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Distinct and Non-Overlapping Determinants of Records Management Accountability: Evidence from Sub-District Government Offices in Semarang, Indonesia

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ABSTRACT:

Effective records management underpins accountable local governance, yet sub-district offices in Indonesia frequently operate below the standards mandated by national archival law. This study examines how facilities and infrastructure, funding, and employee competence relate to records management accountability, and whether these determinants behave as compensatory, complementary, or distinct organisational resources. A cross-sectional survey was conducted between August and September 2025 across the twelve urban villages of Tembalang Sub-District, Semarang, Indonesia. Eighty-one of 101 employees were sampled proportionally and completed a twenty-eight-item five-point Likert instrument. Data were analysed using multiple linear regression, dominance analysis, and moderated regression. The three determinants were jointly associated with records management accountability, explaining 48.4 per cent of its variance (adjusted 46.4 per cent), and each made a significant partial contribution. Dominance analysis attributed 57.3 per cent of the explained variance to facilities and infrastructure, 32.1 per cent to employee competence, and 10.6 per cent to funding. The determinants were essentially uncorrelated with one another, and adding their two-way interactions did not improve model fit, indicating contributions that are distinct and additive rather than overlapping or mutually reinforcing. Funding reached significance only when the other determinants were held constant, a suppression pattern requiring cautious interpretation. These findings suggest that single-lever improvement strategies are unlikely to capture the variation attributable to the other domains, and support attention across all three, prioritised by their relative contributions. For vocational office administration education, they underscore the need to strengthen graduates' records-handling competence alongside literacy in digital archival systems.

INTRODUCTION

Public accountability rests on evidence, and in government offices that evidence is held in records. Decisions, expenditures, and services leave documentary traces that allow citizens, auditors, and supervisory bodies to verify what an institution claims to have done. Where those traces are absent or unretrievable, the consequences reach beyond administrative inconvenience: weak records control has been shown to create the conditions in which opacity, maladministration, and corruption become difficult to detect (Casadesús de Mingo & Cerrillo-i-Martínez, 2018), and supreme audit institutions have repeatedly found their oversight function obstructed less by the absence of financial rules than by the absence of the records those rules presuppose (Mojapelo & Ngoepe, 2021). Recordkeeping is also implicated in questions of rights and redress, since the capacity of citizens to claim entitlements depends on the survival and accessibility of the documents that establish them (Farrell et al., 2023). Farrell (2024) distinguishes accountability as a mechanism, embedded in reporting obligations and legal requirements, from accountability as a virtue, expressed in an organisational disposition towards transparency and self-correction, and shows that recordkeeping is implicated in both. Records management is therefore not a clerical activity subordinate to administration, but part of the infrastructure through which accountability is produced.

The problem this study addresses is the variation in records management accountability observed at the frontline tier of local government, and the organisational resource conditions associated with that variation. Indonesian Law Number 43 of 2009 on Archives obliges every public body to manage records systematically, from creation through retention scheduling to disposal, and to make them accessible for oversight. This obligation has since been layered with a digital mandate: under the Electronic-Based Government System, records management was designated a general application domain, and an integrated dynamic records information system was introduced as its standard platform (Suprayitno et al., 2024), with implementation guidance cascading to regional secretariats and their subordinate units (Iqbal et al., 2024). The obligations are stated uniformly, yet the capacity to meet them is distributed unevenly. This gap between legislative ambition and institutional capacity is not peculiar to Indonesia; comparative work on archival legislation shows that statutory frameworks are commonly enacted well in advance of the staffing, funding, and infrastructure required to give them effect (Netshakhuma, 2019). In Indonesia the shortfall has been documented even in comparatively well-resourced public institutions, where records human resources remain thinly distributed and unevenly qualified (Handayani, 2018). Under decentralisation, sub-district and urban

village offices form the frontline of public service: they issue civil documents, administer social assistance, mediate land disputes, and produce accountability reports for every rupiah spent. Their record volume is substantial, while their structural position is the weakest in the bureaucratic hierarchy. They rarely host a functional archivist post, their budgets are nested within sub-district mechanisms, and their staff are appointed for general administrative duties rather than for records work.

Preliminary observation in Tembalang Sub-District, Semarang, illustrates the distance between regulation and practice. Most urban village offices do not maintain a dedicated records room, and existing storage falls short of standards for lighting, ventilation, and humidity control. Several offices have adopted digital correspondence applications, yet physical handling of outgoing letters remains improvised, with documents photographed and stored without classification. This pattern is consistent with a wider Indonesian literature. Studies of the national records platform report gains in accessibility and collaboration alongside persistent shortfalls in training and technical support (Azzahra et al., 2025; Kurniadi et al., 2025), while work on district archives services finds that the authentication and systematic management of electronic records lag behind their creation (Listiyani & Alamsyah, 2019). Hybrid practice, in which physical and digital records are maintained simultaneously, has been shown to become institutionalised as an administrative routine rather than a transitional stage, with duplicate recordkeeping retained as a mechanism of organisational security and legitimacy (Atmojo & Hermanto, 2025). At the urban village tier specifically, records handling has been described as procedural and largely undocumented beyond the immediate needs of service delivery (Raihan & Irham, 2023), and studies of civil registry offices show that systematic treatment is typically reserved for vital records while the remainder is managed informally (Marlinda, 2020; Nasution & Darmayanti, 2020). The Tembalang observation reproduces this pattern precisely: procedures are documented for high-stakes files such as accountability reports and land dispute records, leaving the remainder unsystematised and difficult to audit. Funding, meanwhile, is seldom allocated to records activities as a distinct budget line; most expenditure follows sub-district mechanisms with limited transparency, and procurement of storage facilities depends on proposals answered only in the following fiscal year.

Prior research has established each of these conditions as a determinant of records performance. In Indonesian higher education institutions, facilities and infrastructure, funding, and archivist competence were each found to contribute to records management accountability (Kuswantoro et al., 2024). At the urban village level in the same city as the present study,

employee competence and archival facilities were shown to influence dynamic records management, jointly accounting for a substantial share of its variance (Kuswantoro & Hartati, 2019). Competence has separately been linked to the capacity of records units to meet public information needs (Ardyawin, 2017), and records management practice has been connected to institutional accountability in Indonesian schools (Sholikah & Oktarina, 2019) and to human resource effectiveness in local government offices (Hendrawan et al., 2025). Comparable evidence associates records management practice with governance quality in Kenyan county governments (Osebe et al., 2018). Funding is the least examined of the three: a recent metasynthesis of archival funding identifies a striking scarcity of empirical work on the subject, alongside a widespread absence of financial transparency in the sector (Guardado da Silva & Ascensão de Macedo, 2025), and bibliometric mapping of the field confirms that research attention has concentrated on systems and practices rather than on the resource conditions that sustain them (Moid et al., 2025).

