



DOI: <https://doi.org/10.38035/dijefa.v6i4>
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Implementation of Shared Services through ICT Budget Consolidation in the Ministry of Finance

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Abstract: The government's ever-increasing Information and Communication Technology (ICT) spending is often inefficient due to duplication, silos, and separate management across work units. To address this, the Ministry of Finance implemented a shared services approach to consolidate the ICT budget. This study aims to evaluate the successful implementation of this program based on Burns and Yeaton's (2008) five success factors: Strong Project Management Skills, Senior-Level Support, Effective Communication, Strong Change Management, and Phased Approach to Implementation. The study used qualitative methods. The results show that the implementation of shared services successfully eliminated several ICT infrastructure duplications, including user devices, and reduced ICT spending by at least 20%. However, challenges remain, such as the dynamics of human resource transfers that could potentially disrupt sustainability, the risk of losing momentum during phased implementation, and suboptimal consolidation due to the presence of two data centers, more than 300 applications, and limited interoperability. Recommendations include involving HR units in strategic ICT planning, competency regeneration through young human resources, application rationalization, data center consolidation, and the implementation of shared services nationally. This study contributes to strengthening integrated ICT management strategies in the public sector and provides policy recommendations to support digital government reform.

Keywords: Implementation, shared services, budget consolidation, ICT spending, procurement consolidation.

INTRODUCTION

The government's ever-increasing Information and Communication Technology (ICT) spending remains inefficient due to duplication, silos, and separate management within each work unit. Based on the appendix of Presidential Regulation No. 95 of 2018 on Electronic-Based Government Systems (SPBE), government ICT spending is inefficient: 65% of

application budgets are used to develop similar systems across different agencies. There are 2,700 data centers spread across 630 institutions, yet their average utilization is only 30%. The Ministry of Finance previously managed eleven data centers across each Echelon 1 Unit and one temporary Disaster Recovery Center (DRC). Internet and intranet services were procured separately by each unit, leading to duplication and inefficient spending. To address these issues, the Ministry of Finance is using a shared services approach to consolidate the ICT budget. The purpose of this study is to assess the success of the shared services program in consolidating the ICT budget and examine the five success factors identified by Burns and Yeaton's (2008) model: Strong Project Management Skills, Senior-Level Support, Effective Communication, Strong Change Management, and Phased Approach to Implementation. The study employed qualitative methods. The results show that the implementation of shared services successfully eliminated several ICT infrastructure duplications, including user devices, and reduced ICT spending by at least 20%. The study recommends include involving HR units in strategic ICT planning, competency regeneration through young human resources, application rationalization, data center consolidation, and the implementation of shared services nationally. This study contributes to strengthening integrated ICT management strategies in the public sector and provides policy recommendations to support digital government reform

The concept of shared services is a desired state in the Decree of the Minister of Finance (KMK) Number 36/KMK.01/2014 concerning the Blueprint of the Ministry of Finance's Institutional Transformation Program for 2014-2025. Decree of the Minister of Finance of the Republic of Indonesia Number 15/KMK.01/2023 concerning Management of Information and Communication Technology Infrastructure within the Ministry of Finance regulates the details of the management of shared services starting from the identification of needs that include shared services and the consolidation of the ICT spending budget. In the implementation of ICT budget consolidation, it also refers to the Decree of the Deputy for Legal Affairs and Settlement of Objections of LKPP Number 6 of 2021 concerning Guidelines for Consolidation of Government Goods/Services Procurement. KMK No.36/KMK.01/2014 also states that all ICT support activities, infrastructure and ICT operations are the responsibility of Pusintek (now merged in BaTii) which is mandated to act as shared services for all these activities. This initiative is part of the design principles of ICT Governance, especially the organizational structure of ICT management.

