

Organizational determinants of mobile population administration service performance in Batam City

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Abstract

Mobile population administration services (Jemput Bola) have become a critical instrument for extending civil document coverage in archipelagic regions of Indonesia, yet the organizational factors driving their field-level performance remain insufficiently understood. studies have predominantly examined conventional office-based public services and have not integrated leadership, communication, work structure, team dynamics, and organizational environment within a single analytical framework for mobile service contexts; this study aimed to address that gap by analyzing the partial and simultaneous influence of transformational leadership, interpersonal communication, division of work, teamwork, and organizational climate on mobile service performance. A quantitative explanatory study using a census technique was conducted on 50 field officers of the Department of Population and Civil Registration, Batam City, with data collected through validated 5-point Likert scale questionnaires and analyzed using multiple linear regression with SPSS version 26. All five variables had positive and significant partial effects on service performance; simultaneously, the model was significant ($F = 25.284$; $p < 0.001$) with an Adjusted R^2 of 0.713. Teamwork emerged as the most dominant factor ($\beta = 0.312$; $p = 0.001$), followed by transformational leadership ($\beta = 0.245$; $p = 0.007$), while division of work showed the smallest coefficient ($\beta = 0.185$; $p = 0.046$). In mobile service environments characterized by high interdependence and field uncertainty, relational-collective factors (teamwork, leadership) exert stronger influence than structural-procedural factors (division of work), suggesting that proactive public service improvement strategies should prioritize team cohesion and inspirational leadership development.

Keywords: Transformational Leadership, Teamwork, Mobile Service, Public Service Performance, Population Administration.

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INTRODUCTION

Public services in the contemporary era demand transformation from static bureaucratic models toward proactive approaches oriented to community needs. In the context of population administration in Indonesia, the Jemput Bola (mobile service) innovation of the Department of Population and Civil Registration has become a crucial instrument for accelerating the coverage of civil document ownership, such as Electronic Identity Cards (KTP-el) and Birth Certificates. Data from the Ministry of Home Affairs in 2023 indicated that 3.2% of Indonesia's population still lacked KTP-el, with the largest distribution in archipelagic and border regions (Ministry of Home Affairs, 2023).

Batam City, as an archipelagic region with high population mobility, faces specific challenges in population administration services. According to the 2023 Annual Performance Report (Laporan Kinerja Instansi Pemerintah/LAKIP) of the Department of Population and Civil Registration of Batam City (an unpublished internal document), mobile service achievement reached only 78% of the target, with the main obstacles including difficulties in inter-officer coordination and limited adaptation to dynamic field conditions. The effectiveness of this field service depends not only on the availability of technological infrastructure but also on the organization's internal dynamics (Ritonga et al., 2023).

Previous research on public service performance has been extensively conducted; however, several critical limitations constrain the current understanding of mobile service contexts. First, the majority of studies have focused on conventional office-based services operating in stable, predictable environments (Ohemeng et al., 2018; Hoai et al., 2022), leaving a significant contextual gap for field-based mobile services operating under conditions of environmental uncertainty, geographic dispersion, and resource constraints. The organizational dynamics of mobile services differ fundamentally from office-based operations: officers work in temporary, decentralized settings with limited supervision, requiring higher levels of self-coordination, adaptability, and team interdependence than their office-based counterparts.

Second, existing studies have typically examined organizational factors in isolation rather than as an integrated system. Guzmán et al. (2020) emphasized the importance of transformational leadership in dynamic work contexts but did not examine how leadership interacts with communication quality and team dynamics. Pandey (2023) investigated teamwork in e-governance but did not extend the analysis to field services requiring high physical mobility. Rahmadewi and Kushandajani (2024) studied the division of work in population services without integrating leadership and organizational climate variables. This fragmented approach fails to capture how multiple organizational factors jointly determine performance in complex service delivery environments.

