Jurnal Archipelago
Jurnal Tata Kelola Pemerintahan

© Erisna Dewi Ariyani, Rusmin Rum
Jurnal Archipelago,
Vol 4 (2), p.105-116, Juni 2026

AKSES TERBUKA ARTIKEL

Diterima
12 November 2025

Disetujui
17 April 2026

Diterbitkan
Juni 2026

DOI

Digital Transformation in Civil Servant Competency Assessment: Evaluating System Effectiveness and Regional Disparities.

Transformasi Digital dalam Penilaian Kompetensi Aparatur Sipil Negara: Mengevaluasi Efektivitas Sistem dan Kesenjangan Daerah.

Erisna Dewi Ariyani[1], Rusmin Rum[2]

Badan Kepegawaian Daerah dan KORPRI

emaill@gmail.com[1]

08XXXXXX[1], 08XXXXXXX[2]

Abstrak: Studi ini mengevaluasi implementasi *Online Assessment Centre Kepri (OACK)*, sebuah inisiatif transformasi digital Pemerintah Provinsi Kepulauan Riau untuk mengatasi tantangan geografis dalam penilaian kompetensi Aparatur Sipil Negara (ASN). Penelitian ini menggunakan pendekatan eksplanatori sekuensial dengan metode campuran. Data kuantitatif diperoleh dari survei Indeks Kepuasan Pegawai (IKP) terhadap 235 responden pada tahun 2025, yang dianalisis secara statistik dan dilanjutkan dengan Importance-Performance Analysis (IPA). Data kualitatif dianalisis menggunakan kerangka kerja SWOT (*Strengths-Weaknesses-Opportunities-Threats*).

Temuan kuantitatif menegaskan bahwa OACK berhasil meningkatkan kemudahan akses dan responsivitas administrator. Analisis lebih lanjut mengidentifikasi peluang untuk memperkuat dampak sistem secara keseluruhan, termasuk memperluas partisipasi secara lebih merata di seluruh wilayah. Namun, setelah koreksi multipel, signifikansi statistik tidak bertahan dan ukuran efek yang diperoleh relatif kecil, sehingga temuan ini lebih menunjukkan tren positif daripada perbedaan yang kuat. Melalui analisis IPA, empat area prioritas untuk optimalisasi lebih lanjut diidentifikasi: (1) kualitas pertanyaan asesor, (2) kejelasan instruksi simulasi, (3) kompetensi asesor, dan (4) kualitas alat asesmen.

Berdasarkan temuan terintegrasi, studi ini merekomendasikan strategi pengembangan, termasuk: penyempurnaan instrumen asesmen, penguatan kapasitas asesor dan administrator, optimalisasi teknis untuk berbagai kondisi jaringan, dan implementasi bertahap yang didukung oleh pemantauan partisipasi dan survei Indeks Kepuasan Pegawai (IKP) secara

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

berkala untuk memastikan efektivitas dan keberlanjutan program. Temuan ini tidak hanya memberikan kontribusi empiris terhadap literatur tentang transformasi digital sektor publik, tetapi juga menawarkan strategi untuk memperluas kesetaraan dan efektivitas sistem asesmen di wilayah kepulauan.

Kata Kunci: Alat penilaian; Disparitas regional; Indeks Kepuasan Pegawai; Platform penilaian kompetensi; Transformasi digital

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol. XX (X), p.XXX-XXX bulan 2026

Abstract: *The research evaluates the implementation of the Online Assessment Centre Kepri (OACK), a digital transformation initiative by the Kepulauan Riau Provincial Government to address geographical challenges in assessing the competency of State Civil Apparatus (ASN). The research employed a mixed-methods sequential explanatory approach. Quantitative data were obtained from the Employee Satisfaction Index (IKP) survey of 235 respondents in 2025, which was statistically analysed and followed by Importance-Performance Analysis (IPA). Qualitative data were analysed using a SWOT (Strengths-Weaknesses-Opportunities-Threats) framework to integrate datasets*

The quantitative findings confirmed that OACK successfully improved ease of access and administrator responsiveness. Further analysis identified opportunities to strengthen the overall system's impact, including expanding participation more equitably across regions. However, after multiple regression correction, statistical significance did not persist and the effect sizes were relatively small, suggesting positive trends rather than strong differences. Through the IPA analysis, four priority areas for further optimisation were identified: (1) the quality of assessor questions, (2) the clarity of simulation instructions, (3) assessor competency, and (4) the quality of assessment tools.

