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Organizational Administration System and Employee Work Effectiveness in an Indonesian Construction Company: Cross-Sectional Evidence

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A R T I C L E I N F O

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A B S T R A C T

Administrative records can reveal process friction even when employees rate their systems favorably. This study assessed the association between organizational administration and self-reported work effectiveness in an Indonesian construction company. A cross-sectional survey collected 79 usable responses during 25 July–22 August 2026. Two Likert scales measured administration (16 items) and effectiveness (12 items). Mean scores were 3.725 and 3.781, respectively. The variables correlated positively ($r = 0.726$, $p < 0.001$); regression yielded $B = 0.637$ (95% CI 0.500–0.774) and $R^2 = 0.527$. Separate 2025 records identified documentation and coordination exceptions. Findings justify targeted administrative review but do not establish causation

INTRODUCTION

Construction companies rely on reports, traceable documents, coordination and administrative checks to complete interdependent tasks. At PT Basuki Rahmanta Putra, project records indicate disruptions in these routines. The question is whether perceived administration quality relates to employees' work effectiveness.

Company records from PT Basuki Rahmanta Putra provide a measurable starting point (PT Basuki Rahmanta Putra, 2025). Among 612 administrative project documents examined in 2025, 86 were submitted after their deadlines (14.1%), 59 were incomplete at initial verification (9.6%) and 37 were duplicated or circulated in an incorrect version (6.0%). These are distinct indicators of timeliness, completeness and version control, not estimates of employee inefficiency. Their co-occurrence nevertheless suggests that information must sometimes be checked or corrected before it can support the next task. The documents were drawn from internal administrative records and were not combined with individual survey answers in the regression model.

Administrative friction also appeared in document retrieval and communication. Average retrieval required 11.8 minutes against the firm's five-minute standard, a gap of 6.8 minutes. The 2025 record documented 28 cases needing repeated interdepartmental confirmation; among 52 weekly reports, 21 (40.4%) required substantive revision. These observations raise a practical issue: favorable perceptions of an administrative system may coexist with recurring exceptions that demand staff time. They also justify measuring the system through several operations rather than treating digitization or the existence of formal procedures as a substitute for usable information.

Research on information systems and project coordination provides a partial explanation. Lee and Yu (2012) linked the success of construction project management information systems to system and information characteristics and their associated benefits. Hossain (2009) examined how network position relates to coordination in complex project interactions, while Nguyen (2020) connected failures in management functions with construction project delays. Those studies clarify different parts of the problem, although their outcomes and units of analysis differ from individual self-reported work effectiveness. It would be inappropriate to treat results on system adoption, network relationships or project delay as direct estimates of employee-level administrative effects.

Broader organizational evidence further complicates a simple efficiency narrative. Andrews et al. (2011), in a review of public-service performance research, showed why administrative measures and survey judgments should not be assumed to represent identical outcomes. Mergel et al. (2019) also described digital transformation as a change in organizational processes and practices, not merely technology acquisition. Employee performance can reflect leadership and workplace conditions in addition to information processes (Ferine et al., 2021; López-Cabarcos et al., 2022). Thus, administrative quality is a plausible correlate of work effectiveness, but neither an exclusive explanation nor a demonstrated causal mechanism.

The unresolved empirical question is whether employees directly exposed to construction administration perceive reporting, documentation, coordination and administrative control as a coherent system that is associated with how effectively they perform assigned work. Previous studies frequently address information technology, project coordination, management failure or individual performance separately. The present study combines four observable administrative dimensions in one employee-reported predictor and interprets the survey alongside earlier, independently recorded administrative exceptions. Its contribution is an institution-specific estimate and an operational diagnosis, not a claim of a new universal model or a before–after evaluation of reforms.

Accordingly, this study examined the level of perceived organizational administration quality, described self-reported employee work effectiveness, estimated their association and the variance explained in a single-predictor model, and identified process areas meriting review. The evidence comes from one construction company, a cross-sectional employee survey conducted in July–August 2026 and separate internal records from 2025. These distinctions guide the interpretation of both the regression and proposed improvements.

LITERATURE REVIEW

Organizational Administration as an Information-and-Control System

Open-systems theory treats organizational processes as interconnected channels for resources, information and feedback (Katz & Kahn, 1978). In organizational information-processing theory, the requirement to handle uncertainty rises when the information needed for interdependent tasks exceeds what existing procedures can supply (Galbraith, 1974). Administrative processes are therefore consequential when they supply reliable reports, preserve records, connect task holders and enable corrections. This perspective does not imply that more procedures are necessarily better; processes must be appropriate to the timing, complexity and accountability needs of the work.