Third, the theoretical justification for integrating these five specific variables derives from the unique operational characteristics of mobile services. Transformational leadership is essential because mobile service officers operate with high autonomy in the field, requiring leaders who can inspire intrinsic motivation rather than relying on direct supervision (Bass & Avolio, 1994). Interpersonal communication is critical because geographically dispersed teams depend on the quality of information exchange for effective coordination (Katz & Kahn, 1978). Division of work matters because field operations with time constraints demand clear role specialization to prevent duplication and confusion (Fayol, 1916). Teamwork is theoretically central because mobile services are inherently interdependent—the failure of one function (data verification, recording, printing) disrupts the entire service chain (Katzenbach & Smith, 1993). Finally, organizational climate shapes the psychological environment within which all other factors operate, influencing officers' willingness to invest discretionary effort under challenging field conditions (Schneider et al., 2013). Together, these five variables represent a comprehensive model spanning leadership (transformational leadership), communication processes (interpersonal communication), structural design (division of work), group dynamics (teamwork), and organizational context (organizational climate).

Based on these research gaps, this study aimed to: (1) analyze the partial influence of transformational leadership, interpersonal communication, division of work, teamwork, and organizational climate on mobile service performance; (2) analyze the simultaneous influence of these five variables; and (3) identify the most dominant variable affecting service performance. This research contributes theoretically by developing an integrated organizational model specifically tailored to proactive mobile public services and by providing practical recommendations for the Department of Population and Civil Registration to improve mobile service effectiveness.

LITERATURE REVIEW

Transformational Leadership and Service Performance

Transformational leadership is a leadership style capable of transforming followers' values and attitudes through four main dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1994). In the public service context, transformational leaders can create a shared vision and motivate the apparatus to transcend personal interests in pursuit of organizational goals (Khan et al., 2024).

Empirical research demonstrates a positive relationship between transformational leadership and public organization performance. Ohemeng et al. (2018) found that transformational leadership increases employees' affective commitment, impacting service productivity. Hoai et al. (2022) proved that transformational leadership moderates the relationship between internal control systems and innovation intensity in Vietnam's public sector. Based on these theoretical and empirical reviews, the following hypothesis is formulated: H1: Transformational leadership has a positive and significant effect on mobile service performance.

Interpersonal Communication and Service Performance

Interpersonal communication in organizations is the process of information and meaning exchange between two or more people that is direct and interactive (Robbins & Judge, 2017). Organizational communication theory from Katz and Kahn (1978) emphasizes the importance of smooth information flow, both vertical and horizontal, for coordination effectiveness. Message clarity and feedback presence are keys to ensuring that leadership instructions do not become ambiguous during implementation.

Krøtel (2021) found that transparent digital communication strengthens public organizations' responsiveness to citizen needs. In the Indonesian context, Adityo et al. (2022) proved that the quality of interpersonal communication among population administration officers determines document completion speed. Thus, the following hypothesis is formulated: H2: Interpersonal communication has a positive and significant effect on mobile service performance.

Division of Work and Service Performance

Division of work is a fundamental principle in Henri Fayol's (1916) classical administrative theory, emphasizing task specialization to achieve maximum efficiency. Clear division of work based on competence and proportional workload will create high accuracy and reduce task duplication (Rahmadewi & Kushandajani, 2024).

In the mobile service context, role clarity for each team member becomes critical, given time and resource limitations in the field. Appropriate division of work enables officers to focus on specific tasks, thereby increasing productivity and accountability. Based on this argumentation:

H3: Division of work has a positive and significant effect on mobile service performance.

Teamwork and Service Performance

Teamwork is defined as a group of individuals who are interdependent and share responsibility for achieving common outcomes (Katzenbach & Smith, 1993). Teamwork dimensions include common purpose, complementary skills, mutual commitment, mutual accountability, and an agreed-upon work approach.

Pandey (2023) proved that trust-based teamwork is key in facing public service complexity. Synergy and collective support within teams become important social capital for officers when facing communities with diverse characteristics. Therefore:

H4: Teamwork has a positive and significant effect on mobile service performance.