Based on the integrated findings, this study recommends development strategies including: refining assessment instruments, strengthening assessor and administrator capacity, technical optimisation for various network conditions, and phased implementation supported by regular monitoring of participation and Employee Satisfaction Index (IKP) surveys to ensure the program's effectiveness and sustainability. These findings not only provide an empirical contribution to the literature on public sector digital transformation but also offer strategies for expanding the equity and effectiveness of assessment systems in archipelagic regions.

Keywords: Assessment tool; Regional disparity; Employee Satisfaction Index; Competency assessment platform; Digital transformation.

© 2023 The Author (s)
This work is licensed under a Creative Commons Attribution-NonCommercial-SahreAlike 4.0 International License

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

I. INTRODUCTION

The Kepulauan Riau Province's desire to strengthen clean governance through digitalisation is hampered by the administrative centres' geographical spread across various islands, including five districts and two municipalities. This situation has led to a lack of cohesion in the civil servant competency assessment system.

Ministerial Regulation of the Minister of State Apparatus Utilisation and Bureaucratic Reform Number 38 of 2017 (Kementerian PANRB, 2017) introduced an employee assessment system based on competency standards. In response, the Online Assessment Centre Kepri (OACK) was created to map employee competencies using digital tools. This approach aligns with the view that employee competency is central to understanding individual performance (Kruyen & Van Genugten, 2020)

However, the level of OACK utilisation across regions remains suboptimal. Data from the Regional Technical Service Unit for Employee Competency Assessment under the Civil Service and Indonesian Civil Servants Corps of Kepulauan Riau Provincial Government (UPTD PENKOM BKD & KORPRI KEPRI) in 2025 on the Kepulauan Riau Province still shows a gap. For instance, participation rates within the Kepulauan Riau Provincial Government 62.2%) and the Batam Municipality (53.6%), respectively. However, very different conditions were found at most regency levels, where participation remained very low, such as in Bintan Regency (2.3%), Lingga Regency (2.2%), and Kepulauan Anambas Regency (2.5%).

Studies in the public sector context, such as the research by Erisna Dewi Ariyani et al. (2024), explain that the success of digital transformation depends on the effectiveness and integration of web-based information systems. Furthermore, information system integration can improve teamwork effectiveness (Gu et al., 2019). The principles of this digital approach also come from research by Mergel et al. (2019), who define digital transformation as a paradigm shift in government administration.

These descriptions make the DeLone and McLean Information Systems Success Model the main conceptual framework in this study by incorporating the latest empirical developments by Urbach & Müller (2011) through an analysis of the relationships among system quality, information quality, and user satisfaction. Strengthening the system and information quality can influence end-user satisfaction (Amirah Lubis et al., 2024). This confirms its relevance in the use of OACK at the government level. Furthermore, the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are also relevant in understanding the influence of employment status on digital system usage behaviour, as demonstrated by Puspitawati et al. (2023).

Therefore, the fundamental problem facing island regions is the inequality in assessment services caused by geographic fragmentation. OACK evaluation data shows that this system has not been evenly distributed across regency and municipal governments, while the need for employee competency standardisation is increasingly pressing. Kruyen & Van Genugten (2020) found that digital competencies cannot be predominantly identified by employees based on their competency needs, indicating a gap. Thus, OACK use must be balanced with capacity building for assessors, administrators, and participants, particularly in island regions with varying infrastructure and human resource readiness (Kruyen & Van Genugten, 2020).

A gap analysis shows that although information system implementation in the public sector has been widely researched, in-depth studies of digital assessment platforms in regency and municipal governments are still limited. The literature tends to emphasise technical aspects without examining model application based on regional needs and capability analysis, as identified by Topuz et al. (2022) in the context of online assessment systems. In the context of e-government, user contentment and trust are key determinants of continued use of digital systems (Luo et al., 2024), making them relevant for assessing the effectiveness and prospects of implementing OACK.

