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ARTICLE

How Bandung Succeeds: Multi-Perspective Study of Determinants of Digital Transformation Success in Public Administration

Ira Meiyenti[1*], Nur Sari Bulan[2], Astika Ummy Athahirah[1], Teresa Irmina Nangameka[1], and Mutia Rahmah[1]

[1]*Institut Pemerintahan Dalam Negeri, Jatinangor, Indonesia*
[2]*University of Strathclyde, United Kingdom*

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ABSTRACT
Digital transformation is the main focus in the development of public administration, including in Indonesia. The Electronic-Based Government System (SPBE) implementation at the regional level still faces constraints in human resources, budget, and infrastructure. Bandung City serves as an ideal model of successful SPBE and Smart City implementation. A holistic assessment of the success of digital transformation in public administration was performed in this research by combining theoretical approaches (Stakeholder Theory, RBV, and Innovation Diffusion) and practical approaches in the field. This study employed an explanatory sequential mixed methods design, involving 75 quantitative survey respondents and 30 qualitative interview informants at the Bandung City Diskominfo. The data were analyzed using descriptive statistical techniques and thematic analysis. Five key factors, namely (1) Expectations of employees/implementing employees, (2) Expectations of ICT technical operators, (3) Organizational culture, (4) Relative profitability, and (5) Digital leadership were found as the significant factors. The holistic approach successfully integrated multiple theories and field practices in responding to criticisms of previous studies on technical-social focus inequality. The results provide more effective and contextual strategic guidance for local governments to improve the implementation of digital transformation in the public sector.

A. INTRODUCTION

Digital Transformation has become a major focus among researchers, practitioners, and politicians in the field of modern public administration (Siegel & Gabryelczyk, 2021). The advancement of technology and approaches that combine the physical, digital, and biological worlds has transformed social life and interaction (Lionardo, 2020). Digital transformation integrates all service areas to gain "added value" for more satisfactory services. In this sense, digital transformation positively affects the organizational operations (Khisro, 2021; Vial, 2019).

* Corresponding Author
Email : irameiyenti@ipdn.ac.id

The Electronic-Based Government System (SPBE) implementation in Indonesia is ruled in the Presidential Regulation No. 95 of 2018 as the basis for national policy (Annur, 2020). The shift has improved the quality of digital services, infrastructure, and human resource capacity (Budianta, 2020). According to the United Nations E-Government Survey 2024, Indonesia ranks 64th out of 193 countries, representing an improvement of 13 positions compared to 2023 (United Nations, 2024).

Several factors affect the implementation of this system, including organizational structuring, technology, and innovations (Hafseld et al., 2021; Meyerhoff Nielsen, 2019), since the implementation is both horizontally distributed from the central government to ministries and vertically to the local government (Mergel, 2021). The human, financial, and technical resources in the central government might be sufficient in achieving optimal implementation of the system, yet local governments might face challenges due to the limited human resources, budgets, and infrastructure, as well as technical competency (Hafseld et al., 2021). As the consequence, the gaps are found in the implementation of SPBE in some regions. Weak security system also raises concerns about data security, data leaks and cyber attacks. Furthermore, inconsistent or overlapping regulations between the central and regional governments can hinder system integration and become a challenge in adopting digital technology in local governments.

Most of the SPBE implementation in local governments are categorized very good, good, and sufficient (KemenPANRB, 2024). The Decree of the Minister of State Apparatus Empowerment and Bureaucratic Reform Number 663 of 2024 concerning the Results of the Evaluation of Electronic-Based Government Systems in Central Agencies and Regional Governments in 2024 shows that West Java Province obtains the highest SPBE index value (4.73) among all provincial regions in Indonesia (Menpan RB, 2024). The Decree of the Minister of State Apparatus Empowerment and Bureaucratic Reform Number 13 of 2024 shows that nine regions out of 28 in West Java Province are considered "satisfactory", with Bandung City obtaining the highest score of 4.59 (Menteri PanRB, 2024).

Bandung City, which has successfully implemented SPBE in Indonesia, will be used as a case study to identify the organizational success factors that influence the digital transformation process in public administration. Bandung City also obtained the highest classification "Satisfactory" in the aspect of Smart City 2024 throughout Indonesia, with an index value of 3.93 (Diskominfo Kota Bandung, 2025). *Smart City* is conceptualized as an urban area that integrates information and communication technology and the Internet of Things (IoT) in activities to manage city resources and services efficiently. The *Smart City Concept* aligns with SPBE, in which technology is used to step ahead toward digital transformation (Altha SPBE, 2023).

Studies on digital transformation and public administration mostly focus on the technical aspects of the digitalization adoption process in providing ease of access, effectiveness and quality of digital products (Mustafa et al., 2020). Although many researchers have employed various theoretical foundations such as the Technology Acceptance Model, the Resource-Based View (RBV), and the innovation diffusion perspective, the existing literature largely examines only a single theoretical dimension in studies of digital transformation. As a result, a holistic assessment that identifies and compares the relative importance of the determinants of digital transformation success has not yet been achieved (Balci, 2021; Brosig et al., 2020; Steiber et al., 2021).

Most studies on SPBE in Indonesia mainly focus on technological aspects, while the integration between organizational, political, and regulatory factors has been overlooked. In addition, theory-based research is still limited, thereby a holistic assessment of the determinants of the success of public sector digital transformation has never been performed. To address this

gap, this study offers a different perspective by combining theoretical and practical approaches through a case study on the Bandung City Government as the role model.

This study analyzed the determinants of the success of the digital transformation of the public sector using a mixed explanatory method based on the theory of Stakeholders, Resource-Based View (RBV), and Innovation Diffusion. This study builds an instrument for the holistic assessment of the determinants of digital transformation success based on the relative importance of the organization.

B. LITERATURE REVIEW

Several researchers have examined the concept of digital transformation in public administration. Lewis et al., (2018) which examined the organization's innovation capabilities in terms of discovering, developing, reviewing, testing, and using and integrating innovation into the organization. Boukamel & Emery (2017) and Gieske et al., (2016) described the variety of resources and capabilities for innovative, brave, and innovative public administration for improved performance and better public value. Napitupulu, (2015) and Rozikin et al., (2020) focus on the aspects of the determinants of success in several local governments in Indonesia.