What this body of work has not addressed is how the determinants relate to one another. Each has been examined as a separate contributor, on the tacit assumption that their effects simply accumulate. Yet organisational resources need not behave that way, and the literature on resource configurations identifies three distinct possibilities, each with a different practical consequence and a different empirical signature.

The first is complementarity. Resources are complementary when the return to one rises with the level of another, so that the value of the whole exceeds the sum of the parts. Formalised through supermodularity, this configuration implies that partial change is unproductive: moving only some elements of a system towards their target levels cannot generally be expected to yield improvement, even where a full transition would be beneficial (Milgrom & Roberts, 1995). Applied here, complementarity would mean that equipment yields more where staff are competent, and that piecemeal investment is largely wasted. Its signature is a positive interaction between determinants.

The second is substitutability, or compensation. Resources substitute when a surplus of one offsets a deficit in another, so that an office may reach a given level of accountability through different combinations of the same inputs. This configuration underwrites much of the practical advice offered to under-resourced institutions, which treats improvement as a matter of pulling whichever lever is most readily available. Its signature is a negative interaction: the marginal return to one determinant declines as another rises.

The third is distinct and additive contribution. Resources contribute independently when

each supplies a capability the others do not, without amplifying or offsetting one another. Improvement then requires attention to every domain in proportion to its contribution, since progress in one neither multiplies nor rescues the others. Its signature is the absence of interaction, combined with low covariation among the determinants themselves.

These configurations are not merely conceptual alternatives; they are empirically separable, and the distinction matters because each prescribes a different allocation of scarce public resources. The evidence to date does not settle which applies to records management capacity. Reviews of the complementarity literature further caution that findings depend heavily on how the question is investigated, and that the absence of complementarity among a small set of factors does not exclude its presence in a wider system (Ennen & Richter, 2010). The present study therefore treats the configuration as an open empirical question rather than an assumption, and tests it directly.

The study pursues two objectives. The first is to examine the association of facilities and infrastructure, funding, and employee competence with records management accountability, both partially and jointly. The second is to determine which configuration best describes the way these determinants combine, and to establish their relative contribution. Accordingly, four hypotheses are proposed: facilities and infrastructure are positively associated with records management accountability; funding is positively associated with it; employee competence is positively associated with it; and the three are jointly associated with variation in the outcome.

The primary contribution of this study is analytical: it moves beyond establishing that facilities, funding, and competence each matter towards specifying how they combine and how much each contributes relative to the others, using a direct test of configuration rather than an inference from separate effects. Three further contributions follow. Empirically, the study supplies evidence from the weakest-resourced tier of Indonesian local government and introduces funding alongside facilities and competence at the urban village level, where earlier work examined only the latter two. Methodologically, it applies dominance analysis and moderated regression to a domain in which effects have conventionally been reported as separate coefficients. Practically, it offers administrators a basis for allocating capacity investment across domains, and it speaks to a curricular question raised in the records management education literature, namely how far training provision keeps pace with the competences digital recordkeeping now demands (Ngoepe et al., 2024), a question sharpened by evidence that even advertised records positions frequently under-specify those competences (Packalén & Partanen, 2025).

METHOD

Research Design and Setting

This study employed a quantitative, cross-sectional survey design to examine the association between three organisational resource domains and records management accountability in sub-district government offices. The design permits estimation of the joint and separate contributions of the determinants, and of the form in which they combine, but it does not establish temporal or causal ordering; relationships are accordingly reported as associations and predictive contributions throughout.

The research was conducted in Tembalang Sub-District, Semarang City, Central Java, one of sixteen sub-districts in the municipality, comprising twelve urban villages. The setting was selected on three grounds. First, it exhibits the administrative heterogeneity characteristic of Indonesian sub-districts: its urban villages range from densely settled inner-city areas to peripheral zones under rapid residential development, producing marked variation in service volume and record load across offices that share a single supervisory structure and budget mechanism. Second, its offices are typical of the tier in staffing terms, in that none hosts a functional archivist post and records duties are attached to general administrative appointments. Third, all twelve offices operate under the same municipal archival policy and the same national records platform (Suprayitno et al., 2024), so that variation between them arises from local resource conditions rather than from differing regulatory regimes.

These features make Tembalang suitable for examining how resource conditions relate to accountability while holding the policy environment constant. They also bound the transferability of the findings, which speak to urban sub-districts operating under a unified municipal authority and may not extend to rural sub-districts, to offices with dedicated archival units, or to jurisdictions where records policy varies below the municipal level.

Population and Sample

The population consisted of all 101 employees directly involved in records handling across the twelve urban village offices. Sample size was determined a priori using the Slovin formula at a five per cent margin of error, yielding 80.64 and rounded upward to 81. Respondents were allocated to each urban village in proportion to that office's share of the population and drawn at random within each office, so that the sample mirrors the distribution of the population across the twelve offices in Tembalang, Bulusan, Sendangguwo, Tandang, Mangunharjo, Sambiroto, Kedungmundu, Sendangmulyo, Rowosari, Meteseh, Kramas, and

Jangli urban village. Because selection was random within strata, the employees not drawn are missing by design rather than by self-selection or availability, and their exclusion is unrelated to the variables measured. All 81 sampled employees returned usable questionnaires, and no item data were missing.

A complete enumeration would have been feasible given the population size and would have eliminated sampling error altogether. Probability sampling at a five per cent margin was adopted as the a priori design decision, and the sensitivity analysis reported below confirms that the resulting sample supports the analyses undertaken; nonetheless, a census remains the preferable design at this population size and is recommended for replication.

Data were collected between August and September 2025 through a self-administered questionnaire distributed at the respondents' workplaces. Participation was voluntary and responses were recorded without personal identifiers by 81 respondents. No demographic attributes were collected, which precludes examination of whether the associations vary by educational background or length of service, and is acknowledged as a limitation.