© Erisna Dewi Ariyani, Rusmin Rum (s).
Jurnal Archipelago,
Vol. XX (X), p.XXX-XXX bulan 2026

The novelty of this research lies in integrating the Employee Satisfaction Index (IKP) measurement from primary data collected from 235 respondents with a structured SWOT analysis to build a framework for effective OACK use. This provides practical recommendations for the Riau Islands region that can be adopted by regency and municipal governments in Kepulauan Riau Province, referring to the digital transformation concept developed by Mergel et al. (2019).

To address the identified gaps, this research formulates four questions, as follows:

1. How effective is the application of OACK in terms of user contentment through IKP measurement?
2. What factors determine OACK's success in Kepulauan Riau Province?
3. What are OACK's internal strengths and weaknesses, as well as external opportunities and threats?
4. What strategic framework can improve equitable adoption of OACK across all government levels?

Based on these research questions, this research pursues:

1. Measure the effectiveness of OACK implementation based on IKP data.
2. Analyse the determinants of OACK success using a quantitative approach.
3. Identify Strengths, Weaknesses, Opportunities, and Threats (SWOT) in OACK implementation.
4. Develop a strategic framework for OACK embracement across all levels of government.

Overall, this research aims not only to measure employee satisfaction with OACK but also to make theoretical contributions by integrating an information systems success model with assessment centre principles and offer practical strategic recommendations for strengthening the digital transformation of bureaucracy in the Kepulauan Riau Province.

II. RESEARCH METHODS

This research is an evaluative study using a mixed-methods sequential explanatory approach. It focuses on analysing the effectiveness of OACK implementation as a centralised competency assessment platform and on identifying strategies to expand integration across regency and municipal governments. The research specifications refer to the updated DeLone & McLean information systems evaluation framework (Urbach & Müller, 2011), taking into account the archipelago's digital transformation context. This research is categorised as an innovative case study examining OACK as a policy breakthrough in civil service human resource governance.

The approach uses a combination of quantitative and qualitative methods, implemented sequentially through three main phases. The first phase is a quantitative analysis of primary IKP data from 235 respondents, based on survey results on OACK use, to obtain a comparative study of user experience. The validity and dependability of the survey instrument were tested according to standard scale development principles (Boateng et al., 2018). Both raw and standardised alpha values were reported to ensure internal consistency.

The comparative study used the Mann–Whitney U test in SPSS (Pallant, 2020) because the Shapiro–Wilk normality test indicated a non-normal distribution ($p < 0.001$). In addition, exploratory factor analysis was conducted according to established guidelines (Howard, 2016; Watkins, 2018) to identify determinants of implementation success. Next, the assessment dimensions were mapped based on perceived importance and actual performance. Thus, Importance-Performance Analysis (IPA) was used to map the dimension measurements based on perceived importance and actual performance. Statistical validity was enhanced through multiple testing correction (Menyhart et al., 2022). Additionally, effect sizes (r) were calculated to assess the practical significance of the differences (Fey et al., 2023; Schäfer & Schwarz, 2019).

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

The second phase consisted of qualitative analysis through the interpretation of a structured SWOT analysis. This approach translates quantitative findings into strategic implications. To enhance analytical rigour, the SWOT analysis was integrated with IPA quadrant mapping and statistical test results, making sure that each SWOT element was empirically grounded. In the qualitative phase, informants were selected purposively to ensure representation of various stakeholders (Palinkas et al., 2015).

The third phase integrated quantitative and qualitative analyses to formulate evidence-based strategies. Statistical results from the Mann–Whitney U test and IPA quadrant mapping were analysed to identify significant dimensions and priority areas. The results were incorporated into a SWOT matrix to provide an empirical overview of strengths, weaknesses, opportunities, and threats. Integrated analysis produced S-O, W-O, S-T, and W-T strategies (Guetterman et al., 2015). Thus, the research method can produce a comprehensive empirical mapping of OACK's effectiveness across various geographic contexts, including providing a strategic foundation for expanding equitable access to competency assessment services across all government areas in the Kepulauan Riau Province.

