracy. While the program's core focus is not app development, its requirements can indirectly stimulate the creation of mobile applications. Government agencies striving for WBK/WBBM status may find that mobile applications offer efficient and transparent solutions to enhance public service delivery, improve internal processes, and promote citizen engagement – all crucial aspects for achieving the initiative's goals. The Diffusion of Innovation Theory (Rogers, 2003) provides a valuable framework for understanding this phenomenon. This theory suggests that the adoption of innovations (in this case, mobile applications) is influenced by factors like (1) **Relative Advantage:** The perceived benefits of an app compared to existing solutions. Apps can offer advantages like increased efficiency, accessibility, and transparency – all desirable qualities within the ZI (WBK/WBBM) framework. (2) **Compatibility:** The degree to which an app aligns with existing workflows and user needs. Apps designed specifically for ZI (WBK/WBBM) goals would have a

higher compatibility advantage. (3) **Complexity:** The ease with which an app can be understood and used by both government officials and citizens. User-friendly apps are more likely to be adopted within the ZI program. While the ZI program does not explicitly mandate app development, its emphasis on achieving specific goals creates an environment where mobile applications become attractive solutions. Several studies explore how government policies can indirectly influence technological advancements. Governments can utilize policy instruments like funding, regulations, and procurement strategies to stimulate innovation in desired areas, even without directly dictating specific technologies (Mazzucato, 2015). The ZI program can indirectly nudge agencies toward app development by incentivizing specific behaviors. Geels et al. (2017) discuss "mission-oriented policies" that focus on achieving specific societal goals, allowing flexibility in the solutions employed. With its focus on clean and efficient bureaucracy, the ZI program could lead to the emergence of apps as a means to that end. Limited research directly explores the link between the ZI program and app development. However, studies on e-government initiatives offer relevant insights. Hafel et al. (2022) examine the challenges of e-government implementation in Indonesia, highlighting issues like lack of infrastructure and digital literacy. These factors could also present challenges in adopting the ZI (WBK/WBBM) app. Geels (2002) explores e-government services in developing countries, emphasizing the importance of user-centric design and citizen participation. Apps developed within the ZI program would benefit from similar considerations.

Methodology

The Indonesian government's recent surge in developing mobile applications (apps) for its various agencies has raised concerns about budgetary waste and inefficient practices. This paper explores this phenomenon through a qualitative research approach using a case-based analysis. By examining specific **government units** (gUs) striving for the Integrity Zone (ZI) with Corruption-Free Areas and Clean and Serving Bureaucratic Areas (WBK/WBBM) status, we investigate the potential link between the ZI WBK/WBBM assessment criteria and the proliferation of potentially unnecessary apps. This paper argues that the impetus for this app development surge might not solely reside in innovation but potentially stems from the bureaucratic reform program initiated by the Ministry of Administrative and Bureaucratic Reform (PAN-RB).

The ZI WBK/WBBM program is a national initiative to foster corruption-free and service-oriented bureaucracies. gUs undergo assessment for this prestigious designation, with criteria that prioritize transparency, accountability, and service delivery efficiency. One crucial factor within this assessment is the implementation of e-office applications. These applications facilitate digital workflows and information sharing, potentially contributing to the ZI WBK/WBBM goals. This paper seeks to answer the following research question: To what extent does the ZI WBK/WBBM program's emphasis on e-office applications influence the development and adoption of mobile apps within Indonesian gUs? A qualitative approach using a case-based analysis will be employed. It involves selecting a set of gUs at different levels (national, provincial, local) and with varying success in achieving ZI WBK/WBBM status. In-depth interviews will be conducted with key stakeholders, including Government officials involved in ZI WBK/WBBM implementation and IT personnel responsible for app development who utilize these gU apps. Those who serve