Organizational Climate and Service Performance

Organizational climate is the shared perception of organization members regarding valued practices, procedures, and behaviors in the organization (Schneider et al., 2013). Litwin and Stringer’s (1968) theory identifies organizational climate dimensions, including structure, responsibility, rewards, risk, warmth, support, standards, conflict, and identity.

Nguyen and Tu (2022) found a positive correlation between supportive work climate and organizational citizenship behavior. Edmizar et al. (2024) proved that positive organizational climate significantly mitigates work fatigue among mobile service officers. Thus:

H5: Organizational climate has a positive and significant effect on mobile service performance.

H6: Transformational leadership, interpersonal communication, division of work, teamwork, and organizational climate simultaneously have a significant effect on mobile service performance.

RESEARCH METHOD

Research Design and Location

This study employed a quantitative approach with an explanatory (causal associative) design. The research was conducted at the Department of Population and Civil Registration of Batam City, Riau Islands Province.

Population and Sample

The research population consisted of all apparatus and field officers who were members of the Mobile Service Team at the Department of Population and Civil Registration of Batam City, totaling 50 people. Given the limited and specific population size, the sampling technique used was census (saturated sampling), where all population members became research respondents.

The sample size of 50 respondents met the minimum requirement for multiple regression analysis with 5 predictors based on G*Power calculation (medium effect size $f^2 = 0.15$; $\alpha = 0.05$; power = 0.80), which requires a minimum of 43 respondents (Faul et al., 2009).

Variables and Operationalization

Operational definitions and variable measurements are presented in Table 1.

Table 1. Research Variable Operationalization

| Variable | Operational Definition | Dimensions | Source |
|----------------------------------|--|---|----------------------|
| Transformational Leadership (X1) | Officers’ perception of leaders’ ability to inspire and motivate | Idealized influence, inspirational motivation, intellectual stimulation, individualized consideration | Bass & Avolio (1994) |
| Interpersonal Communication (X2) | Officers’ perception of information exchange quality | Openness, empathy, supportiveness, positiveness, equality | DeVito (2016) |

| Variable | Operational Definition | Dimensions | Source |
|-----------------------------|--|--|--------------------------------------|
| Division of Work (X3) | Officers' perception of task clarity and proportionality | Specialization, task clarity, proportional workload | Fayol (1916); Robbins & Judge (2017) |
| Teamwork (X4) | Officers' perception of team collaboration effectiveness | Common purpose, mutual commitment, mutual accountability, synergy | Katzenbach & Smith (1993) |
| Organizational Climate (X5) | Officers' perception of organizational work atmosphere | Structure, responsibility, rewards, support, performance standards | Litwin & Stringer (1968) |
| Service Performance (Y) | Officers' work achievement in mobile services | Productivity, quality, responsiveness, accountability | Dwiyanto (2006); LAN RI (2017) |

Instrument and Pilot Testing

The research instrument consisted of closed questionnaires with a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Instrument pilot testing was conducted on 30 mobile service officers at the Department of Population and Civil Registration of Tanjungpinang City (outside the research population). Tanjungpinang was selected as the pilot test location due to its comparable operational characteristics as an archipelagic municipal government within the same province.

Validity test results using Corrected Item-Total Correlation showed that all items had r-calculated values > r-table (0.361), thus declared valid. Based on the pilot test results, minor wording adjustments were made to three items in the division of work subscale (X3) to improve clarity regarding task-specific responsibilities in the mobile service context. Additionally, one item in the organizational climate subscale (X5) was rephrased to better reflect field-based working conditions rather than office-based settings. No items were removed, as all met the validity threshold after these refinements. Reliability test results with Cronbach's Alpha are presented in Table 2.

Table 2. Instrument Reliability Test Results

| Variable | Cronbach's Alpha | Remarks |
|----------------------------------|------------------|----------|
| Transformational Leadership (X1) | 0.892 | Reliable |
| Interpersonal Communication (X2) | 0.875 | Reliable |
| Division of Work (X3) | 0.847 | Reliable |
| Teamwork (X4) | 0.908 | Reliable |
| Organizational Climate (X5) | 0.863 | Reliable |
| Service Performance (Y) | 0.895 | Reliable |

Source: Primary data processed (2024)

All variables had Cronbach's Alpha values > 0.70, thus the instrument was declared reliable (Hair et al., 2019).