III. RESULTS AND DISCUSSION

A. Research Results

1. Instrument Reliability

Primary data from the Employee Satisfaction Index (IKP) instrument were tested for reliability using Cronbach's Alpha. Results for the First Semester of 2025 yielded $\alpha = 0.765$ (standardised to 0.905), while results for the Second Semester of 2025 yielded $\alpha = 0.774$ (standardised to 0.930). These values indicate adequate internal consistency, making the instrument highly suitable for further analysis.

2. Normality Test and Selection of Statistical Tests

The Kolmogorov–Smirnov and Shapiro–Wilk tests were conducted on the ten dimensions of the IKP, with the total score showing $p < 0.001$. Finally, the non-parametric Mann–Whitney U test was performed in the comparative study because the data were not normally distributed.

3. Mann–Whitney U Test

Integration of the initial p-value, Z-value, effect size (r), and corrected p-value to assess the statistical significance and magnitude of differences between semesters. The Mann–Whitney U test results have shown that at the initial stage, only two dimensions had $p < 0.05$, either Administrator Response ($U = 4871{,}000$; $Z = -2.484$; $p = 0.013$; $n_1 = 73$, $n_2 = 162$) or Ease of Access ($U = 5084{,}000$; $Z = -2.016$; $p = 0.044$), while the Implementation Time and Assessment Tools dimensions were not significant ($p = 0.454$ and 0.134). However, after applying the correction, the p-value increased to > 0.05, so that no dimensions remained statistically significant. Effect sizes were small ($r = 0.010$–0.162), with the largest for Administrator Response ($r = 0.162$) and Ease of Access ($r = 0.131$).

Table 1.
Mann–Whitney U Test Results per Dimension and Total Score

Dimension	p (2-tailed)	Interpretation
Ease of Access (EA)	0.044	Significant (increase)
Administrator Response (AR)	0.013	Significant (increase)
Potential Assessment (PA)	0.582	Not significant
Implementation Time (IT)	0.454	Not significant
Question Understanding (QU)	0.828	Not significant
Assessor Questions (AQ)	0.795	Not significant
Simulation Test Instructions (STI)	0.647	Not significant
Assessor Competence (AC)	0.616	Not significant

© Erisna Dewi Ariyani, Rusmin Rum (s).
Jurnal Archipelago,
Vol. XX (X), p.XXX-XXX bulan 2026

Dimension	p (2-tailed)	Interpretation
Officer Behavior (OB)	0.205	Not significant
Assessment Tools (AT)	0.134	Not significant
Total Score	0.251	Not significant (U = 5366.5; Z = −1.149)

Source: UPTD PENKOM BKD & KORPRI KEPRI, (2025)

4. Importance–Performance Analysis (IPA)

Based on average scores and their correlation with the overall semester total, which serves as an indicator of importance, dimensions are mapped into four IPA quadrants using the approach of Phadermrod et al. (2019). Quadrant I (high importance, low performance) was prioritised for improvement, while Quadrant II needed to be maintained.

Tabel 2.
Importance–Performance Analysis (IPA) Results by Dimension

Dimension	Performance (Mean)	Importance (Item-total corr.)	Quadrant
Ease of Access	2.2840	0.707	II (Keep up)
Administrator Response	2.5123	0.729	II (Keep up)
Assessor Questions	2.2222	0.730	I (Concentrate)
Simulation Test Instructions	2.3272	0.750	I (Concentrate)
Assessor Competence	2.3395	0.769	I (Concentrate)
Assessment Tools	2.3210	0.753	I (Concentrate)
Officer Behavior	2.4444	0.770	II (Keep up)
Potential Assessment	2.0679	0.603	III (Low priority)
Implementation Time	2.1728	0.665	III (Low priority)
Question Understanding	2.1235	0.617	III (Low priority)

Source: Data processing by the author

5. Strengths – Weaknesses – Opportunities – Threats (SWOT) Matrix

The SWOT matrix summarises the strategic position of the Online Assessment Centre Kepri (OACK) based on quantitative findings from the Mann–Whitney U test and IPA analysis of