as informants must have either completed or are currently undergoing the WBM/WBBM process and are actively involved in its implementation at their office. A thematic analysis of the interview data will be conducted to identify recurring themes (Wulandari et al., 2023). The data that has been obtained is then reduced and organized based on recurring topics so that conclusions can be drawn and verified. We anticipate findings that may reveal the perceived importance of e-office applications: How do gUs view the role of e-office applications in achieving ZI WBK/WBBM status? Decision-making processes for app development: What factors influence the decision to develop specific apps? Is the primary focus on fulfilling assessment criteria or addressing actual service needs? Sustainability and maintenance of apps: How do gUs manage app maintenance and updates after the initial development phase? Are there instances of app neglect or abandonment? By analyzing the interview data across the chosen cases, we can gain deeper insights into the relationship between the ZI WBK/WBBM program and gU app development practices. The findings will contribute to the ongoing conversation about bureaucratic reform in Indonesia (Achmad et al., 2021; Alamiyah et al., 2022). Innovation vs. Performance: Does the emphasis on e-office applications potentially lead to a focus on quantity (number of apps) over quality (effectiveness and user-centricity)? Sustainability and Resource Management: How can the ZI WBK/WBBM program incentivize gUs to develop and maintain genuinely beneficial and sustainable apps in the long run? Case-based analysis (CBA) is not a distinct research method, but a technique employed within the broader framework of case study research. It systematically analyzes case studies to identify patterns, similarities, and differences.

Results and Discussions

Indonesia must shift towards a more strategic e-government approach to address these issues. To do so, it involves (1) **Consolidation and Integration:** A thorough evaluation of existing applications, focusing on consolidating functionalities and integrating data across agencies. It must promote interoperability and data sharing in e-government (Layne, 2002). (2) **Focus on User Needs:** Develop applications that address real citizen needs and provide a seamless user experience. It aligns with the citizen-centric approach (Talreja et al. 2017). (3) **Performance Measurement:** Shifting the focus from application quantity to metrics that reflect positive outcomes, such as citizen satisfaction and service improvement. It aligns with the citizen-centric approach and the work measuring e-government success (Janssen et al., 2011).

One example of a successful government application is e-auction from the Directorate of Auctions, Directorate General of State Assets (DGSAM), Ministry of Finance. In 2024, e-auction won the title of one of the 5 best innovations in the sustainability group from the Ministry of Administrative Reform and Bureaucratic Reform. E-auction through the Indonesian auction application is an application that allows auctions in online form. The auction, which is usually carried out face-to-face, is modernized by allowing buyers or bidders to participate by bidding in writing without the need to be present at the auction venue and still fulfilling the auction rules in accordance with applicable laws (DJKN, 2023). E-auction itself has answered the needs of the community in conducting an easy and transparent auction. The all-online process has minimized the possibility of intervention from any party. During the Covid-19 pandemic, online auctions through e-auction also allowed auctions in Indonesia to continue to run normally when restrictions on face-to-face meetings were imposed.

DGSAM itself has integrated data with Directorate General of Population and Civil Registration so that the verification process of National Identification Number (Nomor Induk Kependudukan/NIK) data used in the auction process can be carried out automatically (Ditjen Dukcapil, 2023). DGSAM is also working with the Directorate General of Taxes on a mechanism to confirm the status of taxpayers in the auction which aims to ensure that bidders have fulfilled their tax obligations. Only compliant taxpayers are allowed to participate in the auction (DJKN, 2021). This shows that integration and consolidation as expressed by Layne is possible to be implemented in Indonesia. Every year, DGSAM also conducts a service user satisfaction index survey which is used as a KPI target to get feedback on this application as well as to ensure that service users have felt helped.

The above-mentioned app is one of the few that succeeds in fulfilling all three aspects mentioned earlier. The latest characteristics of Indonesia's current e-government are application proliferation and a potential focus on self-promotion, which are risks hindering progress toward a more efficient and citizen-centric system. By implementing a strategic approach that prioritizes consolidation, user needs, and performance measurement, Indonesia can unlock the true potential of technology to enhance public service delivery. It requires a collaborative effort between government agencies, IT professionals, and citizens to create a more cost-effective and user-friendly e-government system.