The thesis operationalized the administration system as four dimensions: reporting (clarity, timeliness, completeness and verification), documentation (classification, versions, security and retrieval), coordination (responsibility, distribution, response and problem resolution), and administrative control (authorization, checking, follow-up and procedural compliance). Coordination addresses dependencies between activities (Malone & Crowston, 1994), whereas the COSO (2013) framework explains the role of controls, communication and monitoring. These complementary perspectives motivate a composite X score representing experienced administrative processes, not the sophistication of any particular software application.

Employee Work Effectiveness and Measurement Boundaries

Work effectiveness refers here to individuals' perceived ability to complete relevant assignments, meet time expectations, maintain work quality and sustain productivity. Steers (1977) treated effectiveness as dependent on organizational goals and the level being assessed. Koopmans et al. (2014) identified individual work-performance indicators that should not be confused with organization-wide outcomes. The present study accordingly uses a 12-item Y score covering task achievement, timeliness, work quality and productivity. It does not objectively audit construction outputs, payroll productivity or firm profitability.

Because both variables are self-reported, responses can reflect personal standards, organizational climate and shared response tendencies. DeLone and McLean (2003) distinguished information and system quality from their use and benefits, reinforcing the need to separate an administrative input concept from a performance outcome. Such construct separation is attempted through different questionnaire items but cannot, by itself, eliminate common-method bias (Podsakoff et al., 2003). Operational records provide context, not a second independent employee-level estimate of work effectiveness.

Expected Association and Hypothesis

A clearer administrative process may reduce rework by making the responsible person, approved version and next step easier to identify. Evidence from construction information systems and project communication supports the plausibility of this pathway, but is not interchangeable with proof of it in the present company (Lee & Yu, 2012; Hossain, 2009; Pauget & Wald, 2013). Other organizational research links information systems and structure with business performance (Fu et al., 2022), while work performance is also associated with leadership-related conditions (Qalati et al., 2022). Given these alternative influences, the study tests a directional statistical association without asserting that administration alone determines effectiveness.

H1: Higher perceived quality of the organizational administration system is positively associated with self-reported employee work effectiveness. Figure 1 specifies X as a four-dimension administrative composite and Y as a four-dimension individual outcome; the arrow represents the direction of the regression hypothesis, not experimentally identified causality.

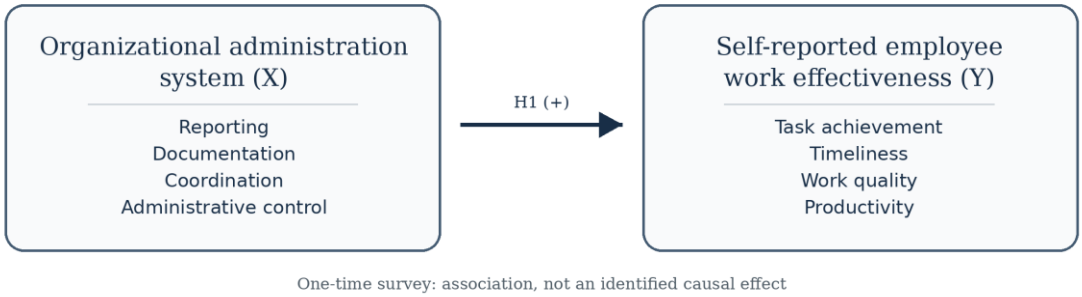


Figure 1. Conceptual Framework of the Employee-Level Association

METHODOLOGY

Research Design, Setting, and Sample

The study used a quantitative, cross-sectional survey of employees at PT Basuki Rahmanta Putra, an Indonesian construction-service company. Questionnaires were collected between 25 July and 22 August 2026 from personnel involved in administration, projects, finance, logistics or operations. The original unit-level workforce numbered 126; 104 had at least one year of service, and 98 met both the tenure and functional involvement criteria. The accessible population, rather than the full company headcount, formed the sampling frame. Participants provided anonymous individual responses, so the inferential unit is an employee and the measured outcome is perceived individual effectiveness.