Statistical adequacy was assessed by sensitivity analysis rather than by post hoc power computed on observed effects, which is a monotone transformation of the p value and therefore uninformative. For a three-predictor model at alpha = .05 with 80 per cent power, detection of a medium effect ($f^2 = .15$; Cohen, 1988) requires 77 cases; the achieved sample of 81 exceeds this threshold. At n = 81, the smallest effect detectable at 80 per cent power is $f^2 = .10$ for a single predictor and $f^2 = .15$ for a three-term interaction block. The sample is therefore adequate for effects of medium size or larger, but underpowered for small interaction effects, a constraint carried forward to the interpretation of the moderation results.

Instrument and Operationalisation

Facilities and infrastructure refers to the buildings, rooms, and equipment available to support the storage, retrieval, and maintenance of records. The specification follows the three-element treatment established in Indonesian records research, in which building, storage room, and equipment are treated as distinct conditions rather than as a single provision (Kuswantoro & Hartati, 2019; Kuswantoro et al., 2024), a distinction that matters where offices possess equipment without purpose-built space.

Funding refers to the availability and allocation of budget for records-related activities, including policy implementation, records handling, staff development, and facility procurement, as mandated for records-creating bodies under Law Number 43 of 2009. The

construct is operationalised to capture not only the presence of allocation but its governance, namely proposal, efficient use, and monitoring, since the absence of expenditure transparency has been identified as a defining weakness of archival funding rather than an incidental one (Guardado da Silva & Ascensão de Macedo, 2025).

Employee competence refers to the knowledge, understanding, skills, values, work attitudes, and interest that employees bring to records work. This follows the knowledge-skills-attitude conception that continues to organise how records competence is specified in professional practice, where employers consistently seek a combination of technical capability, relevant experience, and personal attributes rather than procedural technique alone (Gibbons & Douglas, 2021; Packalén & Partanen, 2025). The inclusion of values and attitude as measured dimensions rather than assumed background follows this specification, and is consistent with evidence that the technical component of records competence has itself been shifting under digital conditions (Mosweu & Rakemane, 2025).

Records management accountability refers to the obligation of employees and units to perform records duties in accordance with established rules, procedures, and standards, and to answer for the use of resources entrusted to them. The construct spans both dimensions that Farrell (2024) distinguishes: compliance with documented procedure and reporting obligation on the one hand, and the disposition to explain, evaluate, and take responsibility for records work on the other. Its indicators accordingly cover written decision processes and target consistency alongside monitoring, evaluation, and responsibility for outcomes.

Four constructs were measured in total. The objects of measurement throughout are dynamic records, namely the correspondence, service documents, and accountability files in active administrative use, rather than permanent archives, consistent with the scope of Law Number 43 of 2009 and with the national platform now designated for their management (Suprayitno et al., 2024).

Each construct was measured by statement items rated on a five-point Likert scale ranging from strongly disagree to strongly agree. The instrument comprised 28 items: seven for facilities and infrastructure, eight for employee competence, six for funding, and seven for records management accountability. Table 1 sets out the constructs and their indicators. Appendix A documents the derivation of each dimension, its source, and the adaptation applied, together with the full item wording.

Table 1. Construct Operationalisation

Construct	Indicators	Items
Facilities and infrastructure (SP)	Building; storage room; equipment	7
Employee competence (EC)	Knowledge; understanding; skill; value; work attitude; interest	8
Funding (FN)	Funding for policy implementation; for records handling; for staff development; for facility procurement	6
Records management accountability (Y)	Written decision process; accuracy and completeness of information; clarity of objectives; consistency of operational targets; management information and monitoring; responsibility for work outcomes	7

Instrument Quality

Two forms of evidence were obtained. Content validity was established through derivation: every dimension was mapped to a regulatory provision or a documented conceptual specification before item writing, and the draft instrument was reviewed by two academics in office administration education for coverage and clarity, with wording revised accordingly.

Item discrimination was assessed through corrected item-total correlation computed within each construct, that is, the correlation between an item and the sum of the remaining items of the same construct. This within-construct procedure was preferred over correlating each item against the total score of the whole instrument, because the latter penalises items belonging to constructs weakly related to the others and therefore confounds item quality with inter-construct correlation. Items were retained where the corrected correlation exceeded 0.218, the two-tailed critical value for n = 81 at the five per cent level, a criterion met by all 28 items. Internal consistency was assessed using Cronbach's alpha, with 0.70 adopted as the minimum acceptable value.

These procedures establish item discrimination and internal consistency; they are not equivalent to construct validation. No exploratory or confirmatory factor analysis was undertaken, and the dimensional structure of the four constructs was therefore not tested against the data. The measurement model rests on content derivation and item-level reliability, and the absence of factor-analytic confirmation is acknowledged as a limitation.

Data Structure and Common Method Variance

Respondents are nested within twelve urban village offices, and employees sharing an office also share its facilities, budget line, supervisory arrangements, and records procedures.

Their observations may therefore not be fully independent. Office identifiers were not retained in the analytic dataset, so the magnitude of clustering could not be quantified. With twelve clusters averaging fewer than seven observations each, neither multilevel estimation nor cluster-robust standard errors would in any case yield reliable variance estimates, since both procedures require a substantially larger number of clusters for consistency. Standard errors and significance tests should therefore be read as potentially anti-conservative. This constraint bears on the precision of the estimates rather than on the direction or relative magnitude of the associations reported, and is carried forward to the limitations.

All constructs were measured through a single self-administered instrument completed by the same respondents at one point in time, which raises the possibility of common method variance (Podsakoff et al., 2003). Two procedural safeguards recommended in that literature were applied at the design stage: participation was anonymous, with no personal identifiers recorded, and the predictor and outcome items were separated within the instrument and preceded by distinct framing statements, reducing the salience of any implied relationship between them. Harman's single-factor test was applied as a post hoc diagnostic. Unrotated principal components analysis of all 28 items returned six components with eigenvalues above unity, the first accounting for 26.2 per cent of the total variance, well below the 50 per cent threshold conventionally taken to indicate a dominant method factor. Common method variance is therefore unlikely to account for the observed relationships, although this diagnostic is recognised as insensitive to moderate levels of bias (Podsakoff et al., 2003).

Data Analysis

Analysis proceeded in five stages. First of all is descriptive analysis. Statistics were computed at item, indicator, and construct level. Construct scores were classified using equal class intervals across the five-point scale, giving a width of 0.80 and the ranges 1.00-1.79 (very low), 1.80-2.59 (low), 2.60-3.39 (moderate), 3.40-4.19 (high), and 4.20-5.00 (very high).