Data Analysis Technique

Data analysis used multiple linear regression technique with SPSS version 26. Before regression analysis, classical assumption tests were conducted, including normality test (Kolmogorov-Smirnov), multicollinearity test (VIF and Tolerance), and heteroscedasticity test (Glejser). Hypothesis testing was conducted through t-test (partial) and F-test (simultaneous) with significance level $\alpha = 0.05$.

The regression model used:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where: Y = Mobile Service Performance; X₁ = Transformational Leadership; X₂ = Interpersonal Communication; X₃ = Division of Work; X₄ = Teamwork; X₅ = Organizational Climate; α = Constant; β = Regression Coefficient; ε = Error Term.

RESULTS AND DISCUSSION

Respondent Characteristics

Respondent characteristics are presented in Table 3.

Table 3. Respondent Demographic Characteristics

| Characteristic | Category | Frequency | Percentage (%) |
|----------------|-------------|-----------|----------------|
| Gender | Male | 32 | 64.0 |
| | Female | 18 | 36.0 |
| Age | 21–30 years | 12 | 24.0 |
| | 31–40 years | 23 | 46.0 |
| | 41–50 years | 11 | 22.0 |
| | > 50 years | 4 | 8.0 |
| Education | High School | 8 | 16.0 |
| | Diploma | 14 | 28.0 |
| | Bachelor’s | 24 | 48.0 |
| | Master’s | 4 | 8.0 |
| Work Tenure | < 5 years | 15 | 30.0 |
| | 5–10 years | 22 | 44.0 |
| | > 10 years | 13 | 26.0 |

Source: Primary data processed (2024)

The majority of respondents were male (64%), aged 31–40 years (46%), held bachelor’s degrees (48%), and had work tenure of 5–10 years (44%).

Classical Assumption Test Results

Table 4. Classical Assumption Test Results

| Test | Result | Criteria | Conclusion |
|------------------------------|---------------------------|--------------|-----------------------|
| Normality (K-S) | Asymp. Sig. = 0.187 | > 0.05 | Normal |
| Multicollinearity: | | | |
| - X1 | Tol. = 0.542; VIF = 1.845 | > 0.10; < 10 | No multicollinearity |
| - X2 | Tol. = 0.486; VIF = 2.058 | > 0.10; < 10 | No multicollinearity |
| - X3 | Tol. = 0.521; VIF = 1.919 | > 0.10; < 10 | No multicollinearity |
| - X4 | Tol. = 0.412; VIF = 2.427 | > 0.10; < 10 | No multicollinearity |
| - X5 | Tol. = 0.478; VIF = 2.092 | > 0.10; < 10 | No multicollinearity |
| Heteroscedasticity (Glejser) | All Sig. > 0.05 | > 0.05 | No heteroscedasticity |

Source: SPSS Output (2024)

Test results showed that the regression model met all classical assumptions, making it suitable for hypothesis testing.

Multiple Linear Regression Analysis Results

Table 5. Multiple Linear Regression Analysis Results

| Variable | β | Std. Err. | t-value | Sig. | Decision |
|----------------------------------|---------|-----------|---------|-------|-------------|
| (Constant) | 2.150 | 0.878 | 2.450 | 0.018 | – |
| Transformational Leadership (X1) | 0.245 | 0.086 | 2.842 | 0.007 | H1 Accepted |
| Interpersonal Comm. (X2) | 0.198 | 0.093 | 2.135 | 0.038 | H2 Accepted |
| Division of Work (X3) | 0.185 | 0.090 | 2.055 | 0.046 | H3 Accepted |
| Teamwork (X4) | 0.312 | 0.088 | 3.564 | 0.001 | H4 Accepted |
| Organizational Climate (X5) | 0.210 | 0.087 | 2.410 | 0.020 | H5 Accepted |

| R | R Square | Adj. R ² | Std. Error |
|-------|----------|---------------------|------------|
| 0.861 | 0.742 | 0.713 | 2.847 |

| ANOVA | Sum of Sq. | df | Mean Sq. | F | Sig. |
|--------------|------------------|-----------|----------|--------|-------|
| Regression | 1,025.634 | 5 | 205.127 | 25.284 | 0.000 |
| Residual | 356.966 | 44 | 8.113 | | |
| Total | 1,382.600 | 49 | | | |