Some of the theoretical bases used in this study refer to previous research, especially research conducted by (Yuen et al., 2022) which used four theoretical bases: stakeholder theory, RBV theory, innovation diffusion theory, and competency motivation theory. In this study, the stakeholder theory, RBV, and the innovation diffusion theory complemented the gaps in explaining the trend of digitalization in the context of public administration (Kaiser et al., 2025).

Stakeholder Theory (X1)

Stakeholder Theory emphasizes the importance of various parties' roles and contributions in managing an organization or program. The indicators used in this study refer to Yuen et al., (2022) based on the dimensions of stakeholder expectations. The first dimension is the Expectations of Employees/Executive Employees (X1.1), the second is the Expectations of the Leading Sector (X1.2), and the third is the Expectations of ICT Technical Operators (X1.3).

RResource-Based View *(RBV)* Theory (X2)

Resource-Based View (RBV) is a strategic management theory that focuses on the company's internal resources and capabilities as a source of competitive advantage. In this study, the indicators are: Digital Leadership (X2.1), Financial Stability (X2.2), Digital Readiness (X2.3), and Organizational Culture (X2.4) (Yuen et al., 2022). Although RBV emphasizes on competitive advantage through internal resource management, in the context of the public sector, such advantages are part of the regulatory and socio-political environment. Political legitimacy, regulatory support, and public policy stability are institutional resources that determine the sustainability of digital transformation (Barney, 2014; Hartley et al., 2017).

Innovation Diffusion Theory (X3)

The Diffusion of Innovation Theory explains how new ideas spread through social systems over time through several stages: knowledge acquisition, attitude formation, decision-making, implementation, and confirmation (Mailin et al., 2022). The indicators proposed in Kaminski's study were further developed by Kaiser et al., (2025) which consisted of: Relative Profit (X3.1), Compatibility (X3.2), Complexity (X3.3), and Trial (X3.4)

The holistic analysis used in this research was conducted based on the indicators set forth by Napitupulu (2015): 1. Engaging users and stakeholders; 2. Good planning; 3. Using Portals/Apps; 4. Training; 5.Good System Usability; 6.Campaign/ Socialization on the uses

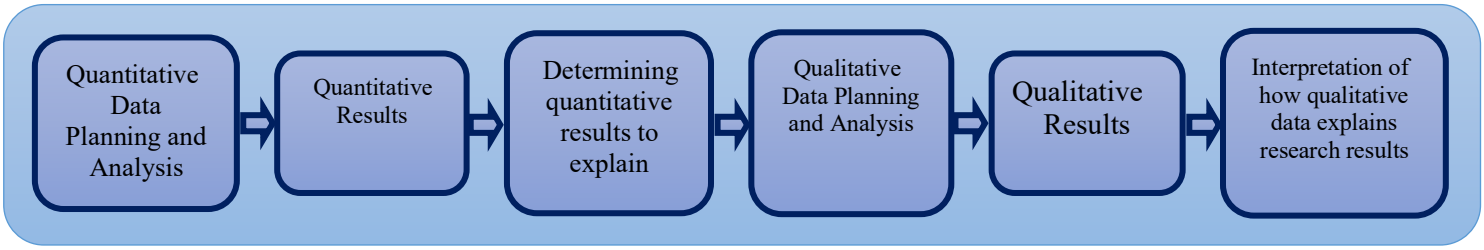
and advantages of the system; 7. Creating a Prototype; 8. Good team member skills and expertise; 9. Strong leadership; 10. Good coordination among the people involved in the project 11. Consider existing best practices; 12. Sufficient financing; 13. Making business processes better; 14. Supportive government policies; 15. Support and political stability; 16. A good outsourcing strategy; 17. Support availability; 18. Computer/Internet literacy of users/society; 19. Clear and good organizational structure; 20. Guaranteed system security; 21. The existence of a legal framework; 22. Monitoring and evaluation; 23. Good cooperation with other institutions; 24. Proper change management; 25. A supportive socio-cultural environment; 26. Good system modeling; 27. Orientation to the Community; 28. Top-level Management Support; 29. Supports interoperability; 30.Good project management; 31. Good quality of information in the system; 32. Good system quality; 33.Good service quality; 34.Trust in the system and government; 35. Awareness of the government and the community; 36. Meet user/community satisfaction; 37. The existence of the right system development methodology; 38.Electronic Payment/Transaction; 39. Phased implementation; 40. Reusable Components/Systems/Resources; 41. Continuous Improvement; 42. Creativity & Innovation; 43. The Willingness to Change Based on Paradigm Change; 44. Awards and Recognition; 45. High Public Interest; 46. Increase in Regional Original Income (PAD); 47. Public participation in public policy/decision-making; 48. Prioritization of e-Government Development (e-Government Prioritization), and 49. The existence of e-Government Development Guidelines.

These indicators were used in the qualitative approach process within the context of cross-examination and categorization between the theoretical basis and the practical approach in the field.

C. METHOD

This descriptive study to obtained a holistic and concrete picture of the success of digital transformation in regions that are considered successful in carrying out digital transformation by implementing SPBE. Using a mixed-methods with an Explanatory Sequential mixed-methods design, this research allowed for initial quantitative findings to be tested in depth through qualitative confirmation in order to check the validity between numerical and contextual data.

The *Explanatory Sequential Mixed Methods Design* identifies quantitative and qualitative parts, which are useful for readers and researchers to understand the research topic (Creswell, J.W., Clark, 2017). The Explanatory Sequential Plan can be seen in the image below.



(Source: Creswell, J.W., Clark, 2017)

Figure 1. Explanatory Sequential Design

Quantitative Approach

A quantitative approach was employed to identify and analyze the determinants of digital transformation success based on the evaluation of Stakeholder Theory (X1) (Yuen et al., 2022), Resource-Based View Theory (RBV) (X2) (Yuen et al., 2022) and Diffusion Innovation Theory (X3) (Kaiser et al., 2025).

Data were collected through a questionnaire-based survey method on a Likert scale to measure the factors of the three theories.: 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree", and 5 = "Strongly Agree". The technical data analysis employed descriptive statistics to determine the frequency and mean value of each factor. Indicators were classified as critical success factors (CSFs) in digital transformation when the mean value was greater than or equal to 4 (Castro et al., 2020). The unit of analysis was the Communication and Information Service of Bandung City, which served as the implementing agency for SPBE, with a total sample of 75 respondents (Diskominfo Kota Bandung, 2017).