Second of all is assumption testing. The assumptions of ordinary least squares regression were examined: normality of residuals (Shapiro-Wilk), homoscedasticity (Breusch & Pagan, 1979), multicollinearity (variance inflation factors), and independence of residuals (Durbin-Watson). The Durbin-Watson statistic addresses serial dependence in the residual sequence and does not test for clustering by office, which is treated separately above.

Third of all is regression estimation. Multiple linear regression was estimated as $Y = a + b1\ SP + b2\ FN + b3\ EC$, where Y denotes records management accountability, SP facilities

and infrastructure, FN funding, and EC employee competence. The joint hypothesis was tested with the F statistic and the partial hypotheses with t statistics at alpha = .05. Standardised coefficients, semi-partial coefficients of determination, and Cohen's f2 (Cohen, 1988) were reported. Zero-order correlations and structure coefficients were examined alongside the partial coefficients, since a predictor whose partial coefficient exceeds its zero-order correlation indicates suppression rather than a straightforward direct association.

Fourth of all is configuration testing. The theoretical framework distinguishes three ways in which the determinants may combine, each with a distinct empirical signature: complementarity implies positive two-way interactions (Milgrom & Roberts, 1995), substitutability implies negative ones, and distinct additive contribution implies their absence. Predictors were mean-centred and the three two-way product terms entered as a block, with the incremental F test used to evaluate whether their addition improved model fit. Zero-order correlations among the predictors were inspected in parallel, since the extent to which resources covary across offices is a separate question from the form in which they combine in producing the outcome (Ennen & Richter, 2010).

Fifth of all is relative contribution. General dominance analysis partitioned the explained variance among the predictors. The procedure averages each predictor's incremental contribution to R2 across all subset models, so that the resulting estimate does not depend on the order or specification in which the predictor is entered (Budescu, 1993; Azen & Budescu, 2003), and yields shares summing to the model's explained variance that can be compared directly (Grömping, 2007). General dominance was reported rather than the stricter complete or conditional forms, as the research question concerns relative magnitude rather than the establishment of dominance relations between specific pairs. Dominance weights express relative predictive contribution within the specified model; they do not indicate that any determinant is dispensable or that a lower-ranked resource is functionally optional.

Descriptive statistics, item analysis, reliability estimation, multiple linear regression with collinearity and residual diagnostics, the normality test, the unrotated principal components analysis used for the common method diagnostic, and the moderated regression were performed in IBM SPSS Statistics 26. Three procedures not available in that environment were performed in R version 4.4.1 (R Core Team, 2024) within RStudio 2026.01: the Breusch-Pagan test, the general dominance decomposition, and the sensitivity analysis reported above. Dominance weights were obtained by averaging each predictor's incremental contribution to R2 across all seven subset models, a computation that can be verified directly against the

corresponding subset regressions in SPSS.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Scores were computed at item, indicator, and construct level. Using the equal-interval classification set out in the Method, all four constructs fall within the high category (3.40-4.19), with a clear internal ordering: the two conditions embedded in the office, facilities and employee competence, scored higher than funding and than accountability itself. Funding (3.498) and accountability (3.515) sit close to the lower boundary of that category, so the shared classification should not be read as indicating equivalence among the constructs. Standard deviations between 0.586 and 0.764 indicate that appreciable variation persists beneath the category labels, and it is this variation that the regression analysis subsequently models.

Table 2. Descriptive Statistics by Construct and Indicator

Construct	M	SD	Category	Indicator (M)
Facilities and infrastructure	3.765	0.764	High	Storage room 3.815; equipment 3.762; building 3.679
Employee competence	3.719	0.710	High	Work attitude 3.802; interest 3.753; understanding 3.716; skill 3.716; knowledge 3.679; value 3.654
Records management accountability	3.515	0.586	High	Target consistency 3.593; responsibility for outcomes 3.593; written decision process 3.512; information accuracy 3.506; clarity of objectives 3.494; management information and monitoring 3.395
Funding	3.498	0.631	High	Staff development 3.580; records handling 3.568; facility procurement 3.506; policy implementation 3.444

Note. N = 81. Scores range from 1 to 5. Category boundaries: 1.00-1.79 very low; 1.80-2.59 low; 2.60-3.39 moderate; 3.40-4.19 high; 4.20-5.00 very high.

Funding recorded the lowest construct mean, and within it the policy-implementation indicator was weakest (3.444). That indicator comprises the items on proposing funds, using them efficiently and accountably, and subjecting their use to monitoring and evaluation. Within the outcome construct, the lowest-scoring indicator was management information and monitoring (3.395), which concerns periodic evaluation of records work. Both fall in the moderate rather than the high band.

Instrument Quality

All 28 items exceeded the critical value of 0.218 for corrected item-total correlation within their own construct, with values well above the threshold in every case. Internal consistency was high for all four constructs, exceeding the 0.70 criterion by a substantial margin.

Table 3. Item Discrimination and Internal Consistency

Construct	Items	Corrected item-total correlation	Cronbach's alpha
Facilities and infrastructure	7	0.717 - 0.781	0.918
Employee competence	8	0.623 - 0.844	0.919
Funding	6	0.443 - 0.674	0.832
Records management accountability	7	0.471 - 0.671	0.839

Harman's single-factor diagnostic returned six components with eigenvalues above unity; the first accounted for 26.2 per cent of the total variance in the 28 items, below the 50 per cent threshold indicative of a dominant method factor.

Assumption Testing

The residuals of the estimated model were normally distributed (Shapiro-Wilk W = 0.981, p = .264) and homoscedastic (Breusch-Pagan LM = 2.131, p = .546). Variance inflation factors ranged from 1.003 to 1.026, and the Durbin-Watson statistic was 1.737, indicating no serial dependence in the residual sequence. Ordinary least squares estimation was therefore appropriate, subject to the clustering caveat set out in the Method.

Regression Analysis

The three determinants were jointly associated with records management accountability, $F(3, 77) = 24.044$, $p < .001$. The model accounted for 48.4 per cent of the variance in the outcome ($R2 = .484$), or 46.4 per cent after adjustment for the number of predictors (adjusted $R2 = .464$), leaving the greater part of the variance attributable to factors outside the model. Each determinant made a significant partial contribution.