Factors Driving the Adoption of App Creation in Government

Several attributes can be embedded in encouraging the adoption of innovations, one of which is by giving a mandate to adopt innovations. It usually happens in social organizations such as governments, communities, or companies. Behavior change in innovation adoption can change if there is an order from the government, for example (Rogers, 2003). In Indonesia itself, one of the things that drives the creation of applications - indirectly - through mandated policies is the direction of the Central Government. In 2014, the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia launched the Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 52 of 2014 concerning Guidelines for the Development of Integrity Zones Towards Corruption-Free Areas and Clean and Serving Bureaucratic Areas. The Integrity Zone (Zona Integritas/ ZI) is a predicate given to government agencies whose leaders and staff are committed to realizing a Free from Corruption Area (Wilayah Bebas dari Korupsi/ WBK) and a Clean and Serving Bureaucratic Area (Wilayah Bersih dan Bebas Melayani/ WBBM). The Integrity Zone is a title given to government agencies whose leaders and staff are committed to realizing WBK/WBBM through bureaucratic reform, especially in preventing corruption and improving the quality of public services (Kemenpan-RB, 2014).

The WBK predicate is a title given to a work unit that has fulfilled most of the change management, structuring management, structuring HR management systems, strengthening supervision, and strengthening performance accountability. The WBBM predicate is a title given to a work unit that fulfills most of the change management, structuring management, structuring HR management systems, strengthening supervision, strengthening performance accountability, and strengthening the quality of public services. WBBM is an

advanced level of WBK. The continuity of implementing activities carried out during WBK is one of the benchmarks (Kemenpan-RB, 2014).

This program must be followed by all central and regional government agencies along with units/work units in these government agencies at the lowest echelon III level that carry out service functions. Government agencies that are eligible to get the title will previously be assessed by the National Assessment Team (Tim Pengawas Nasional/ TPN) consisting of elements of the Ministry of Administrative Reform and Bureaucratic Reform (Kemenpan-RB), the Corruption Eradication Commission (Komisi Pemberantasan Korupsi/ KPK) and the Ombudsman of the Republic of Indonesia (ORI). The assessment uses an Evaluation Worksheet (Lembar Kerja Evaluasi/ LKE) containing leverage and outcome component indicators. In LKE, one of the aspects assessed is the e-office. In the e-office aspect, four details are measured to get the maximum score in the assessment by TPN: (1) Does the unit's performance measurement system use information technology? (2) Does the operationalization of HR management use information technology? (3) Does providing services to the public use information technology? (4) Has there been monitoring and evaluation of the use of information technology in measuring unit performance, operationalizing HR, and providing services to the public? If a work unit has a performance measurement system that uses information technology and also innovates, if the unit has provided services to the public using information technology and has also innovated, and if the work unit can provide services to the public using innovation technology and also innovate in it, then in the assessment by TPN will be given a maximum / perfect score. TPN does not require agencies to use applications as innovations, but if not, the score given will not be maximized, and there will be a reduction. Due to the importance of having the titles of ZI WBK and WBBM for government agencies, all government agencies strive to get full points in the LKE assessment, including in e-office implementation.

Innovation Adoption or Just Prestige?

Based on the Electronic-Based Government System (SPBE) evaluation in 2022, the National SPBE Index is only 2.34 out of 5. This relatively small score cannot be said to indicate success. Ordiyasa's research (2015) states that although the implementation of e-government in developing countries is quite rapid, the results of its implementation have not been as expected. The failure of e-government applications in developing countries is due to a lack of understanding of the current situation and what is to be achieved with e-government projects (Ordiyasa, 2015). The ZI WBK/WBBM competition, aiming to achieve "corruption-free and clean bureaucratic areas," emphasizes adopting information technology through e-office applications. This focus on e-office spans three key areas: performance measurement, HR management, and public service delivery. The Regulation of the Minister of Administrative Reform and Bureaucratic Reform Number 52 of 2014 is the primary communication channel for this expectation. It outlines the guidelines for developing Integrity Zones and emphasizes the role of the e-office within them.

The competition timeframe is a crucial factor. With a one-year development period and a final evaluation before receiving the ZI WBK/WBBM title, government agencies must develop and implement their e-office applications within this tight window to be considered by the National Assessment Team. Finally, the hierarchical structure of government agencies plays a significant role. Leaders within these organizations hold

substantial influence over the adoption of innovations. Their support and commitment are crucial for successfully implementing e-office applications across all levels of the bureaucracy.