Source: SPSS Output (2024)

Based on Table 5, the resulting regression equation is:

$$Y = 2.150 + 0.245X_1 + 0.198X_2 + 0.185X_3 + 0.312X_4 + 0.210X_5$$

The Adjusted R² value of 0.713 indicates that 71.3% of mobile service performance variation can be explained by the five independent variables, while the remaining 28.7% is influenced by other factors outside the research model.

Discussion

The Influence of Transformational Leadership on Service Performance

Transformational leadership demonstrated a strong positive effect on mobile service performance ($\beta = 0.245$; $t = 2.842$; $p = 0.007$), confirming H1. This finding aligns with Ohemeng et al. (2018), who found that transformational leadership elevates employee performance in the Ghanaian public sector, and Hoai et al. (2022), who demonstrated its moderating role in driving public sector innovation in Vietnam.

The theoretical mechanism underlying this result can be explained through Bass and Avolio’s (1994) transformational leadership framework. In mobile service operations, officers work in decentralized field settings where direct managerial oversight is minimal. Under these conditions, two dimensions of transformational leadership become particularly salient. First, inspirational motivation enables leaders to articulate a compelling service vision that sustains officers’ intrinsic drive even when working far from the office—a mechanism consistent with Self-Determination Theory’s emphasis on autonomous motivation (Deci & Ryan, 1985). Second, individualized consideration allows leaders to recognize the unique challenges each officer faces across different service locations, tailoring support to individual circumstances rather than applying uniform directives. The relatively high coefficient of leadership ($\beta = 0.245$, second only to teamwork) suggests that in high-autonomy mobile contexts, leadership quality functions as a proximal substitute for structural control mechanisms that are unavailable in the field.

The Influence of Interpersonal Communication on Service Performance

Interpersonal communication proved to have a positive and significant effect on service performance ($\beta = 0.198$; $t = 2.135$; $p = 0.038$), supporting H2. This finding is consistent with Adityo et al. (2022) and Krøtel (2021), who established communication quality as a determinant of public service responsiveness.

From the perspective of organizational communication theory (Katz & Kahn, 1978), this result highlights the critical role of information flow in geographically dispersed operations. Mobile service teams operate simultaneously at multiple locations across Batam's archipelagic territory, creating physical separation that amplifies the potential for information asymmetry, coordination failures, and duplicated efforts. Effective interpersonal communication—characterized by DeVito's (2016) dimensions of openness, empathy, and supportiveness—serves as a compensatory mechanism that bridges this geographic dispersion. Specifically, clear horizontal communication among team members reduces ambiguity about task responsibilities, while transparent vertical communication from coordinators ensures that field officers receive timely updates about schedule changes, community requests, and logistical adjustments. The moderate coefficient ($\beta = 0.198$) indicates that communication is a necessary but not sufficient condition; its effects are likely amplified when combined with strong teamwork and leadership.

The Influence of Division of Work on Service Performance

Division of work had a positive and significant but relatively modest effect on service performance ($\beta = 0.185$; $t = 2.055$; $p = 0.046$), supporting H3. This finding broadly aligns with Fayol's (1916) specialization principle and Rahmadewi and Kushandajani's (2024) finding that role clarity reduces task duplication in population services.