Table 5. Regression Results

Predictor	B	SE	Beta	t	p	sr2	f2
(Constant)	-0.189	3.190	-	-0.059	.953	-	-
Facilities and infrastructure	0.395	0.063	0.515	6.281	< .001	.265	.512
Funding	0.274	0.090	0.253	3.048	.003	.062	.121
Employee competence	0.291	0.060	0.403	4.853	< .001	.158	.306

Note. Dependent variable: records management accountability. R = .695; R2 = .484; adjusted R2 = .464; SEE = 3.004; F(3, 77) = 24.044, p < .001.

The estimated equation is Y = -0.189 + 0.395 SP + 0.274 FN + 0.291 EC. Hypotheses one to four are supported. By Cohen's conventions, facilities and infrastructure produced a large effect, employee competence a medium-to-large effect, and funding a small effect.

Relations among Determinants

Two questions were examined: whether the determinants covary across offices, and whether their contributions to the outcome overlap or interact.

Table 6. Zero-Order Correlations and Structure Coefficients

	SP	FN	EC	Y	Structure coeff.
Facilities and infrastructure (SP)	-			0.538***	0.773
Funding (FN)	0.010	-		0.197	0.283
Employee competence (EC)	0.050	-0.151	-	0.390***	0.561
Records management accountability (Y)	0.538***	0.197	0.390***	-	-

*Note. N = 81. *** p < .001. The correlation between funding and the outcome is not significant (p = .078). Structure coefficients are the zero-order correlation of each predictor with the outcome divided by the multiple R.*

None of the three inter-predictor correlations approached significance; the largest in absolute terms was the weak negative association between funding and employee competence (r = -.151). Offices scoring higher on facilities were no more likely to score higher on competence, and neither condition covaried with funding. This absence of shared variance is consistent with the negligible variance inflation reported above and indicates that each determinant carries largely non-overlapping information about the outcome.

Funding shows a divergence between its zero-order and partial coefficients. Its bivariate association with accountability is weak and non-significant (r = .197, p = .078), while its standardised partial coefficient is larger (beta = .253, p = .003). Because the absolute partial coefficient exceeds the absolute zero-order correlation, funding operates as a suppressor

variable within this model: its inclusion improves prediction partly by removing variance in the other predictors that is unrelated to the outcome, rather than solely through a direct association of its own. The structure coefficients make the same point from a different angle. Funding's structure coefficient (.283) is markedly lower than its standardised beta, whereas those of facilities (.773) and competence (.561) exceed or approximate theirs. Funding's contribution is therefore more model-dependent than that of the other two determinants, and its interpretation requires correspondingly more caution.

Configuration of the Determinants

The three two-way product terms were entered as a block after the mean-centred main effects, in order to distinguish complementary, substitutable, and additive configurations.

Table 7. Moderated Regression: Test of Interaction among Determinants

Predictor	B	SE	t	p
(Constant)	24.658	0.339	72.690	< .001
Facilities and infrastructure (SP)	0.374	0.064	5.826	< .001
Funding (FN)	0.289	0.090	3.199	.002
Employee competence (EC)	0.293	0.062	4.753	< .001
SP x EC	-0.021	0.013	-1.663	.101
SP x FN	-0.011	0.020	-0.533	.596
EC x FN	0.006	0.017	0.363	.718

Note. N = 81. Predictors mean-centred. R2 = .504; change in R2 = .020 over the main-effects model; F(3, 74) = 1.004, p = .396; f2 = .041.

Adding the interaction block did not significantly improve model fit (change in R2 = .020, F(3, 74) = 1.004, p = .396), and no individual interaction reached significance. The main effects were essentially unchanged in magnitude and significance from the additive model. The observed interaction effect size (f2 = .041) falls below the smallest effect the sample can detect at 80 per cent power (f2 = .15), so the absence of significance is consistent both with genuinely additive contributions and with interaction effects too small for this sample to identify.

The interaction closest to conventional significance was that between facilities and employee competence (B = -0.021, p = .101). Its sign is negative, which is the direction associated with compensation rather than reinforcement: the marginal contribution of facilities is slightly smaller at higher levels of competence. This term does not reach significance and no inference is drawn from it, but it is reported because it bears directly on the configuration question and is examined further in the discussion.

Relative Contribution

General dominance analysis partitioned the explained variance among the three determinants.

Table 8. General Dominance Analysis

Predictor	Average incremental R2	Share of explained variance
Facilities and infrastructure	0.278	57.3%
Employee competence	0.156	32.1%
Funding	0.051	10.6%
Total	**0.484**	**100%**

Facilities and infrastructure accounted for the largest share of the explained variance, followed by employee competence at roughly a third and funding at approximately one tenth. The ordering matches that obtained from the standardised coefficients, indicating that the two approaches yield the same relative ranking within this model specification. This agreement does not establish that the ranking would hold under alternative specifications, since no other model was estimated. Dominance weights express relative predictive contribution and do not indicate that the lowest-ranked determinant is dispensable.

Discussion

Facilities and Infrastructure as the Binding Constraint

Facilities and infrastructure accounted for the largest share of the explained variance in records management accountability. The direction of this association is consistent with earlier Indonesian evidence (Kuswantoro & Hartati, 2019; Kuswantoro et al., 2024), although its rank relative to the other determinants differs from what has been reported in other institutional settings.

In Indonesian universities, archivist competence rather than facilities emerged as the strongest determinant of records management accountability (Kuswantoro et al., 2024). This study did not compare institutional sectors, and no such comparison can be drawn from its design: the two studies differ in sample, measurement instrument, and period, and any divergence between them may reflect those differences rather than a property of the sectors themselves. The contrast is nonetheless worth registering as a question for future work, and one interpretation is available for testing. University archives operate with dedicated units, purpose-built storage, and functional archivist posts, and the research agenda in that sector has moved to description, access, and digital strategy rather than the existence of storage itself

(Chrysanthopoulos et al., 2021). Where a condition is relatively uniform across an institutional population, it can contribute little to explaining variation within it; where it is unevenly present, its explanatory share rises. Whether this accounts for the differing ranks is a proposition that would require a study sampling both sectors on a common instrument.