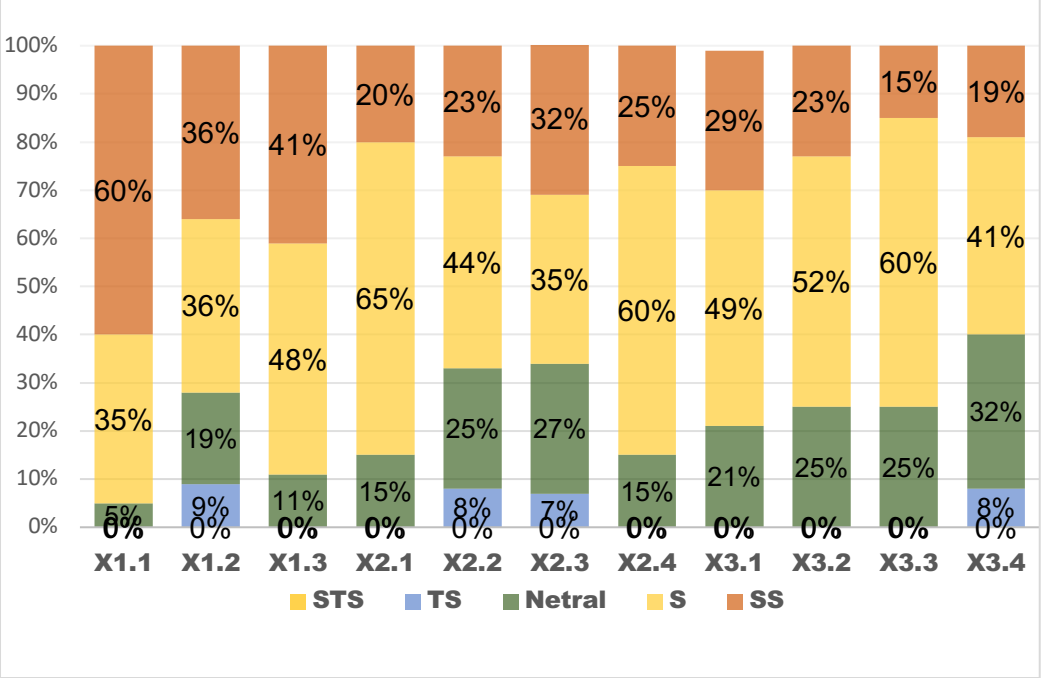
Qualitative Approach

At this stage, semi-structured interviews were conducted with 30 informants from the Bandung City Communication and Information Office to complement the quantitative findings. The indicators used in this research were explained to 49 final success indicators research (Napitupulu, 2015) which is obtained from a field approach.

The data of this study were analyzed using Miles and Huberman's model (Miles et al., 2019) through data reduction procedures, data presentation, and conclusion drawing to obtain a holistic/comprehensive description and overview, refine, expand, or explain the general quantitative picture.

D. RESULTS AND DISCUSSION

Digital transformation in local government was analyzed through three theoretical frameworks: Stakeholder Theory, Resource-Based View (RBV), and Innovation Diffusion. The results of the data processing showed that the indicators contributed to the success of the digital transformation, with an average score above the "agree" category. The output results of the data processing are presented in the following Figure.



(Source: Data processed, 2025)

Figure 2. Frequency of Indicators Determining the Success of Digital Transformation from Theoretical Approaches (Stakeholder Theory, RBV Theory, and Innovation Diffusion Theory)

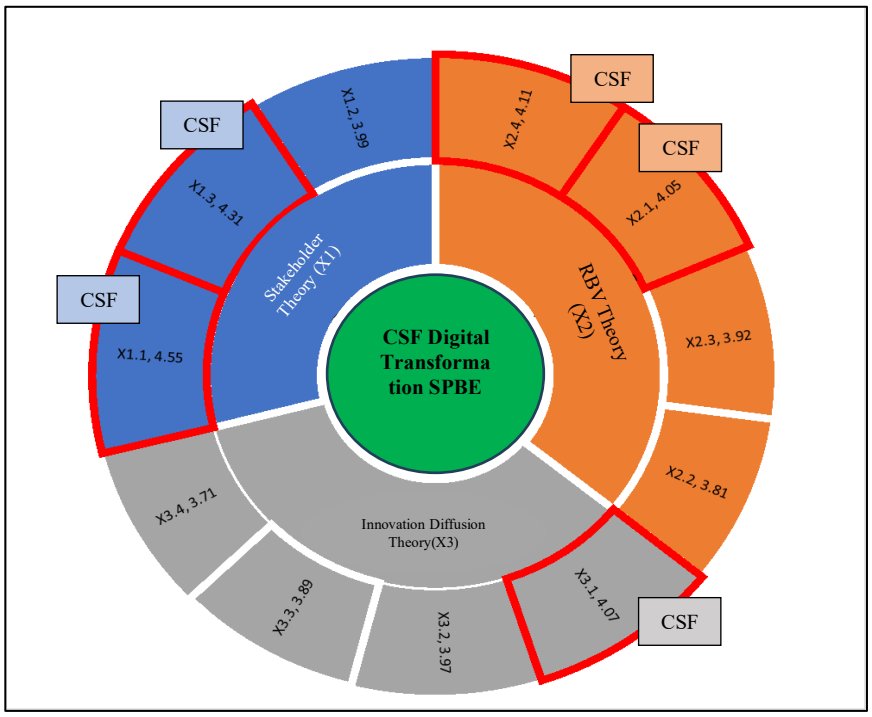
As shown in the figure, within the Stakeholder Theory framework, the X1.1 indicator (Expectations of Employees/Executive Employees) received the highest score, with 60% of respondents selecting Strongly Agree. This suggests that the role of stakeholders in supporting digital transformation was viewed as highly important, particularly in terms of commitment and collaboration. Meanwhile, the X1.2 indicator (Expectations of the Leading Sector) displayed a polarization of responses, with 36% Agree, 36% Strongly Agree, and 9.33% Disagree. This indicates that although the majority expressed agreement, a small minority doubted the contribution of leading-sector stakeholders in practical implementation. For the X1.3 indicator (Expectations of ICT Technical Operators), 48% Agree, and 41.33% Strongly Agree, demonstrating a strong consensus that these stakeholders were capable of addressing obstacles to digital transformation.