However, the notably lower coefficient of division of work compared to teamwork ($\beta = 0.185$ versus $\beta = 0.312$) warrants critical theoretical examination. Several contextual explanations account for this differential. First, Fayol's (1916) classical administrative theory was developed for stable, factory-like environments with predictable task sequences, whereas mobile services operate in highly variable field conditions where officers frequently encounter situations requiring adaptive role-switching. When a community site presents unexpected demands—such as large numbers of elderly residents requiring extra assistance or technical equipment malfunctions—rigid task boundaries become counterproductive. Officers must flexibly assume responsibilities beyond their designated roles, which diminishes the marginal value of formal work division relative to collaborative adaptability.

Second, the small team size in mobile service units (typically 5–8 officers per team) creates natural task visibility that makes formal division of work somewhat redundant. In small groups, members can readily observe who is doing what and adjust accordingly through informal coordination—a process that team effectiveness theory terms “implicit coordination” (Rico et al., 2008). This implicit coordination, facilitated by teamwork, may partially absorb the variance that formal work division would otherwise explain. Third, the nature of population administration services involves highly sequential processes (verification → data entry → printing → distribution) where process bottlenecks at any single station require collective problem-solving rather than individual task adherence. Under such conditions, the willingness and ability to support colleagues (a teamwork function) matters more than the precision of task boundaries (a division of work function).

The Influence of Teamwork on Service Performance

Teamwork emerged as the most dominant predictor of mobile service performance ($\beta = 0.312$; $t = 3.564$; $p = 0.001$), strongly confirming H4. This finding substantiates Pandey's (2023) conclusion that trust-based teamwork is crucial for complex public service delivery.

The dominance of teamwork can be theoretically explained through Katzenbach and Smith's (1993) team effectiveness framework and the concept of task interdependence. Mobile population administration services represent what Thompson (1967) classified as “reciprocal

interdependence”—the highest form of task interdependence where each unit’s output becomes the input for another, and vice versa. In the Jemput Bola operations at Batam City, the verification officer’s work directly feeds into the data entry process, which in turn determines the printing and distribution workflow. This reciprocal structure means that team synergy—manifest in shared purpose, mutual accountability, and complementary skill utilization—becomes the critical binding mechanism that determines whether the sequential chain functions smoothly or breaks down.

Furthermore, the field environment adds layers of unpredictability (weather disruptions, community scheduling changes, equipment failures) that cannot be addressed through pre-planned individual task execution alone. Effective teamwork provides the collective problem-solving capacity and emotional resilience needed to navigate these contingencies. The gap between teamwork ($\beta = 0.312$) and division of work ($\beta = 0.185$) provides quantitative support for the argument that, in dynamic mobile service environments, relational-collective factors outperform structural-procedural factors in determining performance outcomes.

The Influence of Organizational Climate on Service Performance

Organizational climate had a positive and significant effect on service performance ($\beta = 0.210$; $t = 2.410$; $p = 0.020$), confirming H5. This result aligns with Edmizar et al. (2024), who demonstrated that conducive organizational climate mitigates work fatigue, and Nguyen and Tu (2022), who found positive associations between supportive climates and organizational citizenship behavior.

Drawing on Schneider et al.’s (2013) organizational climate theory, the supportive dimension of organizational climate appears particularly relevant for mobile service performance. Field officers who perceive that their organization values their contributions, provides adequate resources, and maintains fair performance standards develop a psychological sense of security that encourages discretionary effort and innovative problem-solving—qualities essential for navigating unpredictable field situations. Additionally, Litwin and Stringer’s (1968) responsibility dimension is relevant here: when officers perceive that the organization trusts them with autonomous field decision-making and recognizes their accountability, they are more likely to take ownership of service quality rather than treating mobile duty as a mere compliance obligation.

Simultaneous Influence

Simultaneously, the five variables had a significant effect on mobile service performance ($F = 25.284$; $p < 0.001$), confirming H6. The Adjusted R^2 of 0.713 indicates that the integrated model possesses strong explanatory power, accounting for nearly three-quarters of performance variation. This finding validates the theoretical rationale for combining leadership, communication, structural, team, and contextual factors into a comprehensive model. The collective significance strengthens the argument that mobile public service performance is a multi-determined outcome that cannot be adequately understood through single-factor analyses.