Strengths (S): 1) Ease of Access improved significantly (p = 0.044) 2) Administrator Response improved significantly (p = 0.013) 3) Instrument reliability is satisfactory (Cronbach's alpha ≈ 0.77) 4) Successful adoption at the Kepulauan Riau Provincial Government has 62.2%, and the Batam Municipality Government has 53.6%	Opportunities (O): 1) Supportive digital transformation policies 2) Need for the standardisation of ASN competency 3) Improvements in national/regional digital infrastructure 4) Potential funding/pilot project opportunities from the central government
Weaknesses (W): 1) Eight IKP dimensions did not show significant improvement 2) Low participation below < 3% in several regencies, as follows: Bintan, Lingga, Kepulauan Anambas 3) Total score did not increase significantly 4) Four IPA priority dimensions exhibit low performance	Threats (T): 1) Archipelagic geography leading to logistical and cost challenges 2) Bureaucratic resistance at local institutions 3) Limited budgets, both in municipal government and regencies 4) Digital literacy disparities among ASN

Figure 1
Strengths-Weaknesses-Opportunities-Threats (SWOT) Matrix

Source: Data processing by the author

assessment participation data. Each quadrant represents internal and external factors that underpin strategy formulation, using a structured approach consistent with Harahap et al. (2023). As shown in Figure 1, OACK's internal factors show a balanced mix of strengths and weaknesses. Strengths include improvements in ease of access (S-1: p = 0.044) and administrator responsiveness (S-2: p = 0.013). These are supported by adequate instrument reliability (S-3: Cronbach's α = 0.77) and a relatively high adoption rate (S-4: Kepulauan Riau Provincial Government: 62.2%; Batam

© Erisna Dewi Ariyani, Rusmin Rum (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

Municipality: 53.6%). However, several weaknesses remain, including insignificance across the eight IKP dimensions (W-1), very low participation (<3%) in Bintan, Lingga, and Kepulauan Anambas (W-2), no significant increase in the total score (W-3), and low performance across the four priority dimensions based on the IPA analysis (W-4).

On the other hand, opportunities include: supportive digital transformation policies (O-1); standardisation of civil servant competencies (O-2); improvements to digital infrastructure (O-3) and potential funding from the central government as a pilot project (O-4). Conversely, Threats include archipelagic geography (T-1); bureaucratic resistance (T-2); budget constraints (T-3) and digital literacy (T-4). In line with Kruyen and Van Genugten's (2020) view, strengthening collaboration and communication is a key element for expanding OACK access and implementing a more targeted replication strategy. In particular, low participation can be addressed through interventions that target W-2 and T-1 (WT-1 strategy), which can be a strategic step to reduce the competency gap. Access to OACK can help address low participation. Therefore, replication strategies should explicitly target these areas to address competency gaps.

B. Discussion

Initial testing showed an improvement, but after applying multiple corrections, the effect was no longer statistically significant. Nevertheless, the results still show a positive trend. These findings indicate that OACK has succeeded in improving technical aspects, particularly ease of access and administrative responsibility, which aligns with the definition of digital transformation proposed by Mergel et al. (2019). These results also support Amirah Lubis et al. (2024), who stated that system quality is a key driver of user satisfaction.

However, technical improvements alone are insufficient without improvements in the assessor-related dimensions. This is consistent with Topuz et al.'s (2022) view of the limitations of online assessment systems in terms of features and platform integration. Similarly, Kruyen & Van Genugten (2020) emphasise the multidimensional nature of staff competency, suggesting that improvements in assessment quality depend on integrating system enhancement with human capacity development.

Furthermore, the IPA analysis identified four priority dimensions that require the most intervention: assessor question quality, simulation instructions, assessor competency, and assessment tools. To ensure more equitable assessment quality across regions, a strategy for replicating OACK in other regions needs to be designed, combining technical improvements and capacity interventions. This approach is also supported by Gu et al. (2019), who demonstrated the importance of aligning system development, user capacity, and organisational support to improve group effectiveness and management outcomes.