The question arises for the central government, as a policy maker regarding e-office, to understand this policy's consequences. Referring to Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning Electronic-Based Government Systems Article 63 paragraph 3, the government asks each head of central agencies and regional heads to prevent and stop the development and development of similar applications with general applications related to planning, budgeting, procurement of goods and services, performance accountability, monitoring and evaluation, archives, staffing, and public service complaints. There is a contradiction between the development of ZI WBK/WBBM launched by Kemenpan-RB and the Presidential Regulation above, raising the question, is it true that the application is a form of innovation or just prestige? If the decision-making process for adopting innovations must go through 5 stages, then the question arises as to whether the agency leader as a decision-maker understands how the innovation in the form of the application functions. Even at the persuasion stage, decision makers form an attitude of liking or disliking the innovation based on its impact on the agency, namely full points in LKE ZI WBK / WBBM. The decision to apply as a form of innovation is only based on efforts to get full points in developing ZI WBK / WBBM. So that at the implementation and confirmation stages, what is evaluated by decision makers is not about the effectiveness of the application but precisely on the results of their decision to build the application, whether it can lead to full points in LKE ZI WBK / WBBM and get the Integrity Zone (Zona Integritas) predicate. Innovation should be an effort to improve and provide government services that make performance more effective, efficient, transparent, and accountable (Manar and Alfirdaus, 2023). Therefore, the ZI WBK/WBBM title should not be the basis for adopting these innovations.

Failure Factors of Innovation in the Form of Applications in Government Circles

Not all government applications run smoothly, according to a survey conducted by the Ombudsman in 2020, stating that people do not like application-based government services. The survey results state that only 27.5% of people like to use government online services. The remaining 63.57-87.28% do not like these kinds of services. Many factors cause innovation failure. These factors include a lack of clear division of tasks and roles and a lack of understanding of the innovation vision (Manar and Alfirdaus, 2023). In the case of many government applications, there is a push from the central government, in this case Kemenpan-RB, to provide e-office services. However, we can question whether Kemenpan-RB understands what e-office is and its impact on society and the government sector. Coupled with the issuance of Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning Electronic-Based Government Systems Article 63 paragraph 3, the government asks each head of central agencies and regional heads to prevent and stop the development and development of applications similar to general applications related to planning, budgeting, procurement of government goods and services, performance accountability, monitoring and evaluation, archives, staffing, and public service complaints, which request the cessation of making applications. Government? If seen in this way, it becomes a question of how the stages of understanding (knowledge) and persuasion of Kemenpan-RB in deciding to use e-office as a benchmark for the ZI WBK / WBBM predicate

can be described as follows. This passage highlights the paradoxical situation surrounding e-office adoption within Indonesian government agencies. It outlines five key stages in the process but reveals a potential disconnect between the intended and implementation goals.

(1) Knowledge Acquisition: The journey begins with stakeholders at Kemenpan-RB (Ministry of Administrative and Bureaucratic Reform) learning about e-office applications. However, the focus is not on understanding the application's functionalities. Instead, the emphasis is on its role as a benchmark for achieving the coveted WBK/WBBM ZI designation (corruption-free and clean bureaucratic areas). It potentially creates a knowledge gap regarding the core functionalities of the e-office. (2) Persuasion through Incentive: The path to adoption seems more driven by external incentives than a true understanding of the benefits. Stakeholders are persuaded by the prospect of improving their agency's chances of acquiring the ZI title rather than by the potential for enhanced public service delivery. The source of information and its appropriateness for fostering a long-term vision for e-office remains unclear. (3) Decision-Based on Incentive: Ultimately, stakeholders decide to adopt e-office, likely driven by the desire for the ZI title. However, this decision might not be based on a comprehensive understanding of the technology or its potential to improve internal processes and service delivery. (4) Conflicting Regulations: The implementation stage is marked by the release of Regulation Number 52 of 2014, which outlines guidelines for developing Integrity Zones. However, this seemingly positive step is overshadowed by a later regulation – Presidential Regulation Number 95 of 2018. This regulation discourages the development of new applications within government units, potentially hindering e-office implementation efforts. (5) Confirmation Focused on Title, Not Use: The final stage, confirmation, reveals a concerning emphasis. Success is measured not by user satisfaction or improved service delivery but by acquiring the ZI title. This narrow focus undermines the true potential of e-office applications and potentially leads to functionality taking a backseat to achieve a bureaucratic designation.