The unique contribution of this research to the public service performance literature lies in three aspects. First, it extends the performance determinant framework from conventional office-based contexts—where most prior research has been situated—to the specific domain of mobile field services, revealing that the relative importance of organizational factors shifts when service delivery occurs in decentralized, unpredictable environments. Second, it provides empirical evidence for a theoretical hierarchy where relational-collective factors (teamwork, leadership) outperform structural-procedural factors (division of work) in dynamic service settings, challenging the classical administrative assumption that task specialization is the primary driver of organizational efficiency. Third, it demonstrates that the integrated five-variable model achieves substantially higher explanatory power (71.3%) than single-factor studies typically report for public service performance, supporting the call for holistic organizational approaches in proactive service delivery research.

Research Limitations

This study has several limitations that need attention in interpreting results. First, the use of census technique at one institution limits the generalization of findings to different contexts. Second, the cross-sectional design does not allow strong causal inference; longitudinal studies would better establish the temporal dynamics between organizational factors and performance outcomes. Third, the use of self-report questionnaires potentially causes common method variance bias; future research could incorporate objective performance indicators such as service completion rates and citizen satisfaction scores. Fourth, there is still 28.7% of performance variance unexplained by the model, indicating the existence of other relevant variables not studied, such as digital competence, community engagement factors, and geographic accessibility conditions.

CONCLUSION

This study sought to understand why mobile population administration services at the Department of Population and Civil Registration of Batam City have not yet achieved their full performance potential, by examining five organizational factors that collectively shape field officers' capacity to deliver proactive services effectively.

The central insight emerging from this research is that mobile service performance is fundamentally driven by the quality of human relationships and collective dynamics rather than by structural arrangements alone. Teamwork proved to be the most powerful determinant—a finding that reflects the inherent nature of Jemput Bola operations, where officers are bound by reciprocal task interdependence and must navigate unpredictable field conditions through collective problem-solving. At Batam City's Disdukcapil, the practical implication is that service teams with strong internal cohesion, mutual accountability, and shared purpose consistently outperform those that rely primarily on individual task adherence, regardless of how precisely tasks are divided.

Transformational leadership emerged as the second most influential factor, confirming that in decentralized field operations where direct supervision is impractical, the quality of leadership vision and motivational support becomes a critical substitute for structural controls. At Batam's Disdukcapil, team coordinators who articulate a compelling service mission and attend to individual officers' development needs create conditions where intrinsic motivation sustains performance across dispersed service locations.

The finding that division of work, while significant, exerted the weakest influence among the five variables carries important practical significance for mobile service design. It suggests that in dynamic field environments, excessive emphasis on rigid task boundaries may actually constrain the adaptive capacity that teams need. The implication for Batam City's mobile service management is to maintain general role clarity while fostering cross-functional flexibility that enables officers to support each other when field conditions deviate from planned scenarios.

Collectively, the strong model fit (71.3% explained variance) demonstrates that improving mobile service performance requires a holistic organizational strategy that integrates team development, leadership cultivation, communication enhancement, and supportive climate creation. This integrated approach is particularly relevant for archipelagic regions like Batam, where geographic dispersion amplifies the importance of organizational cohesion as a compensatory mechanism for physical distance.

Recommendations

First, the Department of Population and Civil Registration of Batam City should prioritize systematic team-building programs that cultivate mutual trust, shared accountability, and complementary skill utilization among mobile service teams. Second, transformational leadership training for team coordinators should focus on articulating service visions, providing individualized mentoring, and empowering autonomous field decision-making. Third, communication infrastructure should be enhanced through integrated digital platforms enabling

real-time coordination across dispersed locations. Fourth, organizational climate can be strengthened through performance-based recognition systems and supportive resource allocation for field operations.

Future research should employ longitudinal designs to examine causal dynamics, expand to multi-regional comparative studies to enhance generalizability, explore additional variables such as digital competence and community engagement, and adopt mixed-methods approaches to deepen understanding of the mechanisms through which teamwork and leadership exert their dominant effects on mobile service performance.

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