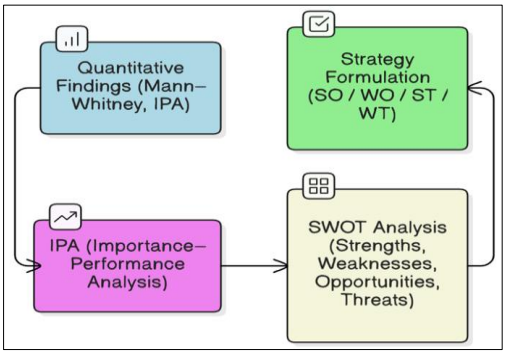


Figure 2
Joint Display: From Quantitative Findings to Strategy

Source: Data processing by the author

Based on the Mann–Whitney U test, no significant differences were found between semesters ($p = 0.205$) in the Officer behaviour (OB) Dimensions, indicating that user perceptions remained relatively stable over time. In the IPA mapping, this dimension falls into Quadrant II with high performance (2.44) and a high level of importance (0.77). Although there was no statistically measurable improvement, positive Officer Behaviour remained consistent. This

© Erisna Dewi Ariyani, Rusmin Rum (s).
Jurnal Archipelago,
Vol. XX (X), p.XXX-XXX bulan 2026

serves as the foundation for Service-Oriented Behaviour and can be leveraged to drive broader quality improvements. The stable positive perception of officer behaviour indicates the existence of a service culture that has been internalised in the assessment process. This placement of the Officer Behaviour dimension in Quadrant II, despite the lack of statistical improvement, can be explained through the perspective of organisational justice (Chen et al., 2024) and organisational culture (Dasgupta & Gupta, 2019). Based on this condition, the strengths-opportunities (S-O) strategy can leverage the successful implementation of OACK in Batam Municipality and Kepulauan Riau Provincial Government to gain legitimacy and encourage wider adoption by other local governments.

For instance, Harahap et al. (2023) noted that the success of digital transformation in one service unit can serve as an effective means to scale up improvements, as follows:

a. Strengths–Opportunities (S-O): Replicate best practices from the Batam Municipal and the Kepulauan Riau Provincial Government as pilots; leverage evidence of improved Ease of Access (EA) and Administrator Response (AR) to build legitimacy; utilise policy support to secure funding and improve access infrastructure.

b. Weaknesses–Opportunities (W-O): Provide technical assistance and develop training modules tailored to low-participation regions; prepare standard operating manuals for online assessment procedures.

c. Strengths–Threats (S-T): Optimise strengths in administrator access and responsiveness, including addressing bureaucratic resistance, and provide training for regional implementers to better understand OACK usage.

d. Weaknesses–Threats (W-T): Design a phased rollout with low-cost packages for fiscally constrained regions; prioritise Quadrant I dimensions for quick wins.

Furthermore, two visual tools are presented to illustrate how quantitative results inform the strategic framework. Figure 2 integrates statistical findings with the SWOT analysis into a replication framework. For instance, modest effects in Ease of Access and Administrator Response support the S-O strategy, while the four Quadrant I dimensions guide the W-T strategy.

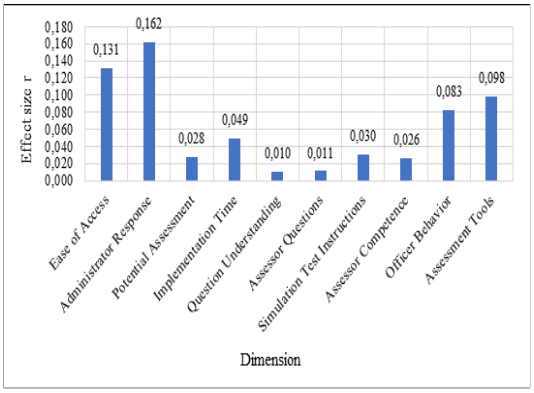


Figure 3
Effect Sizes (r) per IKP dimension

Source: Data processing by the author

Figure 3 maps effect sizes (r) across IKP dimensions to support intervention prioritisation. Larger r values, such as Administrator Response (r = 0.162), indicate areas requiring immediate attention, whereas smaller values highlight dimensions for continued monitoring. Together, these figures guide resource allocation, action sequencing, and evaluation indicators for OACK replication.

IV. CONCLUSION

The implementation of OACK improved administrator accessibility and responsiveness, though the effect was small and became statistically insignificant after multiple testing corrections, indicating a positive trend rather than strong empirical evidence. Substantial regional disparities persist, particularly in regencies with very low participation, such as Kepulauan Anambas (2.5%) and Lingga (2.2%).