This analysis highlights the need for a shift in focus. By prioritizing user experience, public service improvement, and a clear understanding of e-office functionalities, stakeholders can ensure that this innovation truly serves its intended purpose. In addition to a lack of understanding of the vision of innovation, the lack of capacity of innovation actors and a rigid bureaucratic culture contribute to innovation failure (Sururi in Manar and Alfirdaus, 2023). Government institutions are famous for their tiered bureaucratic culture, and this can also affect the innovation adoption process in an agency, especially if there is a mandate in the form of regulations from the central government that encourage innovation (Tjahjono et al., 2022). The perception of regional agencies and ministries/institutions that receive the mandate may be as described. There are five stages stakeholders go through when adopting e-office applications to achieve the WBK/WBBM ZI designation in Indonesia. Knowledge: The process begins with awareness. Stakeholders become informed about the WBK/WBBM ZI assessment, which includes aspects of e-office usage, through regulations such as the Regulation of the Minister of Administrative Reform and Bureaucratic Reform Number 52 of 2014. Persuasion: Stakeholders then evaluate the potential benefits. The impact of the e-office assessment on their agency's chances of obtaining the prestigious ZI WBK/WBBM title plays a significant role in shaping their attitude towards this innovation. Decision: Based on this evaluation, stakeholders make a decision. They opt to adopt e-office and begin planning the digitization of services. Implementation: The adoption phase sees the

launch of e-office applications designed to meet the assessment criteria. Confirmation: However, the success of these applications is not measured by user satisfaction. Unfortunately, the confirmation stage focuses solely on achieving the ZI WBK/WBBM title, potentially neglecting the core purpose of e-office: improved public service delivery.

The confirmation stage of e-office implementation within the government has revealed a concerning shift in focus. This stage was originally intended to assess the true adoption and effectiveness of the innovation, but it has been repurposed to solely evaluate the acquisition of the WBK/WBBM ZI designation. Initially designed to improve public service delivery through e-governance, this bureaucratic reform initiative has been reduced to a mere checkbox exercise centered on obtaining the title mentioned earlier. Consequently, core functionalities of the government's e-office applications may be disregarded, potentially hindering the intended benefits for the community. The relationship between innovation diffusion theory and e-office implementation in the context of ZI WBK/WBBM lies in the adoption process being driven by external incentives rather than based on a deep understanding of the technology. Diffusion of innovation highlights how innovations spread in society or organizations, but in this case, incentives such as the WBK/WBBM award changed the way the innovation was adopted and implemented. Decisions and implementation are more often directed by the desire for recognition of clean bureaucracy status rather than the full utilization of technology for service improvement and efficiency. This approach creates a potential mismatch between the intended goal (efficiency and transparency through technology) and the implemented goal (gaining WBK/WBBM status).

Research by Manar and Alfirdaus (2023) identifies the causes of unsustainability of innovations carried out by local governments, namely the lack of socialization, which causes people not to know about innovations; the second is the lack of budget to keep running innovations; the third is the absence of a legal umbrella to keep running innovations; the fourth is the resistance of innovation operators so that they do not want to run innovations; and the last is the mutation of innovator positions so that innovations that have been implemented are abandoned. As a result of the adoption of innovations driven by the mandate, the socialization of these innovations is less considered because the innovation maker in the form of an application in the confirmation stage is more concerned with the existence of the application so that when the TPN assesses it, it gets maximum value, rather than the use of innovation in the form of applications by the community itself. As a result of mandate-driven innovation adoption, there is also resistance from innovation operators, in this case, applications. Application operators in government agencies often show resistance. It is due to their position as the Late Majority, which has the characteristic of only wanting to adopt innovations after most people have adopted them, usually due to economic demands or pressure from the environment. Usually, the late majority are very cautious and skeptical of innovation (Orr, 2003).