Learning from other countries that have successfully implemented e-government while maintaining state data security, access to government information and services should be provided through two portals: the Government Internet Portal for the public using government services, and the Intranet Portal for employees/staff within the government (Indrajit et al., 2005). The internet/intranet network for employees at the Ministry of Finance, along with several other ICT expenditures, has been consolidated in the Central ICT Unit from budgeting to procurement. This has successfully created efficiency and effectiveness in ICT budgeting, reducing ICT management silos, including eliminating duplication of ICT budgets for application development, infrastructure, and data centers (Minutes of the Working Meeting of Commission XI of the Indonesian House of Representatives, 2022). Spending efficiency is an important indicator of state budget policy (Bayramov, 2020). Given that government spending allocated in the State Budget is largely implemented through the procurement of goods/services (Azwar, 2016), control is needed from the planning and procurement stages.

Research into the concept of shared services, which incorporates budget consolidation and consolidation of Goods/Services Procurement (PBJ) within the Ministry of Finance, is a novelty in the Indonesian government. The concept of ICT spending consolidation is similar to Pertamina's shared services practice, where business support work is centrally

consolidated, with the hope of achieving labor efficiency, economies of scale, and competitive costs from centralized contracts. Pertamina established the Shared Service Center (SSC) in 2018 to manage routine, repetitive, and high-volume business support activities across subsidiaries and affiliates within the Pertamina Group. The SSC plays a crucial role as a provider and controller of services to all subsidiaries. The SSC will manage massive contracts. For example, in IT services, all notebooks/laptops needed by group business employees will be provided by the SSC, including configuration and software on the devices, which are centrally monitored. This is intended to help subsidiaries focus on the continuity of their core business, without being distracted by routine/supporting matters (Suterisno & Munir, 2021).

Research on shared services in government organizations worldwide (Burns and Yeaton, 2008) identified five key success factors for implementing shared services in government: strong project management skills, senior-level support, effective communication, strong change management, and a phased approach to implementation. This theory was used because it fits the complex research context in the public sector and involves various units. The focus of this study was to assess the implementation of shared services in the Ministry of Finance through the consolidation of the ICT budget, and to assess the effectiveness of these five factors. Dispersed management, duplication of procurement, and inefficient ICT spending were the main issues raised. Data showed that nationally, data center utilization was only 30%, and previously the Ministry of Finance had several different data centers, and internet/intranet procurement was spread across several units with different prices despite the same specifications. After consolidation, both for data center needs and end user device requirements, budget savings of Rp290 billion were recorded for collaboration tools and Rp140.83 billion for end user device procurement consolidation. The difference from previous studies is that the research subjects are different. This study examines the concept of shared services in ICT budgets and spending in the government sector, specifically at the Indonesian Ministry of Finance.

METHOD

The qualitative approach is chosen because of its efforts to get a deep, real, and fundamental understanding of the topic being observed or examined (Agustino & Wicaksana, 2020). Social reality and the participants' subjective meanings are best captured via a qualitative approach. In-depth interviews with semi-structured questions, direct observation with the researcher acting as a non-participant observer, and document analysis incorporating pertinent laws and websites pertaining to the research topic are some methods of gathering data (Sugiyono, 2017).

The study method adopted was descriptive (Rustanto, 2016). The purpose of the information gathering in this study is to obtain the information that is needed from the information that is carefully considered in order to understand the topic and the context of the study and to provide the information that is needed in a suitable manner (Mulyono & Hidayat, 2022). The researcher employed a purposive informant determination technique in this study, which selects informants who are thought to have the best understanding of the information the researcher needs. One Head of the Center for Financial Information and Technology Systems, one Head of General Affairs, one Head of the ICT Service Management Division, one Functional Official at the Directorate General of Fiscal Balance as a unit impacted by the ICT Budget Consolidation, one Commitment Making Staff Officer, and one staf of Financial Management involved in the idea of combining the Ministry of Finance's ICT spending were among the six informants interviewed. A minimum of five years of relevant work experience, direct participation in the ICT budget consolidation process, and a thorough comprehension of relevant regulations and procedures were taken

into consideration when choosing informants, in addition to their positions. These factors made sure that the informants had deep knowledge that was necessary to fully address the research issues.