Proportional random sampling across five work units was used. The 79 usable responses comprised administration (15), projects (27), finance (10), logistics (11) and operations (16), consistent with the specified work-unit allocation. Of 87 questionnaires distributed, 82 were returned; three of those were incomplete, leaving 79 analytic cases and a usable fraction of 90.8% of distributed forms. The returned fraction was 94.3%. Respondents had been sampled from eligible personnel, and the pilot participants were excluded from the main dataset. Nonresponse remains possible despite the high return fraction.

The minimum sample was obtained using the finite-population Krejcie–Morgan expression (Krejcie & Morgan, 1970):

$$n = \frac{\chi^2 \times N \times P(1-P)}{d^2 \times (N-1) + \chi^2 \times P(1-P)} \qquad (1)$$

In Equation (1), n represents the required sample, N = 98 the accessible population, χ^2 = 3.841 the chi-square value for 95% confidence, P = 0.50 the assumed population proportion and d = 0.05 the precision parameter. The reported calculation produced 78.24, rounded upward to 79; the final analytic sample met that threshold. The calculation establishes a nominal sampling target, not protection from self-report error, omitted variables or nonresponse differences. Table 1 shows the work-unit frame and allocation.

Measures, Data Sources, and Measurement Quality

The organizational administration scale contained 16 statements, with four items for each of reporting, documentation, coordination and administrative control. Work effectiveness used 12 statements, three for each of task achievement, timeliness, work quality and productivity. Responses ranged from 1 (strongly disagree) to 5 (strongly agree), and construct scores were item averages. Wording separated administrative experiences from employee outcomes to limit direct conceptual overlap. The survey also recorded demographic and work-unit characteristics, which were used descriptively rather than as regression covariates.

Three experts reviewed the 28 items for content relevance and clarity. Three initially flagged items (X7, X15 and Y7) were revised before a final Aiken's V range of 0.833–1.000 was obtained (Aiken, 1985). A 30-person pilot

sample outside the 79 analytic respondents was used for item testing and internal consistency; the main sample was then reassessed. Main-data corrected item–total correlations ranged from 0.533–0.741 for X and 0.447–0.699 for Y. All items were retained, and the main-sample Cronbach alphas were 0.928 and 0.890, respectively.

The complementary source was the company's 2025 administrative archive: reviewed documents, lateness, incompleteness, version errors, retrieval times, repeat confirmations and weekly-report revision records. Those organizational event counts predated the 2026 survey and were not linked to respondents by identifier. They were examined as contextual indicators of process friction rather than coded as additional predictors or interpreted as changes caused by administration quality. Research permission and participant consent are documented in the study records; identifiable employee data are not reported.

Statistical Analysis and Inference Limits

Analyses included descriptive statistics, pilot and main-sample instrument checks, Pearson correlation and ordinary least-squares regression of composite Y on composite X. Residual normality, nonlinearity, heteroskedasticity, serial dependence and case influence were examined using the reported diagnostics. A single-factor Harman check was treated only as a limited indicator of common-method concentration (Podsakoff et al., 2003). Calculations were undertaken in Microsoft Excel; only analyses documented in the study outputs are reported. Inferential statements are confined to the observed cross-sectional association.

For employee i, the fitted specification was:

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i \qquad (2)$$

In Equation (2), Y_i is the employee's mean work-effectiveness score, X_i is the mean organizational-administration score, β_0 is the intercept, β_1 is the linear slope and ε_i represents unobserved influences. A coefficient indicates a model-based mean difference, not the outcome of a controlled one-unit improvement. We report B, standard error, 95% confidence interval, t, p, model F and R^2 where available. Because the study has one predictor and no temporal follow-up, neither statistical significance nor R^2 establishes causal attribution.

RESEARCH RESULT

Response Formation and Instrument Quality

All 79 usable questionnaires contained complete answers to the 28 study items; no main-analysis imputation was required. Of the 87 distributed forms, five were not returned and three of the 82 returns were incomplete. The 79 retained cases were spread across all five work units (Table 1). These figures support transparency about dataset formation, but cannot establish that those who did not respond would have reported identical administration experiences. The work-unit allocation is therefore reported alongside the analytic size rather than reduced to an overall response percentage.

Sixty respondents (75.9%) were male and 19 (24.1%) female. The largest age category was 31–40 years (40 respondents; 50.6%); 38 respondents (48.1%)

held a bachelor's degree. Thirty (38.0%) reported more than ten years of employment and 29 (36.7%) reported seven to ten years. The project unit contributed the largest stratum (27; 34.2%). These characteristics describe an experienced sample with substantial project involvement, but their separate associations with work effectiveness were not estimated in the prespecified single-predictor model.