The RBV Theory also shows that the X2.1 (Digital Leadership) indicator obtained a majority response of 65.33% Agree and 20% Strongly Agree. Hence, resources (such as technology, infrastructure, and human resources) are considered adequate and contribute positively to digital transformation. The X2.2 (Financial Stability) indicator has a more heterogeneous response, with a distribution of 44% Agree, 22.67% Strongly Agree, and 25.33% Neutral. Thus, uncertainty regarding the allocation of financial resources or the availability of HR skills indicates limited adaptability to change. A similar pattern appears in the X2.3 indicator (Digital Readiness), with response distributions of 34.67% Agree, 32% Strongly Agree, and 26.67% Neutral. This suggests that resource utilization was not yet optimal across all dimensions. Conversely, the X2.4 indicator (Organizational Culture) showed a majority of respondents selecting Agree (60%) and Strongly Agree (25.33%), indicating that the organization's capability to manage resources was generally perceived as strong.

The third theory is Innovation Diffusion. The X3.1 indicator (Relative Profit) received responses of 49.33% Agree and 29.33% Strongly Agree, indicating that innovation was generally well received within the organization, although 21.33% of respondents remained Neutral. This suggests a need for further socialization efforts. The X3.2 indicator (Conformity) recorded 52% Agree, 22.67% Strongly Agree, and 25.33% Neutral, reflecting that the adoption of innovation was not yet evenly distributed across the organization. The X3.3 indicator (Complexity) showed 60% Agree, but only 14.67% Strongly Agree, indicating that the overall impact of innovation had not been strongly perceived. Furthermore, the X2.4 indicator (Trial) received 41.33% Agree and 32% Neutral, suggesting ongoing challenges related to the compatibility of the innovation with user needs, which in turn affects the rate of adoption.

Indicators of Digital Transformation Success: Theoretical Approach

Employee Expectations/implementing employees and the expectations of ICT technical operators in the Stakeholder Theory are found as the determinants in the transformation success. In the RBV Theory, Digital Leadership and Organizational Culture determine the success, while Relative Profit is the determinant in the Diffusion Theory. The average scores on the success indicator are shown in the following Figure.



(Source: Data processed by the author, 2025)

Figure 3. Determinants of Digital Transformation Success from Theoretical Approaches (Stakeholder Theory, RBV Theory, and Innovation Diffusion Theory)

Five indicators were identified as determinants of digital transformation success. These include the Employee/Executive Employee Expectations indicator (X1.1) with an average score of 4.55 (Stakeholder Theory), the ICT Technical Operator Expectations indicator (X1.3) with an average score of 4.31 (Stakeholder Theory), the Organizational Culture indicator (X2.4) with an average score of 4.11 (RBV Theory), the Relative Profit indicator (X3.1) with an average score of 4.07 (Innovation Diffusion Theory), and the Digital Leadership indicator (X2.1) with an average score of 4.05 (RBV Theory).

Holistic Assessment: Categorization of Success Indicators of the Theory-Based Field Outcomes Approach

The in-depth analysis was followed by categorizing the success indicators into five dimensions, based on theoretical foundations and field-specific considerations, that collectively determine the success of digital transformation. The table below presents the complete categorization.

Table 1. Categorization of Success Indicators of Theoretically Based Practical Approaches

Categorization of 49 Indicators of Success of a Practical Approach (Napitupulu, 2015)				
Stakeholder Theory		RBV Theory		Innovation Diffusion Theory
Employee Expectations Indicators (X1.1)	ICT Technical Operator Expectations Indicators (X1.3)	Organizational Culture Indicators (X2.4)	Digital Leadership Indicators (X2.1)	Relative Profit Indicator (X3.1)
4. Training*	3. Using Portals/ Applications	9. Strong leadership	1. Involve users and stakeholders	5. Good System Usability
8. Good team member skills and expertise*	7. Creating a Prototype*	15. Support and political stability	11. Consider existing best practices	6. Socialization on the usability and advantages of the system
10. Good coordination among the people involved	17. Availability of support (Technical and infrastructure)	23. Good cooperation with other institutions	12. Sufficient financing	13. Makes the business process better
19. Clear and good organizational structure	20. Guaranteed system security*	25. A supportive socio-cultural environment*	14. Supportive government policies*	31. Good quality of information in the system
24. Proper change management*	26. Good system modeling	27. Orientation to the Community	16. A good Outsourcing Strategy*	33. Good service quality*
28. Top-level Management Support*	29. Supports interoperability*	35. Awareness from the government and the community*	18. Computer/Internet literacy of users/society	34. Trust in the system and government
30. Good project management	32. Good system quality*	42. Creativity & Innovation*	21. The existence of a legal framework*	36. Meet user/community satisfaction*
37. The existence of a proper system development methodology	38. Electronic Payment/Transaction	43. The Willingness to Change Based on Paradigm Change	22. Monitoring and evaluation	41. Continuous Improvement
44. Awards and Recognition*	40. Reusable Components/Systems/Resources	45. High Public Interest	39. Phased implementation	46. Increase in Regional Original Income*
	49. The existence of e-Government Development Guidelines	47. There is community participation in policy-making	2. Good planning	48. Prioritizing e-Government Development

* The dominant indicator is closely related to the theoretical approach indicator
Source: Data processed, 2025

On average, each theory has approximately nine to ten indicators from the field's practical approach. Some indicators may fall into several categories, such as management support, which can be categorized as employee/executive employee expectations and technical operator expectations.

Practical Approach Success Indicators related to Employee/Implementing Employee Expectations (X1.1 – Stakeholder Theory)

Employee expectations as implementers are an important indicator in Stakeholder Theory, which emphasizes that the expectations and involvement of internal stakeholders, such as employees, significantly influence the process and outcome of digital transformation. The findings of this study align with Yuen et al., (2024) who identified stakeholder expectations as a critical factor, noting that individual motivations within an organization significantly support digital change (Oh et al., 2022). Ozdemir et al., (2023) also affirmed that collaboration with internal stakeholders could increase innovation and demand for skilled labor in strengthening the transformation process.