This study employs the interactive model of Miles, Huberman, and Saldaña (2014) for data analysis, focusing on the processes of data condensation, data display, and conclusion drawing/verification. Nvivo 12 software is used as a tool to assist in coding, theme visualization, and mapping relationships between categories to support the analytical process. As explained by Creswell (2013), a thematic approach is applied for coding; this approach begins with open coding, followed by category grouping, and the development of core themes. In addition to member checking, source and technique triangulation are used to test the validity of the data. Nvivo enhances the transparency, accuracy, and efficiency of qualitative data analysis. Finally, qualitative approaches may be more appropriate to the nature of the research problem than quantitative methods, which may be less suitable for measuring more substantial and complex aspects of the research (Utami et al., 2024).

RESULTS AND DISCUSSION

Strong Project Management Skills

Van Meter and Van Horn (1974) emphasized the importance of structured organizational action to achieve policy objectives. This aligns with the fact that successful ICT budget consolidation relies on strong project management skills.

Not only are timelines and budgets crucial for good project management, but also how employees work in a structured manner and understand each other's responsibilities. Interview results indicate that the process was carried out with planned project management in the context of ICT budget consolidation. Everything was carried out in a gradual and measured manner, from the initial planning stage through the tender process, equipment installation, and final reporting. Regular meetings became a kind of "mandatory ritual" that fostered collaboration and ensured that all parties pursued established goals.

Time management in the field was crucial. Each task was divided into packages, each with a designated individual responsible for each task. "The initial laptop price of Rp8 million was successfully negotiated down to Rp6 million, resulting in an efficiency of Rp2 million per unit or Rp20 billion for 10,000 units." (Interview, Hadinata, 2025). This ensured that each team knew who was responsible for what. The procurement process demonstrated that the team worked according to a pre-developed work plan, with clear deadlines. This demonstrated that the consolidation was not only carried out but also managed meticulously.

An efficient budget is one way to measure success, in addition to consistency. According to informants, one of the primary goals of consolidation is to increase efficiency through resource sharing "This consolidation positively promotes efficiency and shared use of infrastructure, such as implementing a common platform for similar applications to avoid redundant system development." (Interview, Agus D.M, 2025). For example, it's more cost-effective for multiple units to share internet networks and servers than to build their own infrastructure. The results of this method are then assessed based on their effectiveness, efficiency, and the added value they generate.

In this process, the technical expertise of experts is crucial. They are responsible for ensuring that the specifications of the devices being purchased meet the needs on the ground, not simply following the latest technological trends. Given that Indonesia does not yet produce its own devices, large companies like IBM, Huawei, and Microsoft still dominate the ICT sector.

The ability to negotiate and interact with others is also crucial. Not all units have the same needs during the consolidation process, so negotiations are often necessary to meet the interests of all parties. One interviewee stated that "the ability to persuade gently but data-

drivenly" (Interview, Ramdhany A.N.P, 2025) is a key strategy for resolving differences between units. This demonstrates that good project management encompasses both technical aspects and building relationships and trust.

In short, good project management in consolidating ICT budgets is evident in many ways. A clear work structure, disciplined time management, efficient budget utilization, and leadership and communication that can move many people in the same direction align with Burns and Yeaton's perspective, which states that the success of a transformation project depends on both the systems and the individuals involved.

Senior Level Support

Clarity of policy direction, political commitment, and adequate resource allocation are some of the elements that shape this support. Support from senior leaders, such as the Minister of Finance and the Chief Information Officer (CIO), is crucial to ensuring the smooth and sustainable implementation of ICT in the ICT budget consolidation process within the Ministry of Finance.

Top-level leaders, particularly the Minister of Finance and the CIO, provide significant moral and structural support for the success of the ICT budget consolidation process. Their instructions have become official ministry policy, enshrined in various regulations, including Ministerial Regulation No. 15 of 2023 concerning the Management of Information and Communication Technology Infrastructure within the Ministry of Finance. Interviews indicate that field implementers have greater confidence in continuing the program because they receive full support from the highest levels of the organization. "Every year, the consolidation campaign is always presented in the LOM, with direct instruction from the Minister of Finance." (Interview, Moch. Ali Hanafiah, 2025)

The existence of formal regulations that provide a strong legal basis for the consolidation process is one of the most tangible forms of support. For example, Ministerial Regulation No. 15 of 2023 clearly outlines the outline and scope of ICT infrastructure within the ministry. This document is not only distributed periodically but also serves as a primary reference for units when developing their work plans and budgets. In reality, the presence of this regulation made the consolidation process more focused and less contentious.