Table 1. Accessible Employees and Analytic Sample by Work Unit

Work unit	**Eligible employees**	**Analytic cases**
Administration	18	15
Projects	34	27
Finance	12	10
Logistics	14	11
Operations	20	16
Total	98	79

Source: Company personnel records and study questionnaire log, 2026. Five cases were not returned and three returns were incomplete; n = 79.

Following the three-expert content review and 30-person pilot, all 28 items were retained in the final scales. In the pilot, corrected item–total correlations ranged from 0.471–0.830 for X and 0.603–0.781 for Y; corresponding main-data ranges were 0.533–0.741 and 0.447–0.699. Table 2 summarizes construct-level alpha. Dimension-level coefficients ranged from 0.736 to 0.825 for X and 0.704 to 0.782 for Y. Internal consistency was therefore acceptable for describing these composites, but alpha does not independently verify construct distinctness, measurement invariance or lack of self-report bias.

Table 2. Instrument Reliability and Main-Sample Item Coverage

Composite	**Items**	**Pilot α (n=30)**	**Main α (n=79)**
Administration system (X)	16	0.944	0.928
Work effectiveness (Y)	12	0.935	0.890

Source: Instrument pilot and main-sample reliability results, 2026. Final Aiken's V = 0.833–1.000; all 28 items were retained after expert review and item testing.

Perceived Administration and Work-Effectiveness Profiles

The administration composite mean was 3.725 (SD = 0.593). Documentation had the highest dimension mean (3.778), followed by reporting (3.731), coordination (3.715) and administrative control (3.677). Respondents rated distinguishing the current document version (X6) highest at 3.861. Verification of report content (X4), timely distribution of job information (X10) and checking documents before subsequent use (X14) each averaged 3.608. The comparatively low control score and these particular items point to verification

and communication as more discriminating issues than an undifferentiated judgment that the administration system is good or poor.

Using the study's individual composite categories, 18 employees rated administration very high, 37 high, 20 moderate and four low. Thus, a generally favorable central tendency does not erase heterogeneous experiences. The dimensional means should be treated as descriptive contrasts, not evidence that one procedure outperformed another under controlled conditions. No between-unit significance test was reported, and the higher-rated documentation scale does not establish that errors in archive management were absent.

Self-reported work effectiveness averaged 3.781 (SD = 0.520). Productivity (3.819) and timeliness (3.797) were rated slightly higher than task achievement (3.755) and work quality (3.751). Avoiding delays (Y6) had the highest item mean (3.886), whereas the fit of task outputs to unit needs (Y3) and the absence of fundamental corrections (Y9) were lowest (both 3.709). The relatively narrow range of dimension means suggests a broadly favorable employee profile while retaining specific concerns about the adequacy and first-time quality of outputs.

At the individual level, 16 effectiveness scores were categorized as very high, 48 high, 14 moderate and one low. These are respondents' judgments about their own work, not independently timed or supervisor-rated production indicators. In particular, the discrepancy between seemingly high perceived efficiency and records of repeated document correction is substantively relevant but not a statistical contradiction: the sources refer to different observation units, periods and measurement procedures.

Table 3. Descriptive Statistics for the Two Composite Constructs

Construct / dimension	**Mean**	**SD**
Administration — reporting	3.731	0.702
Administration — documentation	3.778	0.690
Administration — coordination	3.715	0.643
Administration — administrative control	3.677	0.671
Administration — composite X	3.725	0.593
Effectiveness — task achievement	3.755	0.598
Effectiveness — timeliness	3.797	0.659
Effectiveness — work quality	3.751	0.650
Effectiveness — productivity	3.819	0.638
Effectiveness — composite Y	3.781	0.520

Source: Main survey (n = 79), 2026. Five-point composite means; higher scores indicate more favorable self-reports.

The descriptive pattern does not identify which administrative dimension is the strongest unique predictor of effectiveness, because the inferential model includes a single aggregate X predictor. Differences between dimension means may guide where to inspect operating procedures, but should not be interpreted as dimension-specific regression effects or proven benefits of administrative interventions.