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

The IPA analysis identified four priority dimensions requiring immediate attention: assessor question quality, simulation instructions, assessor competency, and assessment tools. This confirms that the main challenges lie not only in technical aspects but also in human and procedural factors, consistent with studies on organisational and managerial determinants of digital government transformation (Nurhidayat et al., 2024; Tangi et al., 2021).

This study recommends a phased adoption strategy with clear KPIs, including regional participation targets, IKP thresholds, and assessor certification. Furthermore, the Kepulauan Riau Provincial Government and Batam are used as pilot models. Besides, Implementation should be tailored to regional capacity, supported by improved assessor competency and the deployment of assessment mentors in underserved areas (Topuz et al., 2022).

These research recommendations align with previous research on the role of human factors in mediating information system effectiveness (Gu et al., 2019) and the need to address the regional digital divide (Kartiasih et al., 2023). Therefore, future development of OACK should strengthen civil servants' core competencies, such as analytical thinking, collaboration, and communication. As well, it should be supported by quarterly monitoring through IKP participation and surveys (Kartiasih et al., 2023; Kruyen & Van Genugten, 2020; Tangi et al., 2021; Virnandes et al., 2024).

BIBLIOGRAPHY

Amirah Lubis, F. E., & Yuliaty, T. (2024). The Influence of System Quality, Information Quality, Perceived Usefulness, User Competency, And Employee Performance on User Satisfaction of Accounting Information Systems at the Medan City Government. *International Journal of Research and Review*, *11*(5), 509–524.

https://doi.org/10.52403/ijrr.20240559

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Frontiers in Public Health*, *6(149)*.

https://doi.org/10.3389/fpubh.2018.00149

Chen, Yunan, Sun, Ivan Y, Wu, Yuning, Ha, S. V, & Zheng, Xi. (2024). Organizational Justice, Technology Utilization, and Well-Beings Among Chinese Police Officers. *Police Quarterly*, *28*(2), 258–282.

https://doi.org/10.1177/10986111241275043

Dasgupta, S., & Gupta, B. (2019). Espoused organizational culture values as antecedents of internet technology adoption in an emerging economy. *Information & Management*, *56*(6), 103142.

https://doi.org/10.1016/j.im.2019.01.004

Erisna Dewi Ariyani, Chablullah Wibisono, & Nurhatisyah Nurhatisyah. (2024). Determination of Information Quality, Organizational Culture and Digital Competence of Work Effectiveness Through the Web-Based Hospital Management Information System of Raja Ahmad Tabib Regional Hospital, Kepulauan Riau Province. *International Journal of Economics, Commerce, and Management*, *1*(4), 262–275.

https://doi.org/10.62951/ijecm.v1i4.238

Fey, C. F., Hu, T., & Delios, A. (2023). The Measurement and Communication of Effect Sizes in Management Research. *Management and Organization Review*, *19*(1), 176–197. https://doi.org/10.1017/mor.2022.2

Gu, D., Deng, S., Zheng, Q., Liang, C., & Wu, J. (2019). Impacts of case-based health knowledge system in hospital management: The mediating role of group effectiveness. *Information & Management*, *56*(8), 103162. https://doi.org/10.1016/j.im.2019.04.005

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine*, *13*(6), 554–561.

https://doi.org/10.1370/afm.1865

Harahap, K., Ariyani, E. D., Saputra, A., Hartanto, S. B., Fatimah, S., Khaddafi, M., & Saputra, J. (2023). Study of Digital Service Transformation in Financial Transactions at Raja Ahmad Tabib Hospital with SWOT Analysis Approach. *Journal of Accounting Research, Utility Finance and Digital Assets,* 2(1), 413–418. https://garuda.kemdiktisaintek.go.id/documents/detail/3536048

Howard, M. C. (2016). A Review of Exploratory Factor Analysis Decisions and Overview of Current Practices: What We Are Doing and How Can We Improve? *International Journal of Human–Computer Interaction*, *32*(1), 51–62. https://doi.org/10.1080/10447318.2015.1087664