Support extends beyond policy to resources. According to interviews, senior management actively ensures budget availability, competent staff, and the necessary supporting facilities to effectively implement the program. They also ensure that the implementation team's workload is managed within the available resources and is not overburdened. This is reinforced by senior management's active oversight and support of this policy.

As Turle (2010) points out, the implementation of shared services in the UK public sector can only be successful when support from senior management is directed at improving service systems and structural efficiency. Furthermore, these leaders actively monitor and evaluate the implementation process. They are directly involved in discussions and key decision-making in forums such as the Leader's Offsite Meeting (LOM) and the ICT operational oversight forum. Their presence in these forums is not merely symbolic but also helps the implementation team address various issues. According to comments from these forums, active leadership involvement can expedite decision-making and resolve cross-unit coordination issues.

Interestingly, this support from leaders also extends to people outside the Ministry of Finance. They created simple, straightforward, and easy-to-understand communication materials to promote the consolidation program to external stakeholders, such as the House of Representatives (DPR). This was crucial for securing budgetary support and strengthening the ministry's position by demonstrating the importance of ICT to an effective national

strategy. As interviews demonstrated, this method successfully promoted a favorable public and external perception of the program.

Effective Communication

Effective communication within the Ministry of Finance is crucial to ensuring the smooth implementation of ICT budget consolidation. This communication is not simply one-way from the top down, but rather two-way, enabling constructive conversations between units. In interviews, many informants stated that the Focus Group Discussion (FGD) method is most effective because it brings relevant parties together directly and gives them the opportunity to share their thoughts and voice their desires openly.

To expand the reach of communication, various channels are used. Official letters are used for formal communication and documenting policies, while regular meetings serve as a forum for decision-making and problem-solving. Furthermore, internal social media and agency chat groups are also utilized to provide quick updates and strengthen day-to-day coordination. This multi-channel communication method aligns with Wang's (2021) argument that knowledge exchange and information transparency between organizational units are necessary for the successful implementation of shared services. Furthermore, cross-border communication is a crucial tool for organizational integration because, as Lugo Santiago (2018) notes, disconnected silo structures can hinder policy effectiveness and coordination. "The focus group discussion method is the most effective because the parties involved are pre-selected and the information conveyed is two-way." (Interview, FX. Cahyo Wijayanto, 2025).

Communication is also conducted through formal forums, such as the regular ICT Forum and the Leader's Offsite Meeting (LOM). Senior officials, budget managers, and technical implementers gather in these forums to align perspectives and formulate/develop strategic policies. Open discussions can generate practical solutions and foster ownership of the consolidation policy, as demonstrated by comments in these forums.

The communication approach is also proactive, with internal coordination conducted prior to one-on-one meetings with work units to identify potential issues and areas for consolidation. This demonstrates that communication is not reactive but strategically designed with accurate field data.

Communication in the context of ICT budget consolidation is not only a tool for conveying messages, but also a tool for fostering trust, aligning visions, and accelerating decision-making. As outlined by Burns and Yeaton, communication is crucial for success because of its two-way approach, diverse channels, and combination of formal and informal channels.

Strong Change Management

Resistance, both explicit and implicit, often arises as a result of major changes. Reluctance to merge ICT budgets is more likely due to poor perceptions of the process and its outcomes. Some users said there was resistance because the brands offered were unknown, even though their quality had not been proven to be poor. In addition, compared to direct purchasing, procurement through consolidation was perceived to take longer, not in accordance with expected specifications, and tended to be slower in product availability. However, the strategy implemented by senior management was able to overcome these disagreements quite well through open discussion and a persuasive approach. "The Ministry of Finance was one of the fastest in implementing Microsoft Office 365 for 70,000 people within 4 months." (Interview, Moch. Ali Hanafiah, 2025)

A top-down approach combined with open communication is the main strategy used. Leaders listen to implementers' concerns and provide guidance regularly. This reduces the

possibility of conflict and creates a healthy discussion environment. According to interviews, this method builds trust and makes implementers feel valued and heard.