The adoption of innovation driven by the mandate also relies heavily on opinion leaders, in other words, stakeholders who decide that innovation in this application must be adopted. These opinion leaders are usually early adopters who use data from the implementation and confirmation results of the innovator's innovation to help them make decisions. If the results of their observations state that the innovation adopted by the innovator is quite effective, they will be encouraged to adopt it (Orr, 2003). So, if this opinion leader is no longer in charge of the agency, the application operator who adopts due to pressure from the environment

- in this case, pressure from the opinion leader - will no longer operate the application accordingly. A research by Amjad and Rejman (2018) stated that an organization might face more resistance form the employees when new things and technologies are not properly communicated. Improper communications about new innovations can lead to employees not having enough confident to support the changes that is made by the organization. Thus, the government must socialize its innovation program first before throwing it to the public. The socialization must make the employees concerned feel confident in using the innovation. So that to achieve this goal, it can be done through special training programs, socialization and incentives for employees who want to use it.

Conclusion

The Minister of Finance, Sri Mulyani, complained about the number of applications from government agencies, which amounted to around 24.000 applications, which cost the state budget to manage. However, there are driving factors for the emergence of many government applications promoted by the central government, in this case, the Ministry of PAN-RB. With the mandate from the central government, the adoption of innovation in e-office, often translated as the establishment of applications, has become massive. The problem of the adoption stage can also be traced from how the central government, in adopting innovations to implement e-office and making it a mandate for all central and regional agencies, does not understand the consequences of the policies it launches. Evidence from the launch of the Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning Electronic-Based Government Systems Article 63 paragraph 3 asks regional heads and heads of central agencies to stop developing applications in their units. The stages of innovation adoption no longer consider the knowledge of innovation as a benchmark for innovation adoption, but what is considered in adopting these innovations is the possibility of the government agency getting the ZI-WBK / WBBM title if it adopts innovation. So, it is not uncommon for this government application not to solve community problems but instead become a new problem for people who need services because they are directed to use less qualified applications. The discussion above reveals several key issues:

1. Government units tend to focus more on obataining the ZI WBK/WBBM title and potentially compromising the core purpose of designing an e-office application to improve public service.
2. The mandatory nature of ZI WBK/WBBM program drives government units to develop more applications which are redundant and limited functionality since the government units don’t prioritize sustainability.
3. Government units tend to face challenges to implement the innovations since there are conflicting regulations and insufficent understanding of the e-office innovations within their employees.

Giving a mandate to adopt innovations effectively encourages the adoption level, but the existence of a mandate can bypass the stages of adopting innovations. The understanding stage is not passed properly with the mandate because it only refers to the mandate, not understanding the good and bad of the innovation. Likewise, at other stages, such as the decision-making stage, it is not taken because of the belief in innovation

but precisely because there is a mandate. Also, at the confirmation stage, the satisfaction of application user services that should be part of the evaluation is displaced by how the agency has carried out the mandate using the e-office to get the ZI WBK / WBBM title. This study concludes that while the ZI progam aims to foster bureaucratic reform and improved service, it still needs a revised approach that balanced mandated e-office adoption with user needs and sustainability to achive the goal of enchancing government transparency and efficiency. To achieve that goal, the government needs to shift towards a more strategic e-government approach which involves (1) consolidation and integration, (2) focus on user needs and (3) performance measurement. To make the shift sustainable, the government also needs to reduce resistence within their remployees by providing them with proper training, socialization and incentives which lead them to be more confident while using the e-office innovation.

Limitation

There are some limitations in this study that can be addressed in the future. Fisrtly, this research only considers mandate-driven innovation in the context of WBK/WBBM as the driver. Secondly, this research only involved a handful of informants from several government offices who are involved in the implementation of WBK/WBBM in their respective offices. Thus, the result of this research cannot be generalized to all government offices in Indonesia.

Recommendation for Future Research

Futures research may examine how to shift the focus from achieving titles to addressing the real needs of public service users or expand to investigate how the offices that have successfully implemented e-office sustainably and dissect the key elements of their success. Future research may also address the conlficting regulations about innovation in Indonesia.