The determinants of success focus on the involvement and expectations of internal stakeholders. Several indicators appeared to have more dominant effects. Employee Expectations Indicator/Executive employee is predominantly related to the indicators of training, team skills, change management and management support, and awards. As reflected in "Bandung Smart City" Program, the employees were trained to use digital platforms such as SIPANDU (Public Service Information System). Unfortunately, LPPM Unpad (LPPM UNPAD, 2022) reported that 40% of employees struggled to adapt due to unsustainable training. Leadership support from the Mayor of Bandung has played a crucial role in driving digital bureaucratic reform. This finding aligns with previous studies (Yuen et al., 2024; Oh et al., 2022; Ozdemir et al., 2023). However, Akmila et al., (2023) and Judijanto et al., (2023) offer a contrasting perspective, suggesting that an excessive focus on employee expectations may instead hinder transformation due to inefficiencies in system design.

Support from the Mayor of Bandung encourages digital bureaucratic reform. However, some studies argue that excessive emphasis on employee expectations may actually hinder transformation, as it can lead to inefficiencies in system design.

Practical Approach Success Indicators related to the ICT Technical Operator Expectations indicator (X1.3 – Stakeholder Theory)

ICT technical operators also have a central role. Their expectations for infrastructure, support, and digital readiness greatly determine the smooth implementation of new technologies. Yuen et al., (2024) mentioned "regulatory bodies' expectations" and digital readiness as important sub-factors in the success of digital transformation. Collaboration with technical stakeholders can accelerate innovation development to meet the organization's technical needs (Ozdemir et al., 2023). The integration between Stakeholder Theory and RBV theory also highlights the importance of stakeholder relations as a strategic resource (Kull et al., 2016).

The determinants of success focus on technical and infrastructure needs, with the dominant ICT Technical Operator Expectations indicator reflecting practical considerations on System Security, Interoperability, Prototyping, and System Quality. Previous literature also explain that technical resources influence the readiness of digital infrastructure (Yuen et al., 2024; Kull et al., 2016). However, several researchers have argued that an excessive focus on technical aspects without adequately considering user needs can contribute to system failure, since technology should be understood as a social product rather than merely a technical solution (Clarke et al., 2024; Liu et al., 2024).

Practical Approach Success Indicators related to the Organizational Culture indicator (X2.4 – RBV Theory)

Organizational culture is an intangible resource according to the RBV Theory. A culture that supports innovation, collaboration, and technological adaptation will lead to a better

organization's ability in the digital transformation (Gillani et al., 2024). The determinants of digital transformation success based on the RBV Theory of View are oriented towards intangible resources in the form of collaborative and innovative cultures. Among the ten indicators, three are predominantly related: Creativity and innovation, Socio-Cultural Environment, and Government/Community Awareness. As seen in Bandung Creative City Forum Initiative, digital innovation is encouraged through the participation of MSMEs and startups.

Several other studies also confirm that "organizational competence" and "human capital" are the main drivers of digital transformation, where a strong organizational culture drives process efficiency, responsiveness, and strategic agility (Gillani et al., 2024; Yuen et al., 2024). The findings of this study are also consistent. with Chatterjee et al., (2022) who found that individual capabilities and organizational cultures significantly influence the success of transformation.

On the other hand, McKinsey & Company (2018) counter-warn that cultural change takes a long time and is not always linear with digital acceleration. Moreover, 70% of digital transformations fail due to the organizational hierarchy (Jerab & Mabrouk, 2023), as identified in the case of the Enterprise Resource Planning (ERP) system, which was discontinued in 2021 due to internal objections.

Practical Approach Success Indicators related to the Relative Profit indicator (X3.1 – Innovation Diffusion Theory)

Relative profitability assesses the benefit from adopting new technologies compared to the old ways. The findings of this study are in line with research based on *innovation diffusion theory,* which explains that the perception of relative profit is the main driver in the adoption and success of digital transformation (Steiber et al., 2020). Operational efficiency, innovation, and competitive advantage are the main factors that encourage organizations in adopting digital transformation (Oh et al., 2022; Steiber et al., 2020).

The indicators associated with Innovation Diffusion Theory highlight benefits perceived by users and the organization, particularly user satisfaction, increased regional revenue (PAD), and improved service quality. Steiber et al., (2020) identified relative profit as a key driver of innovation adoption, as illustrated by the 15 percent increase in Bandung's regional income from the e-Retribution system in 2022. Conversely, Yuan & Ma, (2025) argue that innovation is often pursued for political advantage despite technical inefficiencies. Meanwhile, Montero Guerra & Danvila-Del Valle (2024) contend that economic gains do not always relate to user acceptance.

Practical Approach Success Indicators related to Digital Leadership indicators (X2.1 – RBV Theory)

This study highlights that digital leadership is an important supporting factor and strategic resource in digital transformation. The practical indicators most closely associated with digital leadership are Government Policies, Legal Frameworks, and Outsourcing Strategies.

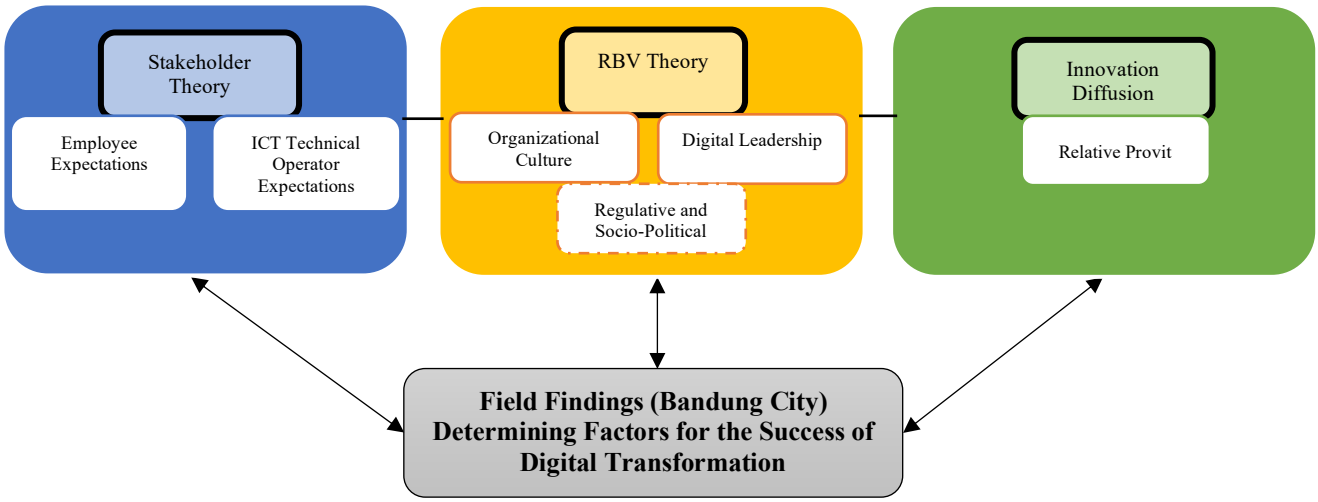
The field approach also shows that regulatory and political factors function as enabling resources that determine the extent to which organizational capabilities can develop sustainably. Local government policies, legislative support, and local political stability strengthen the effectiveness of internal resources. Thus, the ability of organizations to utilize regulatory legitimacy and political support in achieving digitalization goals are considered as organizational resources. This view expands the scope of "strategic resources" from internal assets to the ability to interact adaptively with external institutional structures.