In addition, change management is carried out in a structured and gradual manner. The first step is to inform work units about the long-term benefits of consolidation, which will improve services and save money. In order for a change of mind to occur naturally, this instruction is given repeatedly. Observations show that this method is effective because after several socialization sessions, more and more units finally expressed support for the program.

Participatory approach is very important to manage change. Affected units have been involved since the planning stage, which means they are not only the object but also the subject of change. This increases the sense of ownership and increases commitment to the success of implementation. As a result of interviews conducted with implementers in the field, they found that reluctance was reduced and innovation actually emerged from below.

Change management is successful because of the educational and participatory approach and continuous performance monitoring. Key Performance Indicators (KPIs) are used to evaluate the effectiveness of implementation and provide regular feedback to all parties. With KPIs, each unit can see the progress achieved and assess whether the changes have a positive impact.

Change management in ICT consolidation can be done well with strategies of communication, education, participation, and ongoing monitoring. No change is easy; however, most parties involved have accepted and supported this shift through a humane and inclusive approach. This is very much in line with Burns and Yeaton's idea that managing resistance is a critical component of any significant transformation.

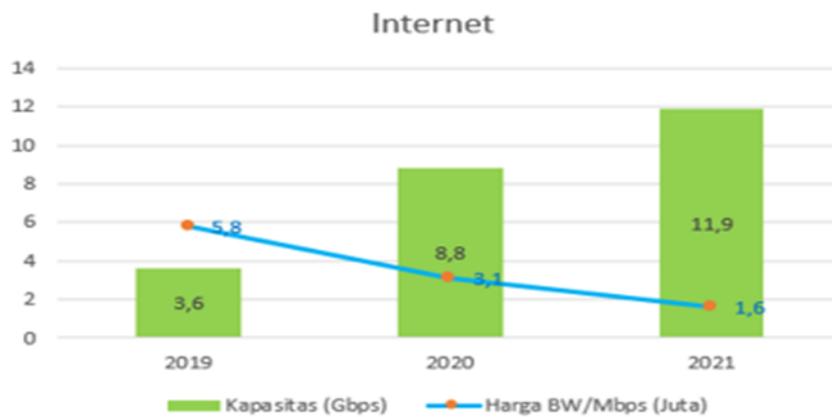
Phased Approach to Implementation

According to Van Meter and Van Horn's (1975) theory, economic, social, and technological conditions influence the ability to implement policies. A phased approach to implementation, is a relevant adaptive strategy for accommodating the diverse conditions on the ground. This approach allows work units to adapt gradually, reduces risk, and allows the organization to learn.

One key way to reduce the likelihood of failure is to implement policies in stages. Lightbourne (2017) emphasized that consolidation in the public sector should be carried out in stages because this gives the organization time to adapt, evaluate, and refine each stage before moving on to the next. ICT budgets were consolidated in stages rather than simultaneously across all units. This method was chosen to minimize risk, control resistance, and provide the implementation team with an opportunity to learn. In interviews, many informants stated that it is a wise strategy to start with simple, proven projects, such as internet and intranets, before embarking on more complex projects. The success of these projects provides early lessons. "A top-down, phased approach is considered most appropriate for a bureaucratic culture with a hierarchical division of authority." (Interview, FX. Cahyo Wijayanto, 2025).

These implementation stages give work units time to adjust. Not all units have the same infrastructure and human resource readiness, so a staged approach allows for more humane adaptation. Observations show that units given time to adjust are more prepared and committed when consolidation is fully implemented. This phased approach was also chosen to ensure the initiative's sustainability and reduce resistance to change. Furthermore, this phased approach was chosen to ensure the initiative's longevity and to reduce resistance to change.