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References

Achmad, Z. A., Siswati, E., Wahyudi, A., Alamiyah, S. S., & Juwito. (2021). *Data Indeks Demokrasi Indonesia Kota Blitar Tahun 2020* (Z. A. Achmad & D. Nasution (eds.)). Sahaja. https://id1lib.org/book/17007252/b2e9c3

Alamiyah, S. S., Achmad, Z. A., Siswati, E., Batari, F. T., Fitriana, V. V., & Widiati, W. R. (2022). *Analisis Isi Berita Media Massa dan Regulasi Daerah yang Mempengaruhi Indeks Demokrasi Indonesia*. PT. INSAN CENDEKIA MANDIRI GROUP. http://repository.upnjatim.ac.id/12482/

Ashraf, A. R., Thongpapanl, N. (Tek), & Spyropoulou, S. (2016). The connection and disconnection between e-commerce businesses and their customers: Exploring the role of engagement, perceived usefulness,

and perceived ease-of-use. *Electronic Commerce Research and Applications*, *20*, 69–86. https://doi.org/10.1016/j.elerap.2016.10.001

Ashraf, A. R., Thongpapanl Tek, N., Anwar, A., Lapa, L., & Venkatesh, V. (2021). Perceived values and motivations influencing m-commerce use: A nine-country comparative study. *International Journal of Information Management*, *59*, 102318. https://doi.org/10.1016/j.ijinfomgt.2021.102318

Amjad, A., & Rehman, M. (2018). Resistance to change in public organization: reasons and how to overcome it. European Journal of Business Science and Technology, 4(1), 56-68.

Direktorat Jenderal Kekayaan Negara (DJKN). (2023, March 16). Pelaksanaan Lelang oleh KPKNL [The Conduct of Auction by KPKNL] Direktorat Jenderal Kekayaan Negara. [Indonesian] Retrieved from https://www.djkn.kemenkeu.go.id/kpknl-ternate/baca-artikel/15971/Pelaksanaan-Lelang-Oleh-KPKNL

Direktorat Jenderal Kekayaan Negara (DJKN). (2021, January 19). Sosialisasi Konfirmasi Status Wajib Pajak [Socialization of taxpayer status confirmation] Direktorat Jenderal Kekayaan Negara. [Indonesian] Retrieved from https://www.djkn.kemenkeu.go.id/kpknl-singkawang/baca-berita/22936/Sosialisasi-Konfirmasi-Status-Wajib-Pajak.html

Direktorat Jenderal Kependudukan dan Pencatatan Sipil (Ditjen Dukcapil). (2023, May 15). Perpanjang PKS dengan Ditjen Dukcapil, DJKN Kemenkeu Siap Mengacu ISO 27001 [Extending the agreement with the Directorate General of Dukcapil, the Ministry of Finance's DGSAM is ready to comply with ISO 27001] Direktorat Jenderal Kependudukan dan Pencatatan Sipil. [Indonesian] Retrieved from https://dukcapil.kemendagri.go.id/blog/read/perpanjang-pks-dengan-ditjen-dukcapil-djkn-kemenkeu-siap-mengacu-iso-27001

Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. *Research Policy*, *31*(8–9), 1257–1274. https://doi.org/10.1016/S0048-7333(02)00062-8

Hafel, M., Jamil, J., Umasugi, M., & Anfas, A. (2022). Challenges of E-Government Implementation in The Region Archipelago Characteristics. *JAKPP (Jurnal Analisis Kebijakan & Pelayanan Publik)*, *8*(1), 44–58. https://doi.org/10.31947/jakpp.v8i1.21282

Janssen, M., Kukulaksız, S., & Steenhoff, M. (2011). Measuring e-government success: From rhetoric to results. International Journal of Electronic Governance, 4(3), 239-262. (https://www.inderscience.com/jhome.php?jcode=ijeg)

Kemenpan-RB (Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi) (2014). Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 52 Tahun 2014 tentang Petunjuk Pelaksanaan Pembangunan Zona Integritas Menuju Wilayah Bebas dari Korupsi dan Wilayah Bersih dan Melayani [Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 52 of 2014 concerning Guidelines for the Development of Integrity Zones Towards Corruption-Free Areas and Clean and Serving Bureaucratic Areas] (https://peraturan.bpk.go.id/Details/132770/permen-pan-rb-no-52-tahun-2014) (In Indonesian)

Layne, K. (2002). The problem of network governance. Administration & Society, 34(1), 103-128.