Operational Administrative Evidence from 2025

Internal administrative records document substantive deviations from the company's operating expectations (Table 4). The reviewed set comprised 612 project documents; 86 were late, 59 incomplete and 37 duplicated or affected by incorrect versions. Document retrieval took 11.8 minutes on average versus a five-minute internal benchmark. Twenty-eight repeated inter-unit confirmations and 21 substantive revisions among 52 weekly reports provided further indications of information friction. The denominators are not identical across indicators, so the event counts should not be combined into one overall administrative error rate.

Table 4. Administrative Exceptions Documented in Company Records, 2025

Operational indicator	**Base / benchmark**	**Cases / value**	**Rate / gap**
Project administrative documents late	612 documents	86	14.1%
Documents incomplete at first review	612 documents	59	9.6%
Duplicate / wrong-version documents	612 documents	37	6.0%
Mean document retrieval time	5-minute target	11.8 min	+6.8 min
Repeated cross-unit confirmation	2025 events	28	—
Weekly reports substantially revised	52 reports	21	40.4%

Source: PT Basuki Rahmanta Putra internal administrative recap, 2025. Categories need not be mutually exclusive; reporting denominators differ.

The 28 repeat-confirmation cases included seven differing document versions, seven cross-unit data differences, six incomplete information cases, four unclear responsibilities and four delayed responses. Of the 21 weekly reports requiring substantial revision, seven involved cross-unit confirmation, five missing supporting data, four substantive correction, three report structure and two number mismatches. Such details make quality checks and ownership of information more actionable than a generic recommendation to digitalize. Because employee scores in 2026 were not linked to these 2025 cases, the archive cannot establish which employees were affected or whether the company's processes improved in the intervening period.

Association, Model Checks, and Alternative Explanation

The Pearson correlation between administration quality and reported work effectiveness was r = 0.726 ($p < 0.001$, n = 79), a positive association in the studied sample. Employees rating administration more favorably also tended to rate their work effectiveness more favorably. This single coefficient does not determine whether administration preceded effectiveness, whether more effective employees perceive processes differently, or whether a third factor affects both assessments. The reported correlations between particular dimensions of the two constructs ranged approximately from 0.412 to 0.588; these exploratory associations do not replace the main composite model.

The reported checks were broadly compatible with the linear specification (Table 5). Shapiro–Wilk and Kolmogorov–Smirnov tests gave p = 0.327 and p = 0.675 for the residual distribution; Breusch–Pagan and Glejser tests yielded p = 0.110 and p = 0.105. An added quadratic term was not statistically supported (p = 0.357), and Durbin–Watson was 2.211. Failure to reject these tests should not be interpreted as proof that all assumptions hold exactly, especially with only 79 respondents.

Table 5. Reported Regression Checks and Common-Method Diagnostic

Check	Statistic	p value / finding
Shapiro–Wilk, residual normality	W = 0.982	0.327
Kolmogorov–Smirnov, residual normality	D = 0.079	0.675
Quadratic component X^2	t = −0.926	0.357
Breusch–Pagan test	2.557	0.110
Glejser test	t = −1.641	0.105
Durbin–Watson statistic	2.211	Near 2
Max. |standardized residual|	2.997	All cases retained
Max. Cook's distance	0.119	No dominant case
Harman first-factor variance	40.97%	Method bias not excluded

Source: Study model diagnostic results, 2026. Residual-based tests do not guarantee assumptions hold or exclude shared-method effects.

The largest absolute standardized residual was 2.997, maximum leverage 0.106 and maximum Cook's distance 0.119; the thesis retained all cases. The first factor in Harman's single-factor assessment accounted for 40.97% of total item variance. A value below the customary 50% flag means no single factor dominated this particular calculation, but it does not exclude shared-method inflation, acquiescence, recall effects or other correlated measurement errors. The association should therefore be interpreted with the same caution as other self-report studies.

Simple Regression and Hypothesis Test

The regression slope for organizational administration was B = 0.637 (SE = 0.069), with a 95% confidence interval of 0.500–0.774. The t statistic was 9.271 ($p < 0.001$), and the overall model F was 85.951 ($p < 0.001$). The intercept was 1.408 (SE = 0.259; 95% CI 0.892–1.924). Table 6 provides the compact parameter summary. The positive confidence interval supports the stated directional hypothesis, within the limits of the observed design; it does not justify causal language in the abstract, title or practical recommendations.