Table 1. Internet Savings (Capacity and Price per Mbps)



Source: Data processed by the author, 2025.

The bandwidth (BW) price per Mbps before consolidation (2019) was 5.8 million, after consolidation (2020) it was 3.1 million and 1.6 million (2021), and the capacity was increased. The efficiency of the internet rental budget consolidation reached 47%. Internet services cover approximately 1,116 offices across the Ministry of Finance.

Table 2. End User Needs Savings
a. Collaboration Tools (Calculation per year)

No.	Description	Number of Licenses	Efficiency (%)
1	Profile 1	40	20,9
2	Profile 2	200	24,24
3	Profile 3	71.819	88,07

Source: Data processed by the author, 2025.

b. Consolidation of User Devices FY 2023

Category	Total Amount Average	Efficiency (%)
Laptop Kategori 1	19.581	16,89
Laptop Kategori 2	44	20,94
Laptop Kategori 3	720	20,94
Laptop Kategori 4	422	5,69
Desktop Kategori 1	461	20
Desktop Kategori 2	107	20,24
Desktop Kategori 3	139	20,24

Source: Data processed by the author, 2025.

Based on the calculation of collaboration tools needs per year, there are three user profiles with different numbers of licenses and efficiency levels. Profile 1 has 40 licenses with an efficiency of 20.9%, Profile 2 has 200 licenses with an efficiency of 24.24%, and Profile 3 dominates with 71,819 licenses and an efficiency of 88.07%. Meanwhile, the consolidation of user devices in FY 2023 shows a variation in device categories based on their function and efficiency level. For laptops, Category 1 totaled 19,581 units with an efficiency of 16.89%, Category 2 had 44 units (20.94%), Category 3 had 720 units (20.94%), and Category 4 had 422 units (5.69%). For desktops, Category 1 recorded 461 units (20%), Category 2 had 107 units (20.24%), and Category 3 had 139 units (20.24%). This data shows

that most collaboration tools licenses are concentrated in Profile 3, while for user devices there is still variation in efficiency that indicates the potential for further optimization.

Furthermore, this phased method allows for reflection and refinement. Before moving on to the next stage, each stage is thoroughly evaluated. Technical and policy adjustments are made if obstacles arise. In interviews, one informant stated that implementation flexibility is key to this phased approach.

The challenge with this strategy, however, is maintaining organizational consistency and resilience. Because it is implemented over a long period, consistency and patience are required. According to several informants, resilience is a challenge, especially when policy changes or personnel changes occur. Therefore, to maintain enthusiasm, consistent leadership and ongoing communication are necessary. Therefore, this phased approach aligns with the principles stated by Burns and Yeaton (2008), who state that a phased approach not only minimizes risk but also allows the organization to learn, develop, and improve the effectiveness of phased implementation.

CONCLUSION

The findings indicate that the organizational change principles proposed by Burns and Yeaton (2008) were successfully applied in consolidating the ICT budget at the Indonesian Ministry of Finance. This success relied on five key components of project management capability: strong project management skills, senior Level support, effective communication, strong change management, and a phased approach to implementation. Each element functioned in its own capacity but collectively contributed to creating a more adaptive and efficient project management system. As noted by Pindiharti et al. (2023), policies serve as the primary reference for organizational members and the public in shaping behavior, and thus, their successful implementation depends greatly on how well they are understood and executed by implementers. A sound understanding of policy helps identify challenges and determine more effective solutions (Wengga et al., 2024).

Despite the effective application of these five success factors, interviews revealed several practical challenges. First, staff rotations involving personnel responsible for shared services or ICT budget consolidation can disrupt program continuity. If staff reassignment is not aligned with organizational needs, consolidation efforts risk losing core competencies and facing operational setbacks. Second, lies in its nature as a long-term transformation, which requires sustained organizational resilience, leadership consistency, and workforce stability. The associated risks include stalled consolidation, loss of momentum, or the re-emergence of siloed work patterns. Third, field data show that ICT at the Ministry of Finance is still managed by five Echelon I units and one non-echelon unit, operates two data centers, and maintains more than 300 applications. This indicates that consolidation remains suboptimal, with high levels of application duplication and limited interoperability, even these conditions may be attributed to technical factors such as legacy systems, unit-level resistance, or the absence of firm policies to retire redundant applications.