The association between internal and external factors shows that resource-based excellence is now determined not only by the efficiency of internal asset management, but also by the organization's ability to integrate these resources in a dynamic institutional context. In this context, visionary leadership strategically links the internal dimensions of the organization to its external environment.

In line with Ji et al., (2023) and Gillani et al., (2024), the present study affirms that leadership's role in building digital skills and driving change is crucial to achieving competitive advantage and organizational sustainability. Visionary leadership that supports digitalization will drive the development of the organization's digital capabilities and ensure the success of the transformation (Chatterjee et al., 2022; Gillani et al., 2024). More importantly, digital leadership integrates organizational resources and creates a culture of innovation (Gillani et al., 2024).

However, excessively top-down governance might lead to resistance (Hughes, 2016). Leaders' decisions should not be rushed to avoid possible challenges from being overlooked (Bala et al., 2021). Therefore, the effectiveness of digital leadership lies in its vision and its ability to navigate the balance between regulatory pressures, political support, and the readiness of internal resources.

The conceptual relationship between theoretical approaches and practical findings in the field from the integration between quantitative analysis and qualitative confirmation is presented in the following Figure.



(Source: Data processed by authors, 2025)

Figure 4. Schematic Relationship of Theory and Field Data

The figure above illustrates the logical flow of how the three core theories interact to form a conceptual model of digital transformation in public administration, where the success of government digitalization is not solely the result of technological mastery but of the integration between resources, actors, and the institutional environment. These findings present the need for public policies that emphasize strengthening institutional capacity through digital leadership, innovative culture, and adaptive regulation. In addition, the synergy between the central and regional governments should be strengthened to ensure consistent harmonization of digital policies. Additionally, political legitimacy and public participation are also non-material strategic resources that support the sustainability of digital transformation. Thus, digital policy should be seen as a technical project and the instrument of bureaucratic reform that strengthens accountability, transparency, and sustainable public value creation.

E. CONCLUSION

The present study provides strategic guidance to the success of digital transformation based on a practical approach that produces five key factors: Expectations of employees/executive employees, expectations of ICT technical operators, Organizational Culture, Relative Profitability, and Digital Leadership. Stakeholder Theory is considered strongly influential, particularly in evaluating the possible challenges. Some risk mitigation measures can be carried out using the Prototyping indicator to test the Technical Operator's Expectation Indicator and user needs. Although both physical and human resources are reasonably adequate, further improvements are still needed in training, adaptation, and optimal resource utilization.

This study identified the determinants of the success of Digital Transformation from theoretical and practical approaches and indirectly expanded the RBV View Theory model by including legal aspects and political indicators that are part of the indicators of practical approaches in the field. Based on the RBV theory, the advantages of public organizations do not only resource from internal capabilities, but also from the ability to utilize regulatory contexts and socio-political support as part of strategic resources. RBV serves as a more realistic institutional framework for the public sector, where legal legitimacy and political support are the factors that accelerate the success of digital transformation.

This study also addressed criticisms regarding an overemphasis on technical aspects by offering a more balanced perspective that integrates both technical and social indicators. Stakeholders and the availability of various resources strongly support digital transformation. Nevertheless, the main challenge lies in adapting and implementing sustainable innovation. The results of this study add up to the body of literature on digital transformation success and provide a critical lens to avoid and minimize failures.

Limitations and Future Research

This study is limited to a single point in time *(cross-sectional*), hence the dynamics of changing determinants over time or in different phases of digital transformation were not examined. Further researchers are encouraged to use longitudinal approaches/advanced statistical techniques such as confirmatory factor analysis (CFA) to map cause-and-effect relationships and validate categorizations between theoretical and practical indicators more dynamically over a given time frame. This study puts stronger emphasis on the internal perspective of the organization. Therefore, external perspectives, such as service users, digital business people, and supervisory institutions, should be taken into consideration in order to gain a more complete and balanced comprehension on this issue.

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Contributorship

The first author conceptualized and analyzed the data. The second author provided general guidance for reviewing and correcting the article. The third author collected the data. The fourth and fifth authors wrote and revised the article.

REFERENCES

Akmila, F., Fadilah, I. N., & Dewi, H. R. (2023). Critical success factors of ERP

implementation at a retail franchise company in Indonesia. *Journal of Contemporary Accounting*, 83–96. https://doi.org/10.20885/jca.vol5.iss2.art3

Altha SPBE. (2023). *Penerapan SPBE Wujudkan Smart City 2023*. Https://Spbe.Co.Id/. https://spbe.co.id/2023/04/18/spbe-mendukung-perwujudan-smart-city-2023/

Annur, C. M. (2020). *Sistem Pemerintahan Berbasis Digital Siap Beroperasi pada 2023*. Retrieved from https://www.kominfo.go.id/content/detail/28252/sistem-pemerintahan-berbasis-digital-siap-beroperasi-pada-2023/0/sorotan_media

Bala, H., Venkatesh, V., Ganster, D. C., & Rai, A. (2021). How Does an Enterprise System Implementation Change Interpersonal Relationships in Organizations. *Industrial Management & Data Systems*, *121*(8), 1824–1847. https://doi.org/10.1108/IMDS-06-2020-0380

Balci, G. (2021). Digitalization in Container Shipping: Do Perception and Satisfaction Regarding Digital Products in a Non-technology Industry Affect Overall Customer Loyalty? *Technological Forecasting and Social Change*, *172*, 121016. https://doi.org/10.1016/j.techfore.2021.121016

Barney, J. B. . (2014). *Gaining and Yustaining: Competitive Advantage*. London: Pearson.