Kartiasih, F., Djalal Nachrowi, N., Wisana, I. D. G. K., & Handayani, D. (2023). Inequalities of Indonesia's regional digital development and its association with socioeconomic characteristics: a spatial and multivariate analysis. *Information Technology for Development*, *29*(2–3), 299–328. https://doi.org/10.1080/02681102.2022.2110556

Kruyen, P. M., & Van Genugten, M. (2020). Opening up the black box of civil servants' competencies. *Public Management Review*, *22*(1), 118–140. https://doi.org/10.1080/14719037.2019.1638442

Luo, C., Hasan, N. A. M., & Zamri bin Ahmad, A. M. (2024). Exploring satisfaction and trust as key drivers of e-government continuance intention: Evidence from China for sustainable digital governance. *Sustainability*, *16*(24), 11068. https://doi.org/10.3390/su162411068

Menyhart, O., Weltz, B., & Győrffy, B. (2022). Correction: MultipleTesting.com: A tool for life science researchers for multiple hypothesis testing correction. *PLOS ONE*, *17*(9), e0274662. https://doi.org/10.1371/journal.pone.0274662

Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, *36*(4), 101385.

https://doi.org/10.1016/j.giq.2019.06.002

Nurhidayat, N., Nurmandi, A., & Congge, U. (2024). Bridging the digital divide: analyzing public participation in Indonesia's e-government through the e-participation index. *Otoritas : Jurnal Ilmu Pemerintahan*, *14*, 481–498. https://doi.org/10.26618/ojip.v14i2.14435

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. *Routledge.*

https://doi.org/10.4324/9781003117452

Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 38 Tahun 2017 tentang Standar Kompetensi Jabatan Aparatur Sipil Negara, Pub. L. Nomor 38 Tahun 2017 (2017). https://peraturan.bpk.go.id/Home/Details/142705/permenpan-rb-no-38-tahun-2017

Phadermrod, B., Crowder, R. M., & Wills, G. B. (2019). Importance-Performance Analysis based SWOT analysis. *International Journal of Information Management*, 44, 194–203. https://doi.org/10.1016/j.ijinfomgt.2016.03.009

Puspitawati, P. A., Kesiman, M. W. A., & Sariyasa, S. (2023). The Effect of Employment Status in the UTAUT Model on the Use Behavioral of E-Office Users: Case Study at Politeknik Pariwisata Bali. *Jurnal Info Sains: Informatika Dan Sains*, 13(02), 345–353. https://ejournal.seaninstitute.or.id/index.php/InfoSains/article/view/2897

Schäfer, T., & Schwarz, M. A. (2019). The Meaningfulness of Effect Sizes in Psychological Research: Differences Between Sub-Disciplines and the Impact of Potential Biases. *Frontiers in Psychology*, 10:813. https://doi.org/10.3389/fpsyg.2019.00813

Tangi, L., Janssen, M., Benedetti, M., & Noci, G. (2021). Digital government transformation: A structural equation modelling analysis of driving and impeding factors. *International Journal of Information Management*, *60*, 102356. https://doi.org/10.1016/j.ijinfomgt.2021.102356

© **Erisna Dewi Ariyani, Rusmin Rum** (s).
Jurnal Archipelago,
Vol 4 (2), p.105-116, November 2026

Topuz, A. C., Saka, E., Fatsa, Ö. F., & Kurşun, E. (2022). Emerging trends of online assessment systems in the emergency remote teaching period. *Smart Learning Environments*, 9(17). https://doi.org/10.1186/s40561-022-00199-6

Urbach, N., & Müller, B. (2012). The updated DeLone and McLean model of information systems success. In Y. Dwivedi, M. Wade, & S. Schneberger (Eds.), *Information systems theory* (Integrated Series in Information Systems, Vol. 28). Springer.

https://doi.org/10.1007/978-1-4419-6108-2_1

Virnandes, S. R., Shen, J., & Vlahu-Gjorgievska, E. (2024). Building public trust through digital government transformation: A qualitative study of Indonesian civil service agency. *Procedia Computer Science*, *234*, 1183–1191. https://doi.org/10.1016/j.procs.2024.03.114

Watkins, Marley W. (2018). Exploratory Factor Analysis: A Guide to Best Practice. *Journal of Black Psychology*, 44(3), 219–246. https://doi.org/10.1177/0095798418771807