From a technical standpoint, the implementation team comprising Commitment Making Officials (PPK), PPK staff, technical teams, and financial managers demonstrated the ability to plan projects systematically, assign tasks clearly, and manage time and budgets effectively. The Project Management Office (PMO) acted as an effective liaison between work units, ensuring smooth coordination flows. The focus extended beyond final outcomes to maintaining a professional and well-managed process.

Leadership engagement, particularly at the senior level, proved to be a decisive factor in success. Support was evident through formal policy issuance, open communication with various stakeholders including the House of Representatives (DPR), active participation in strategic meetings, and the provision of necessary resources. This strengthened the

implementation team's confidence and sense of ownership toward the changes being pursued. Communication was facilitated through formal channels such as the Leader's Offsite Meeting (LOM), Resource Forum, and ICT Operational Oversight Meetings, complemented by informal channels to deepen stakeholder understanding and engagement. This strategy strengthened inter-unit relationships, accelerated information exchange, and minimized communication barriers.

Based on these findings, the study recommends involving the HR unit in strategic ICT planning to ensure that staffing policies align with consolidation needs, supported by rapid adaptation mechanisms to anticipate personnel changes. Competency regeneration should be encouraged by involving more young staff in strategic projects. On the technical side, application rationalization is needed to simplify or integrate systems while decommissioning inefficient or redundant applications. Consolidating data centers into a single computing facility or government cloud is also crucial, backed by leadership mandates to eliminate systems that do not meet shared service standards.

At the national level, the Minister of Finance, as the principal authority on fiscal policy, could advocate for: the development of an integrated digital service platform jointly used by ministries and local governments simply put like a government intranet or advocate for the national replication of office automation systems, such the Electronic Official Document System developed by the Ministry of Finance, the establishment of secure high-efficiency cloud infrastructure and national data centers, the integration of ICT efficiency and interoperability indicators into budget performance assessments, and the elimination of duplicative or siloed ICT expenditures through regulation and budget oversight.

This study is limited by its relatively small number of respondents. Future research should consider case studies on shared service implementation in cross-ministry application integration, user satisfaction surveys on centralized ICT shared services, and the design of an interoperability model based on enterprise architecture to support comprehensive digital transformation in government.

REFERENCES

- Agustino, L., & Wicaksana, H. H. (2020). Policy analysis of handling COVID-19: Experience China, South Korea, Italy, and Indonesia. *Journal of Governance*, 5(2), 179–201.
- Antara News. (2024, Agustus). Kemenkeu hemat anggaran Rp2,21 triliun selama 2020-2023. <https://www.antaraneews.com/berita/4276947/kemenkeu-hemat-anggaran-rp221-triliun-selama-2020-2023>
- Azwar, 2016. Peran Alokatif Pemerintah melalui Pengadaan Barang/Jasa dan Pengaruhnya Terhadap Perekonomian Indonesia. *Kajian Ekonomi Keuangan*, 20(2), pp.149–167. Available at: <http://fiskal.kemenkeu.go.id/ejournal>
- Bayramov, S., 2020. Structural Efficiency of Budget Expenditures as a Stability Factor of the Budget System. 55th International Scientific Conference on Economic and Social Development, Baku.
- Burns, J., & Yeaton, K. (2008). Success factors for shared services implementation in government. *Public Administration Quarterly*, 32(3), 312–335.
- Cresswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches*.
- Dewan TIK Nasional, 2020. *Langkah Strategis Pusat Data Nasional*.
- Dewan TIK Nasional, 2023. *Menanti Jaringan Intra Pemerintah*.
- Indrajit, R.E., Rudianto, D. and Zainuddin, A., 2005. *Electronic Government in Action: Ragam Kasus Implementasi Sukses di Berbagai Belahan Dunia*. Jakarta: Elex Media Komputindo.