The indicator pattern within this sample is more directly informative. Storage room scored highest among the facilities indicators while the building itself scored lowest, a configuration consistent with offices that have improvised storage within premises not designed to house records. Comparable deficits are documented across decentralised administrations elsewhere: infrastructure and staffing shortfalls constrain records practice in Kenyan county governments (Osebe et al., 2018), maturity assessments of public institutions repeatedly identify storage and control conditions as the weakest domain (Manyeke & Joshua, 2023), and record categories with direct legal consequence are found deteriorating in custody for want of adequate housing (Rouget, 2023). Where records cannot be reliably stored and retrieved, the services depending on them are reported to degrade in turn (Marutha & Ngoepe, 2017; Hendrawan et al., 2025). The present finding situates Indonesian urban village offices within that documented pattern.

Employee Competence and the Absence of a Records Cadre

Employee competence ranked second in relative contribution, indicating that the people handling records account for a substantial share of variation in accountability even where no one holds a records post. This aligns with evidence linking records competence to the capacity of units to meet information demands (Ardyawin, 2017) and to human resource performance in local government offices (Hendrawan et al., 2025), and with findings that staffing deficits constrain records practice in comparable decentralised settings (Osebe et al., 2018).

The construct as measured encompasses three analytically distinct capabilities that the present instrument does not separate. General administrative competence covers the clerical and organisational skills required of any office appointment. Records-specific competence covers the technical judgement particular to recordkeeping: classification, appraisal, retention scheduling, and the determination of evidential status. Digital records competence covers the operation, authentication, and control of electronic records systems. The items span all three without distinguishing them, so the observed contribution cannot be attributed to any one. Separating them is a priority for instrument development, since the three imply different remedies.

Within the construct, the lowest-scoring indicator was value, which concerns honesty in supplying information to records users, while work attitude scored highest. One reading, consistent with but not demonstrated by these data, is that the deficit lies less in diligence than in professional orientation: employees apply care to tasks they recognise as theirs, while the disposition that treats records as an accountability instrument owed to external parties is less established. This corresponds to what Farrell (2024) distinguishes as accountability in its virtue sense, as opposed to compliance with reporting mechanisms. The distinction carries weight beyond administrative tidiness, since the documents held by frontline offices are frequently those on which citizens rely to establish entitlements and settle disputes (Dewah & Mutula, 2016; Farrell et al., 2023).

Analyses of recruitment practice show that employers value records-specific education and prior experience, and that the competences sought extend beyond procedural filing to judgement about the status and use of records (Gibbons & Douglas, 2021; Packalén & Partanen, 2025), while the technical component has itself been shifting under digital conditions (Mosweu & Rakemane, 2025). Sub-district offices recruit against no such specification. Competence at this tier is therefore shaped by several channels operating together, namely pre-service education, in-service training, supervisory practice, institutional procedure, and accumulated organisational learning, and the present design cannot apportion the observed contribution among them. That even Indonesian institutions with formal archival establishments report records human resources that are thinly distributed and unevenly qualified (Handayani, 2018) suggests the constraint operates at more than one of these channels.

Funding: A Suppressed and Model-Dependent Contribution

Funding requires the most careful statement of any result in this study, and the empirical pattern should be separated from its possible explanations. Funding's bivariate association with accountability is weak and non-significant ($r = .197$, $p = .078$). Its standardised partial coefficient is larger than that correlation (beta = .253, p = .003), which is the defining signature of a suppressor variable: inclusion of funding improves prediction in part by absorbing variance in the other predictors that is unrelated to the outcome. Its structure coefficient (.283) is well below its beta, whereas those of facilities and competence exceed or approximate theirs. Funding contributed the smallest share of explained variance (10.6 per cent) and the smallest effect size ($f2 = .121$). The determinant is thus statistically significant within this model while

being the most dependent on that model for its significance.

These results do not establish that funding takes effect only where facilities and competence are already adequate. That proposition describes a conditional mechanism, and a conditional mechanism has a specific empirical signature, namely an interaction term, which was tested and not observed. The interactions of funding with facilities ($p = .596$) and with competence ($p = .718$) were both far from significance. The conditional reading is therefore not supported by the present data and is not advanced here.

The suppression pattern is consistent with the possibility that funding as measured captures two components: allocation that translates into records capacity, and allocation that does not. Because the construct emphasises the governance of funds, namely proposal, efficient use, and monitoring, rather than their volume alone, offices scoring high on it may differ from low-scoring offices in administrative control rather than in resources received. On this reading, funding contributes to the model as an indicator of budgetary control, and its weak bivariate association reflects the fact that budget presence alone does not distinguish offices. This remains an interpretation and is not tested here; distinguishing it from alternatives would require measuring allocated amounts separately from their governance.

Two descriptive observations are worth recording independently of the modelling. Funding recorded the lowest construct mean of the four, and within it the weakest indicator was policy implementation (3.444), which comprises fund proposal, efficient and accountable use, and monitoring of expenditure. The domain most directly concerned with the accountable handling of money is thus the least developed in a study whose outcome is accountability. A recent metasynthesis reaches a convergent conclusion from a different direction, identifying the absence of financial transparency and comprehensive expenditure data as a defining weakness of archival funding, alongside a scarcity of research on the subject (Guardado da Silva & Ascensão de Macedo, 2025); bibliometric mapping confirms that research attention has concentrated on systems and practices rather than on the resource conditions sustaining them (Moid et al., 2025). Limited and irregular funding recurs as a constraint in county administrations elsewhere (Osebe et al., 2018), and statutory obligation is routinely enacted without the appropriations required to discharge it (Netshakhuma, 2019). Weak control over how funds are proposed, spent, and monitored is itself among the conditions under which maladministration escapes detection (Casadesús de Mingo & Cerrillo-i-Martínez, 2018; Mojapelo & Ngoepe, 2021).

Distinct Contributions and What They Do Not Establish

The framework set out in the introduction distinguished three configurations, each with an empirical signature. The results speak to that framework as follows.

Complementarity is not supported. Positive interaction is its signature, and none of the three two-way interactions was positive and significant. The block as a whole did not improve model fit (change in R2 = .020, p = .396).

Substitutability is not supported by these data, but neither is it excluded. Negative interaction is its signature. The facilities-by-competence term was negative and the largest of the three, but did not reach significance (p = .101), and the observed interaction effect size (f2 = .041) falls below the smallest this sample could reliably detect (f2 = .15). The correct statement is that the study found no evidence of compensation, not that it demonstrated its absence.