Boukamel, O., & Emery, Y. (2017). Evolution of Organizational Ambidexterity in the Public Sector and Current Challenges of Innovation Capabilities. *Innovation Journal*, *22*(2), 1–27. https://www.proquest.com/docview/1951870686?sourcetype=Scholarly Journals

Brosig, C., Westner, M., & Strahringer, S. (2020). Revisiting the Concept of IT Capabilities in the Era of Digitalization. *2020 IEEE 22nd Conference on Business Informatics (CBI)*, 84–93. https://doi.org/10.1109/CBI49978.2020.00017

Budianta, A. (2020). *Menuju Pemerintahan Digital*. Retrieved from https://www.djkn.kemenkeu.go.id/artikel/baca/13266/Menuju-Pemerintahan-Digital.html

Castro, B. K. do A., Dresch, A., & Veit, D. R. (2020). Key Critical Success Factors of BPM Implementation: A Theoretical and Practical View. *Business Process Management Journal*, *26*(1), 239–256. https://doi.org/10.1108/BPMJ-09-2018-0272/FULL/XML

Chatterjee, S., Chaudhuri, R., Vrontis, D., & Jabeen, F. (2022). Digital Transformation of Organization Using AI-CRM: From Microfoundational Perspective with Leadership Support. *Journal of Business Research*, *153*, 46–58. https://doi.org/10.1016/J.JBUSRES.2022.08.019

Clarke, R., Michael, K., & Abbas, R. (2024). Robodebt: A Socio-Technical Case Study of Public Sector Information Systems Failure. *Australasian Journal of Information Systems*, *28*. https://doi.org/10.3127/ajis.v28.4681

Creswell, J.W., Clark, V. L. . (2017). *Designing & Conducting Mixed Methods Research + the mixed methods reader.* (Vol. 1, Issue 2). California: Sage Publications.

Diskominfo Kota Bandung. (2017). *Daftar Pegawai | Diskominfo*. Diskominfo Kota Bandung. Retrieved from https://diskominfo.bandung.go.id/daftar-pegawai

Diskominfo Kota Bandung. (2025). *Pemda Kota Bandung Raih Predikat Tertinggi Smart City dan SPBE*. Retrieved from https://jabarprov.go.id/berita/pemda-kota-bandung-raih-predikat-tertinggi-smart-city-dan-spbe-17039

Gieske, H., van Buuren, A., & Bekkers, V. (2016). Conceptualizing Public Innovative Capacity: A Framework for Assessment. *Innovation Journal*, *21*(1), 1–25. http://hdl.handle.net/1765/86056

Gillani, F., Chatha, K. A., Jajja, S. S., Cao, D., & Ma, X. (2024). Unpacking Digital Transformation: Identifying Key Enablers, Transition Stages and Digital Archetypes. *Technological Forecasting and Social Change*, *203*. https://doi.org/10.1016/J.TECHFORE.2024.123335

Hafseld, K. H. J., Hussein, B., & Rauzy, A. B. (2021). An Attempt to Understand Complexity in a Government Digital Transformation Project. *International Journal of Information Systems and Project Management*, *9*(3), 70–91. https://doi.org/10.12821/ijispm090304

Hartley, J., Alford, J., Knies, E., & Douglas, S. (2017). Towards an Empirical Research Agenda for Public Value Theory. *Public Management Review*, *19*(5), 670–685. https://doi.org/10.1080/14719037.2016.1192166

Hughes, M. (2016). Leading Changes: Why Transformation Explanations Fail. *Leadership*, *12*(4), 449–469. https://doi.org/10.1177/1742715015571393

Jerab, D. A., & Mabrouk, T. (2023). The Role of Leadership in Changing Organizational Culture. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4574324

Ji, Z., Zhou, T., & Zhang, Q. (2023). The Impact of Digital Transformation on Corporate Sustainability: Evidence from Listed Companies in China. *Sustainability*, *15*(3). https://doi.org/10.3390/SU15032117

Judijanto, L., Hafidurrahman, M., Sari, E. N., & Hanafi, S. (2023). The Impact of Digitalization on Strategic Management: A Bibliometric Analysis of Technology Integration in Strategic Decision Making. *West Science Journal Economic and Entrepreneurship*, *1*(06), 144–154. https://doi.org/10.58812/wsjee.v1i06.455

Kaiser, J. L., Fiorillo, R. M., Vian, T., Ngoma, T., Kuhfeldt, K. J., Munro-Kramer, M. L., Hamer, D. H., Bwalya, M., Sakanga, V. R., Lori, J. R., Ahmed Mdluli, E., Rockers, P. C., Biemba, G., & Scott, N. A. (2025). Qualitative Application of the Diffusion of Innovation Theory to Maternity Waiting Homes in Rural Zambia. *Implementation Science Communications*, *6*(1), 1–14. https://doi.org/10.1186/S43058-025-00696-Y/TABLES/5

KemenPANRB. (2024). *Kementerian PANRB Umumkan Hasil Evaluasi SPBE Tahun 2023*. Retrieved from https://www.menpan.go.id/site/berita-terkini/kementerian-panrb-umumkan-hasil-evaluasi-spbe-tahun-2023

Khisro, J. (2021). Strategizing Digital Transformation: A Clinical Inquiry Into a Swedish Public Sector Organization. *AMCIS 2021 Proceedings*. Retrieved from https://aisel.aisnet.org/amcis2021/org_transform/org_transform/7

Kull, A. J., Mena, J. A., & Korschun, D. (2016). A Resource-based View of Stakeholder Marketing. *Journal of Business Research*, *69*(12), 5553–5560. https://doi.org/10.1016/J.JBUSRES.2016.03.063