Table 6. Simple Linear Regression of Self-Reported Work Effectiveness

Parameter	B	SE	t	p	95% CI
Intercept	1.408	0.259	5.434	<0.001	0.892–1.924
Administration system X	0.637	0.069	9.271	<0.001	0.500–0.774

Source: Study regression output, 2026. n = 79; Pearson r = 0.726; R^2 = 0.527; adjusted R^2 = 0.521; standard error of estimate = 0.360; F = 85.951; p < 0.001.

The fitted line was Y = 1.408 + 0.637X, where both composites use the five-point scale. Within this model, a one-point difference in administration ratings corresponds to an estimated 0.637-point difference in average self-reported effectiveness. The model R^2 of 0.527 indicates that 52.7% of the observed variation in Y is accounted for statistically by X in this sample; 47.3% remains outside the single-predictor fit. It would be incorrect to describe either percentage as the causal contribution or causal remainder of administration.

DISCUSSION

The main finding is a positive employee-level association between perceived administration quality and work effectiveness, set against administrative records that still contain repeated delays, revisions and version problems. The coexistence matters. The survey suggests that respondents experience a generally functional system, whereas the archival data identify specific points at which information fails to move or remain consistent. A meaningful managerial interpretation must accommodate both results rather than assuming either that administration is uniformly effective or that the recorded exceptions prove overall employee underperformance.

The four administrative dimensions help narrow this interpretation. Documentation scored highest (3.778) even though the archive contained 37 duplicated or incorrect-version documents and retrieval was slower than the internal target. The sources need not agree exactly because they observe different units and years. Instead, the contrast suggests that employees may recognize the correct version under ordinary conditions while inconsistencies still arise in particular workflows. This possibility is consistent with the distinction between available information, information actually used and resulting benefits emphasized by DeLone and McLean (2003). It warrants procedural inspection rather than causal inference.

Administrative control had the lowest composite mean (3.677). Three items tied at 3.608 concerned checking report content, distributing information on time and verifying documents before downstream use. All three describe transition points at which one unit's output becomes another unit's input. Galbraith's (1974) information-processing perspective makes these transitions important because errors or delayed messages increase uncertainty for interdependent tasks. Likewise, COSO (2013) situates verification and follow-up within an internal-control environment. This interpretation identifies a plausible mechanism, but the survey did not test a mediator representing reduced rework or processing delay.

The work-effectiveness profile adds another important distinction. Productivity and timeliness were marginally more favorably rated than work quality and task completion. This ordering suggests employees may feel capable of handling workload while still encountering preventable corrections or mismatch between deliverables and unit requirements. Koopmans et al. (2014) argued for outcome indicators tied to individual tasks; the four components used here offer a context-specific operationalization of that principle. However, no objective labor-time measurements or supervisor assessments were collected to test the accuracy of these self-judgments.

The association is statistically substantial, yet it may be partly explained by how responses were generated. Common perceptions of work organization, satisfaction with managers or willingness to give favorable answers can affect both scales in the same questionnaire. Harman's 40.97% first-factor share does not remove this concern (Podsakoff et al., 2003). The model also omits other conditions—capabilities, job demands, project phase, leadership, incentives and work environment—that may be correlated with administration quality. Thus $R^2 = 0.527$ describes within-sample model fit; it does not establish a transferable effect magnitude or the result of a specific improvement initiative.

Construction research is supportive at the level of mechanisms but differs in measured outcomes. Lee and Yu (2012) studied construction project management information systems rather than administrative practice as a wider organizational routine. Hossain (2009) used communication-network relationships to study coordination, while Pauget and Wald (2013) examined relational competence in a complex temporary project organization. Nguyen (2020) concerned management functions and project delay. Taken together, these studies indicate that information, coordination and control are relevant to construction work, but none is an exact replication of the present employee-level cross-sectional association. The thesis therefore contributes additional contextual evidence rather than resolving causal mechanisms established elsewhere.

Comparisons beyond construction reinforce the need to keep outcomes distinct. Andrews et al. (2011) examined 92 public-service performance studies and reviewed differences between administrative and survey measures; their synthesis cautions against equating subjective and recorded performance. A separate survey of 503 public employees reported associations among employee voice, organizational trust, culture and public-sector performance (Iddrisu &

Mohammed, 2024). Those results help illustrate competing organizational explanations, but their construct definitions and analytical models do not yield directly comparable effect sizes. The present study's r and R^2 should not be ranked above or below estimates from unlike models as though they measured the same mechanism.