Distinct additive contribution is the configuration most consistent with the results. The determinants did not covary across offices (absolute r no greater than .151), variance inflation was negligible, dominance shares summed to the explained variance without substantial overlap, and the additive model was not improved by interaction terms.

Three claims must be kept apart, and the distinction is the principal conceptual point of this study. The first is statistical independence among predictors: an office scoring high on one determinant is no more likely to score high on another. This is established by Table 6. The second is non-overlapping predictive contribution: each determinant carries information about the outcome that the others do not. This is established by the variance inflation factors and the dominance decomposition. The third is functional substitutability: whether an office can reach a given level of accountability by increasing one resource in place of another. This concerns what happens when resources change, and the present study observed offices at a single point in time without any resource changing. It therefore cannot be established here, and no claim to that effect is made.

Establishing the third would require a different design. Longitudinal or panel data tracking offices as their resource levels change would permit within-office comparison of accountability against shifting combinations of inputs. Configurational methods capable of identifying necessary and sufficient conditions would test whether adequate accountability is reachable through more than one combination of resource levels, which is the operational meaning of substitutability. A sample powered for interaction effects of small magnitude would allow the moderation test attempted here to be conclusive rather than indeterminate. Reviews of the complementarity literature also caution that the absence of interaction among a small set

of factors does not exclude its presence in a wider system, and that findings depend substantially on how the question is investigated (Ennen & Richter, 2010); a study modelling more of the organisational system might yield a different answer.

What the present results do support is narrower and still consequential. The three domains contribute separately, and no evidence was found that improvement in one carries improvement in the others with it. An improvement strategy directed at a single domain can therefore be expected to secure the variance attached to that domain and no more.

Implications for Practice

The dominance ordering translates into a portfolio rather than a sequence. Because the determinants contribute separately, effort allocated to one is not recovered from another; because their contributions are unequal, equal allocation is not indicated either. The following prioritisation follows from the observed shares, subject to the caveat that relative contribution is not a statement of necessity and that a low-ranked domain is not thereby optional.

First priority is facilities. This domain accounted for the largest share of explained variance, and its weakest indicator was the building itself rather than storage furniture or equipment. The implication is that incremental procurement of shelving and cabinets addresses the strongest-scoring element of the weakest-ranked need. Establishing minimum records accommodation, namely a designated room meeting standards for lighting, ventilation, and humidity, is the intervention the data most support. Second priority is competence. Attention here should distinguish the three capabilities identified above, since general administrative competence is already present in these offices while records-specific and digital records competence are not systematically supplied by the appointment process. Third priority is the governance of funding. The relevant weakness identified in this study is not budget volume but the proposal, monitoring, and accountable use of what is allocated. Measures such as a distinct records budget line, a documented proposal cycle aligned to procurement timing, and periodic evaluation of expenditure address the specific indicator found weakest, and are less costly than the other two priorities.

The findings also qualify a common reading of digital transition. The integrated national records platform is positioned as the standard instrument for records management across public bodies (Suprayitno et al., 2024), with implementation guidance extending to regional secretariats and their subordinate units (Iqbal et al., 2024). Yet adoption studies report that gains in accessibility coexist with shortfalls in training and technical support (Azzahra et al.,

2025; Kurniadi et al., 2025), that authentication and systematic control of electronic records lag behind their creation (Listiyani & Alamsyah, 2019), and that benefits depend on organisational readiness rather than on the system alone (Jacobs & Lemekoana, 2022; Lestari, 2022; Qolby & Taufik, 2025). Hybrid practice becomes institutionalised as routine rather than a transitional stage, with duplicate recordkeeping retained as a mechanism of organisational legitimacy (Atmojo & Hermanto, 2025). A platform is an addition to the facilities domain; on the present evidence it does not carry the competence and funding domains with it, and appraisal, retention, and disposal continue to require judgement and resource commitment that no platform supplies (Pereira & Marutha, 2025; Julaihi et al., 2024). This is the logic underlying integrated information governance frameworks, which treat technological, human, and organisational conditions as jointly relevant (Muhammad et al., 2021).

Implications for Vocational Office Administration Education

Where no functional archivist cadre exists, the records competence available to a sub-district office is largely what its general administrative staff bring with them. Pre-service office administration education is therefore one significant channel among several, alongside in-service training, supervisory practice, and institutional procedure, through which that competence is supplied. That records practice in Indonesian institutions has been linked to organisational accountability (Sholikah & Oktarina, 2019) makes the curricular question a governance question as well as a pedagogical one.

The findings point to specific curricular content rather than general exhortation. Four components follow from the competence and outcome indicators observed here. Creation, classification schemes, retention scheduling, and disposal, addressing the finding that systematic treatment in these offices is reserved for records of immediate consequence while the remainder is managed informally (Marlinda, 2020; Nasution & Darmayanti, 2020; Raihan & Irham, 2023). Operation of the national records platform alongside the metadata, authentication, and version control that give electronic records evidential standing, addressing the documented lag between creation and systematic control (Listiyani & Alamsyah, 2019). The distinction between compliance and answerability (Farrell, 2024), the role of records in audit and in citizens' claims to entitlement (Dewah & Mutula, 2016; Farrell et al., 2023), and the professional obligations attaching to custody, the content corresponding to the value indicator that scored lowest in this sample. Documented procedure, periodic evaluation of records work, and reporting, corresponding to management information and monitoring, the

lowest-scoring indicator of the outcome construct.

Curricular responses of this kind are beginning to appear, with records management courses redesigned around systematic instructional models to incorporate digital content (Alaoui, 2025), and community-facing programmes demonstrating that digital records literacy can be built outside formal archival training (Hermanto et al., 2024; Karimah et al., 2022). The wider gap between training provision and the competences digital recordkeeping demands remains documented (Ngoepe et al., 2024), and advertised roles still under-specify those competences (Mosweu & Rakemane, 2025). Graduates entering sub-district offices will encounter a national records platform alongside persistent physical practice, and will need to operate in both registers.

CONCLUSION

This study asked how facilities and infrastructure, funding, and employee competence relate to records management accountability in the frontline offices of Indonesian local government, and whether these determinants behave as compensatory, complementary, or distinct organisational resources. All three proved positively and significantly associated with accountability, both separately and jointly, and the four hypotheses are supported. The more consequential result, however, concerns not whether the determinants matter but how they combine.