Lewis, J. M., Ricard, L. M., & Klijn, E. H. (2018). How Innovation Drivers, Networking and Leadership Shape Public Sector Innovation Capacity. *International Review of Administrative Sciences*, *84*(2), 288–307. https://doi.org/10.1177/0020852317694085

Lionardo, A. (2020). The Quality Effect of Digital-Based Signature Services on the Performance of the District Government. *Webology*, *17*(2), 607–620. https://doi.org/10.14704/WEB/V17I2/WEB17055

Liu, Q., Chen, J., & Li, Z. (2024). Digital Technology Implementation: The Mediating Role of the Duality of digital technology Affordance in Open Innovation Practices. *Journal of Engineering and Technology Management*, *73*, 101832. https://doi.org/10.1016/j.jengtecman.2024.101832

LPPM UNPAD. (2022). *Dampak Program 100 Smart City Indonesia Terhadap Keamanan Lingkungan Di Indonesia (Studi Kasus Kota Semarang Dan Kota Bandung)*. Sumedang: Fakultas Ilmu Sosial & Ilmu Politik Universitas Padjadjaran.

Mailin, M., Rambe, G., Ar-Ridho, A., & Candra, C. (2022). Teori Media/Teori Difusi Inovasi. *Jurnal Guru Kita PGSD*, *6*(2), 168. https://doi.org/10.24114/jgk.v6i2.31905

McKinsey & Company. (2018). *The case for digital reinvention*. Retrieved from https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-case-for-digital-reinvention#/

Menpan RB. (2024). *Keputusan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 663 Tahun 2024 tentang Hasil Evaluasi Sistem Pemerintahan Berbasis Elektronik Pada Instansi Pusat dan Pemerintah Daerah Tahun 2024*. Jakarta: Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi.

Menteri PanRB. (2024). *Keputusan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Republik Indonesia Nomor 13 tahun 2024 Tentang Hasil Evaluasi Sistem Pemerintahan Berbasis Elektronik Pada Instansi Pusat Dan Pemerintah Daerah Tahun 2023*.

Mergel, I. (2021). *Digital Transformation of the German State* (pp. 331–355). https://doi.org/10.1007/978-3-030-53697-8_19

Meyerhoff Nielsen, M. (2019). Governance lessons from Denmark's digital transformation. *Proceedings of the 20th Annual International Conference on Digital Government Research*, 456–461. https://doi.org/10.1145/3325112.3329881

Miles, M. B., Huberman, A. M., & Saldaña, J. (2019). *Qualitative Data Analysis: A Methods Sourcebook* (4th ed.). California: Sage Publications. https://study.sagepub.com/miles4e?utm

Montero Guerra, J. M., & Danvila-Del Valle, I. (2024). Exploring Organizational Change in the Age of Digital Transformation and Its Impact on Talent Management: Trends and Challenges. *Journal of Organizational Change Management*, *37*(6), 1273–1294. https://doi.org/10.1108/JOCM-10-2023-0419

Mustafa, S. Z., Kar, A. K., & Janssen, M. F. W. H. A. (2020). Understanding the Impact of Digital Service Failure on Users: Integrating Tan's Failure and DeLone and McLean's success model. *International Journal of Information Management*, *53*, 102119. https://doi.org/10.1016/j.ijinfomgt.2020.102119

Napitupulu, D. (2015). Kajian Faktor Sukses Implementasi E-Government. *Jurnal Sistem Informasi*, *5*(3), 229–236. http://is.its.ac.id/pubs/oajis/index.php/file/download_file/1445

Oh, K., Kho, H., Choi, Y., & Lee, S. (2022). Determinants for Successful Digital Transformation. *Sustainability*, *14*(3). https://doi.org/10.3390/SU14031215

Ozdemir, S., Carlos Fernandez de Arroyabe, J., Sena, V., & Gupta, S. (2023). Stakeholder Diversity and Collaborative Innovation: Integrating the Resource-based view with Stakeholder Theory. *Journal of Business Research*, *164*. https://doi.org/10.1016/J.JBUSRES.2023.113955

Rozikin, M., Hesty, W., & Sulikah, S. (2020). Kolaborasi dan E-Literacy: Kunci Keberhasilan Inovasi E-Government Pemerintah Daerah. *Jurnal Borneo Administrator*, *16*(1), 61–80. https://doi.org/10.24258/jba.v16i1.603

Siegel, U., & Gabryelczyk, R. (2021). Exploring Value Streams and CSFs to Foster Digital Transformation in Public Administration. *AMCIS 2021 Proceedings*, 1–10. https://aisel.aisnet.org/amcis2021/global_develop/global_develop/10

Steiber, A., Alänge, S., Ghosh, S., & Goncalves, D. (2020). Digital Transformation of Industrial Firms: An Innovation Diffusion Perspective. *European Journal of Innovation Management*, *24*(3), 799–819. https://doi.org/10.1108/EJIM-01-2020-0018

Steiber, A., Alänge, S., Ghosh, S., & Goncalves, D. (2021). Digital Transformation of Industrial Firms: An Innovation Diffusion Perspective. *European Journal of Innovation Management*, *24*(3), 799–819. https://doi.org/10.1108/EJIM-01-2020-0018

United Nations. (2024). *UN E-Government Survey 2024*. Retrieved from https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2024

Vial, G. (2019). Understanding Digital Transformation: A Review and a Research Agenda. *The Journal of Strategic Information Systems*, *28*(2), 118–144.

https://doi.org/10.1016/j.jsis.2019.01.003

Yuan, Y., & Ma, D. (2025). Actor Network Model of the Construction Mechanism of a Technology Standardization Innovation Ecosystem—Haier Case Study. *Systems*, *13*(4), 285. https://doi.org/10.3390/systems13040285

Yuen, K. F., Koh, L. Y., Fong, J. H., & Wang, X. (2022). Determinants of Digital Transformation in Container Shipping Lines: A Theory Driven Approach. *Maritime Policy & Management*, 1–16. https://doi.org/10.1080/03088839.2022.2139420

Yuen, K. F., Koh, L. Y., Fong, J. H., & Wang, X. (2024). Determinants of Digital Transformation in Container Shipping Lines: A Theory Driven Approach. *Maritime Policy & Management*, *51*(5), 653–668. https://doi.org/10.1080/03088839.2022.2139420