Manar, D. G. & Alfirdaus, L.K. (2023) Analisis Kegagalan Inovasi Pemerintah Daerah. *POLITIKA: Jurnal Ilmu Politik Vol.14, No. 1, 2023*

Mashabi, S. Erdianto, K. (2020, Februari 26). Survei Ombudsman: Masyarakat Tidak Suka Layanan Berbasis Aplikasi. [situs berita] diakses dari https://nasional.kompas.com/read/2020/02/26/19263511/survei-ombudsman-masyarakat-tidak-suka-layanan-pemerintah-berbasis-aplikasi

Mazzucato, M. (2015). *The Entrepreneurial State : Debunking Public vs. Private Sector Myths* (Revised). PublicAffairs.

Minister of Finance of the Republic of Indonesia. (2023, May 17). Menkeu Sorot Aplikasi Tak Terawat di Lembaga Pemerintah [Finance Minister Highlights Neglected Applications in Government Agencies]. Ministry of Finance of the Republic of Indonesia. [Indonesian] Retrieved from https://www.kemenkeu.go.id/

Moon, M. J. (2002). The evolution of e-government arguments and challenges for the transformation of government. Social Science Computer Review, 20(2), 118-132. (https://www.researchgate.net/publication/324496637_E-government_transformations_challenges_and_strategies)

Ordiyasa, I. W. (2015). Kegagalan Penerapan *E-government* di Negara-Negara Berkembang. *Seminar Nasional Teknologi Informasi dan Multimedia 2015*

Orr, G. (2003). Review Diffusion of Innovations, by Everett Rogers (1995). In *Stanford University* (Vol. 1, Issue 3, pp. 1–7). http://web.stanford.edu/class/symbsys205/Diffusion of Innovations.htm

Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 52 tahun 2014. ***Pedoman Pembangunan Zona Integritas Menuju Wilayah Bebas dari Korupsi dan Wilayah Birokrasi Bersih dan Melayani.*** 17 Oktober 2014. Berita Negara Republik Indonesia Tahun 2014 Nomor 1813. Jakarta.

Peraturan Presiden Republik Indonesia Nomor 95 tahun 2018. ***Sistem Pemerintahan Berbasis Elektronik.*** 2 Oktober 2018. Lembaran Negara Republik Indonesia Tahun 2018 Nomor 182. Jakarta.

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.

Rogers, E. M., & Williams, D. (1983). Diffusion of. *Innovations (Glencoe, IL: The Free Press, 1962)*.

Rusmiarti, D. A. (2015). Analisis difusi inovasi dan pengembangan budaya kerja pada organisasi birokrasi. *Masyarakat Telematika dan Informasi*, *6*(2), 85-100.

Sejati, I. R. H., Widyastuti, A., & Sari, D. K. (2023). Menuju Zona Integritas Melalui Optimalisasi Media Sosial. *Journal of Community Empowerment*, *3*(2), 95-101.

Talreja, S., Kaur, P., & Singh, M. (2017). A citizen-centric approach for e-government service delivery: A literature review. International Journal of Public Administration, 40(13-14), 1089-1102.

Tjahjono, A. F., Mashud, M., & Suaedi, F. (2022). Implementation of social capital for multipurpose cooperative autonomy. *Masyarakat, Kebudayaan Dan Politik*, *35*(1), 44–57. https://doi.org/10.20473/MKP.V35I12022.44-57

Utama, A. G. S. (2020). The implementation of e-government in Indonesia. *International Journal of Research*

in Business and Social Science (2147-4478), *9*(7), 190-196.

Wulandari, S. A., Abidin, I. K. R., Achmad, Z. A., & Prakoso, M. A. (2023). The Obligations and Rights to Obtain Compensation as a Result of the Space Objects Discovery. *JURNAL SOSIAL HUMANIORA (JSH)*, *16*(2), 139–151. https://doi.org/10.12962/J24433527.V16I2.17440

Wibowo, I. T. (2019). Proses Difusi Inovasi Program Sakti (Studi Kasus Proses Difusi Inovasi Program Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI) Ditjen Perbendaharaan di DI Yogyakarta Tahun 2018). *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, *4*(4), 323-337.

Yang, H., & Zhao, D. (2018). Performance Legitimacy, State Autonomy and China's Economic Miracle. In S. Zhao (Ed.), *Debating Regime Legitimacy in Contemporary China* (1st ed.). Routledge.