- Kementerian Kominfo, 2021. APTIKA Siapkan Tiga Infrastruktur SPBE untuk Fasilitasi Aplikasi Umum. [Online] Available at: <https://aptika.kominfo.go.id/2021/11/aptika-siapkan-tiga-infrastruktur-spbe-untuk-fasilitasi-aplikasi-umum/> [Accessed 29 May 2024].
- Kementerian PANRB, 2024. Gelar Sosialisasi Clearance: Dukung Keterpaduan dan Efisiensi SPBE. [Online] Available at: <https://www.menpan.go.id/site/berita-terkini/gelar-sosialisasi-clearance-kementerian-panrb-dukung-keterpaduan-dan-efisiensi-pelaksanaan-spbe> [Accessed 30 May 2024].
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Mulyono, A., & Hidayat, Y. R. (2022). Implementasi kebijakan sertifikasi halal di Indonesia. *Res Publica: Journal of Social Policy Issues*, 1(1), 1–12.
- Nota Keuangan beserta RAPBN TA 2022. (n.d.). Ministry of Finance, Indonesia.
- Peraturan Presiden Republik Indonesia Nomor 12 Tahun 2021 Tentang Perubahan Atas Peraturan Presiden Nomor 16 Tahun 2018 Tentang Pengadaan Barang/Jasa Pemerintah. (n.d.).
- Peraturan Presiden Republik Indonesia Nomor 18 Tahun 2020 Tentang Rencana Pembangunan Jangka Menengah Nasional Tahun 2020-2024. (n.d.).
- Peraturan Presiden RI No. 95 Tahun 2018. Tentang Sistem Pemerintahan Berbasis Elektronik (SPBE).
- Pindiharti, D., Cholifihani, M., Rustanto, A. E., & Mariam, S. (2024). Evaluasi implementasi kebijakan penyediaan makanan tambahan anak sekolah (PMTAS) pada sekolah dasar negeri di Suku Dinas Pendidikan Wilayah II Kota Administrasi Jakarta Barat. *Magister Ilmu Administrasi Publik*, Universitas Esa Unggul.
- Rustanto, A. E. (2016). Kepercayaan diri dan efikasi diri terhadap kematangan karir mahasiswa di Politeknik LP3I Jakarta Kampus Jakarta Utara. *Jurnal Lentera Bisnis*, 5(2), 1–12. ISSN 2252-9993.
- Sugiyono. (2017). *Metode Penelitian Kualitatif, Kuantitatif, dan R&D*. Bandung: Alfabeta.
- Suterisno, F. and Munir, N.S., 2021. Strategi Shared Service di Subholding Pertamina. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 5(2), pp.261. <https://doi.org/10.24912/jmieb.v5i2.11678>
- Utami, R. N., Wicaksana, H. H., Bratakusumah, D. S., & Hidayat, Y. R. (2024). Implementasi kebijakan proyek strategis nasional Jalan Tol Serang–Panimbang [Policy implementation of the national strategic project of Serang–Panimbang toll road]. *Transparansi: Jurnal Ilmiah Ilmu Administrasi*, 7(1), 64–73. <https://doi.org/10.31334/transparansi/v7i1.3619>
- Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6(4), 445–488. <https://doi.org/10.1177/009539977500600404>
- Wang, H., 2021. Predictive Analytics for Shared Services. *Journal of International Business and Management*, 4(1), pp.1–13. <https://rpajournals.com/jibm>
- Wengga, N. S. F., Wicaksana, H. H., Rustanto, A. E., Hakim, D. L., & Widiputra, A. W. P. (2024). Evaluation of the role and success factors of facilitators in the Tenaga Kerja Mandiri Pemula (TKMP) program: Case study of Subang Regency. *Neo Journal of Economy and Social Humanities (NEJESH)*, 3(4), 336–345. <https://doi.org/10.56403/nejesh.v3i4.246>