The defensible contribution is the joint visibility of three types of information at one site: a specifically defined four-part administrative construct, a separately defined four-part employee-effectiveness construct, and an older set of tangible process exceptions. The combined picture is more actionable than a significance test alone, because document verification, version control and distribution timeliness can be checked against existing routines. Yet the archival indicators and employee responses were not linked by person, task or reporting cycle. The article therefore cannot establish that a respondent exposed to late documents was less effective than an unexposed respondent.

Administrative transformation research helps interpret the choice of response. Mergel et al. (2019) found that digital transformation implicates processes and organizational arrangements, while Edelmann et al. (2023) identified the competencies required to support changes in public administration. For a construction company, changing file storage without assigning document ownership, correction authority or response times could leave the same uncertainties in place. The open-systems view (Katz & Kahn, 1978) similarly emphasizes feedback and the interdependence of subsystems. Any technology proposal should thus follow an examination of workflow and user responsibilities, not be treated as a benefit demonstrated by these data.

A targeted review of controls is the most immediate practical implication. The company could establish a concise verification gate before documents move to the next process, specifying source-data checks, current revision identifiers, required approvals and the accountable owner. Performance can subsequently be monitored through the share of late or incomplete records, revised weekly reports and incorrect versions. Such indicators map to observed weaknesses and allow prospective evaluation. The current data justify considering these actions, but cannot state how much each would reduce delays, employee workloads or project costs.

A second priority is traceability and inter-unit communication. Standardized document naming, project indexes, access rules and an authoritative revision history could be evaluated against the existing five-minute retrieval benchmark. Named contact points and escalation rules could address the 28 recorded repeated-confirmation cases. However, improved visibility should not be confused with adding bureaucratic stages: extra mandatory checks may themselves lengthen workflows if not risk-proportionate. This trade-off should be measured explicitly in any pilot rather than being resolved by the positive regression coefficient.

For public administration, the case is relevant through the governance of private contractors operating in a regulated infrastructure sector (Indonesia, 2017). Better administrative evidence may support contract accountability and the ability to respond to users and oversight bodies; these are potential

institutional implications, not measured public-value outcomes. Bryson et al. (2021) discussed public value as arising across organizational boundaries, a useful reminder that private administrative routines can be connected to public accountability without assuming that the observed employee correlation establishes service-level or societal benefits.

The constraints are substantive rather than incidental. The sample comes from one company and covers 79 eligible employees, reducing external transferability. Two contemporaneous self-report scales create shared-method and directionality concerns. A single composite predictor conceals possible differences between its dimensions, while unmeasured leadership and workplace conditions plausibly contribute to effectiveness (Ferine et al., 2021; Qalati et al., 2022). Finally, the administrative archive is from 2025 and the survey from 2026, so their juxtaposition cannot be interpreted as improvement over time. A rigorous next stage would link task-level administrative indicators to independently rated or time-stamped outcomes.

CONCLUSIONS AND RECOMMENDATIONS

Among 79 employees of an Indonesian construction company, the perceived organizational administration system was positively associated with self-reported work effectiveness ($r = 0.726$, $p < 0.001$). The fitted slope was 0.637 (95% CI 0.500–0.774), and the single-predictor model explained 52.7% of observed effectiveness-score variance. Respondents rated administration (mean 3.725) and effectiveness (mean 3.781) favorably overall, although administrative control and work quality were relatively less favorable dimensions. These estimates address association within one cross-sectional sample and do not demonstrate that administrative improvements would cause an equivalent change in employee performance.

Operationally, attention should first go to report-content verification, pre-use document checking, timely information distribution and consistent revision control. Monitoring should retain separate measures for late and incomplete documents, incorrect versions, retrieval time, repeated confirmations and substantive weekly-report corrections. The previously reported 2025 exceptions provide baselines for designing a prospective assessment, not evidence that changes have already worked. Responsibility, response-time targets and the possible transaction costs of additional checks should be specified before implementation.

ADVANCED RESEARCH

Follow-up studies should evaluate these process changes longitudinally or through staggered implementation, pairing timestamped administrative tasks with supervisor-rated or objectively recorded employee outcomes. Multivariable models could examine workload, tenure, leadership, organizational culture, project conditions and technology support, while dimension-specific analyses could test whether coordination or administrative control contributes incremental information beyond the composite score. Broader samples of construction companies would be needed to assess transferability. Repeated measures and independent data sources would also reduce—but not automatically eliminate—temporal ambiguity and common-method bias.

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REFERENCES

Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. Educational and Psychological Measurement, 45(1), 131–142. https://doi.org/10.1177/0013164485451012

Andrews, R., Boyne, G. A., & Walker, R. M. (2011). The impact of management on administrative and survey measures of organizational performance. Public Management Review, 13(2), 227–255. https://doi.org/10.1080/14719037.2010.532968

Bryson, J. M., Barberg, B., Crosby, B. C., & Patton, M. Q. (2021). Leading social transformations: Creating public value and advancing the common good. Journal of Change Management, 21(2), 180–202. https://doi.org/10.1080/14697017.2021.1917492

Committee of Sponsoring Organizations of the Treadway Commission. (2013). Internal control: Integrated framework. COSO.

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. Journal of Management Information Systems, 19(4), 9–30. https://doi.org/10.1080/07421222.2003.11045748

Edelmann, N., Mergel, I., & Lampoltshammer, T. (2023). Competences that foster digital transformation of public administrations: An Austrian case study. Administrative Sciences, 13(2), 44. https://doi.org/10.3390/admsci13020044

Ferine, K. F., Aditia, R., Rahmadana, M. F., & Indri. (2021). An empirical study of leadership, organizational culture, conflict, and work ethic in determining work performance in Indonesia's education authority. Heliyon, 7(7), e07698. https://doi.org/10.1016/j.heliyon.2021.e07698

Fu, Q., Abdul Rahman, A. A., Jiang, H., Abbas, J., & Comite, U. (2022). Sustainable supply chain and business performance: The impact of strategy, network design, information systems, and organizational structure. Sustainability, 14(3), 1080. https://doi.org/10.3390/su14031080

Galbraith, J. R. (1974). Organization design: An information processing view. Interfaces, 4(3), 28–36. https://doi.org/10.1287/inte.4.3.28

Hossain, L. (2009). Effect of organisational position and network centrality on project coordination. International Journal of Project Management, 27(7), 680–689. https://doi.org/10.1016/j.ijproman.2008.11.004

Iddrisu, I., & Mohammed, B. (2024). Investigating the influence of employee voice on public sector performance: The mediating dynamics of organizational trust and culture. Social Sciences & Humanities Open, 10, 101096. https://doi.org/10.1016/j.ssaho.2024.101096

Indonesia. (2017). Undang-Undang Republik Indonesia Nomor 2 Tahun 2017 tentang Jasa Konstruksi.

Katz, D., & Kahn, R. L. (1978). The social psychology of organizations (2nd ed.). Wiley.

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C. W., & van der Beek, A. J. (2014). Measuring individual work performance: Identifying and selecting indicators. Work, 48(2), 229–238. https://doi.org/10.3233/WOR-131659

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607–610. https://doi.org/10.1177/001316447003000308

Lee, S.-K., & Yu, J.-H. (2012). Success model of project management information system in construction. Automation in Construction, 25, 82–93. https://doi.org/10.1016/j.autcon.2012.04.015

López-Cabarcos, M. Á., Vázquez-Rodríguez, P., & Quiñoá-Piñeiro, L. M. (2022). An approach to employees' job performance through work environmental variables and leadership behaviours. Journal of Business Research, 140, 361–369. https://doi.org/10.1016/j.jbusres.2021.11.006

Malone, T. W., & Crowston, K. (1994). The interdisciplinary study of coordination. ACM Computing Surveys, 26(1), 87–119. https://doi.org/10.1145/174666.174668

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

Nguyen, L. H. (2020). Empirical analysis of a management function's failures in construction project delay. Journal of Open Innovation: Technology, Market, and Complexity, 6(2), 26. https://doi.org/10.3390/joitmc6020026

Pauget, B., & Wald, A. (2013). Relational competence in complex temporary organizations: The case of a French hospital construction project network. International Journal of Project Management, 31(2), 200–211. https://doi.org/10.1016/j.ijproman.2012.07.001

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

PT Basuki Rahmanta Putra. (2025). Rekapitulasi administrasi proyek tahun 2025 [Unpublished internal company records].

Qalati, S. A., Zafar, Z., Fan, M., Sánchez Limón, M. L., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational citizenship behavior: A mediated model. Heliyon, 8(11), e11374. https://doi.org/10.1016/j.heliyon.2022.e11374

Steers, R. M. (1977). Organizational effectiveness: A behavioral view. Goodyear Publishing Company.