Their contributions were markedly unequal. Facilities and infrastructure accounted for the largest share of the explained variance, employee competence followed at some distance, and funding contributed least despite reaching statistical significance, an ordering that held under both dominance weights and standardised coefficients. Read against the material conditions of these offices, where dedicated records rooms are largely absent and existing storage falls short of environmental standards, the primacy of facilities is a statement about what is unevenly present at this administrative tier rather than a general claim about the priority of physical resources in records work.

The determinants proved essentially uncorrelated with one another, and adding their two-way interactions did not improve the model. Within the limits of the design, the configuration most consistent with the evidence is one of distinct and additive contribution: each domain carries information about accountability that the others do not, and no evidence emerged that strengthening one carries improvement in the others with it. This is a statement about distinct statistical contributions, not a demonstration that these resources cannot compensate for one

another. Substitutability concerns what happens when resources change, and these offices were observed at a single moment with nothing changing. What the evidence does support is narrower but still consequential: an improvement strategy directed at a single domain can be expected to secure the variation attached to that domain and no more, and should not be assumed to remedy weakness elsewhere.

Funding warrants separate statement, and it is the result this study would most wish to place before administrators. It reached significance within the model while contributing the smallest share of explained variance, and its partial coefficient exceeded a bivariate association that was not significant on its own, a suppression pattern indicating that its contribution depends more heavily on the specified model than that of the other two determinants. Funding also scored lowest of the four constructs, and its weakest element concerned precisely the proposal, efficient use, and monitoring of allocated funds. That the domain most directly concerned with the accountable handling of money should be the least developed, in offices required to account for every rupiah spent, suggests that the binding constraint at this tier may lie in the governance of resources rather than in their volume. That reading was not directly tested and is offered as a proposition rather than a finding.

These conclusions are qualified in several respects. The design is cross-sectional, so the results identify associations rather than causal effects, and the ordering of the hypotheses reflects theoretical rather than temporal precedence. The configuration claim rests on the absence of covariation among predictors and on a non-significant interaction block, neither of which establishes functional substitutability or its absence; the moderation test was moreover underpowered for small effects, and the negative facilities-by-competence term points weakly in the compensatory direction, so the appropriate reading is that no evidence of interaction was found rather than that its absence was demonstrated. Respondents are nested within twelve offices whose identifiers were not retained, and with clusters this small neither cluster-robust nor multilevel estimation would have been reliable, so standard errors are potentially anti-conservative, a caveat bearing particularly on funding, whose significance rests on the narrowest margin of the three. Instrument quality was established through content derivation and item-level reliability without factor-analytic confirmation, and the competence construct combines general administrative, records-specific, and digital capabilities without separating them. All measures were self-reported through a single instrument in a single sub-district, and no demographic attributes were collected. Finally, a substantial share of the variance remains unexplained, indicating that determinants outside the model, such as leadership, supervisory

monitoring, internal control, and workload, are at work.

For practice, the findings support attention across all three domains, allocated in proportion to their contributions rather than pursued in sequence: establishing minimum records accommodation, strengthening records-specific and digital competence, and improving the proposal and monitoring of allocated funds. For office administration education, they translate into concrete curricular content, namely records lifecycle and classification, electronic records authentication and audit trails, records as an instrument of answerability rather than a filing procedure, and information governance and monitoring, each corresponding to an element found weak in this sample.

Subsequent research should extend the design across multiple sub-districts with office identifiers retained, complement perceptual measures with archival audit data so that reported accountability can be checked against documented practice, introduce organisational variables capable of addressing the unexplained variance, and employ longitudinal or configurational designs powered for interaction, which would allow the question of substitutability to be settled rather than left open. The wider point is one that a single sub-district can only illustrate: the records through which local government is held answerable are produced by the offices least equipped to keep them, and the conditions that would remedy this appear to accumulate separately rather than to arrive together.

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REFERENCES

Alaoui, S. (2025). (Re)designing an online course in archival science using the ADDIE model: Lessons learned and future directions. Journal of Education for Library and Information Science, 66(3), 295-307. https://doi.org/10.3138/jelis-2023-0060

Ardyawin, I. (2017). Kompetensi arsiparis dalam pengelolaan kearsipan terhadap pemenuhan kebutuhan informasi masyarakat. JIPI: Jurnal Ilmu Perpustakaan dan Informasi, 2(1), 33-45. https://doi.org/10.30829/jipi.v2i1.919

Atmojo, P. J., & Hermanto, F. Y. (2025). Hybrid archival practices in the bureaucracy of population administration services: A qualitative study of the Dispendukcapil of Malang City. Journal of Office Administration: Education and Practice, 5(3), 147-166. https://doi.org/10.26740/joaep.v5n3.p147-166

Azen, R., & Budescu, D. V. (2003). The dominance analysis approach for comparing predictors in multiple regression. Psychological Methods, 8(2), 129-148. https://doi.org/10.1037/1082-989X.8.2.129

Azzahra, A. F., Deliarnoor, N. A., & Kasman, A. (2025). Evaluasi efisiensi sistem kearsipan elektronik dalam penanganan arsip dinamis: Studi kasus aplikasi SRIKANDI di institusi pemerintah. Ranah Research: Journal of Multidisciplinary Research and Development, 7(2), 1303-1317. https://doi.org/10.38035/rrj.v7i2.1320

Breusch, T. S., & Pagan, A. R. (1979). A simple test for heteroscedasticity and random coefficient variation. Econometrica, 47(5), 1287-1294. https://doi.org/10.2307/1911963

Budescu, D. V. (1993). Dominance analysis: A new approach to the problem of relative importance of predictors in multiple regression. Psychological Bulletin, 114(3), 542-551. https://doi.org/10.1037/0033-2909.114.3.542

Casadesús de Mingo, A., & Cerrillo-i-Martínez, A. (2018). Improving records management to promote transparency and prevent corruption. International Journal of Information Management, 38(1), 256-261. https://doi.org/10.1016/j.ijinfomgt.2017.09.005

Chrysanthopoulos, C., Drivas, I., Kouis, D., & Giannakopoulos, G. (2021). University archives: The research road travelled and the one ahead. Global Knowledge, Memory and Communication. Advance online publication. https://doi.org/10.1108/GKMC-08-2021-0128

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.

Dewah, P., & Mutula, S. (2016). The nexus between legal records and human rights in the justice delivery system. Information Development, 32(5), 1513-1523. https://doi.org/10.1177/0266666915608679

Ennen, E., & Richter, A. (2010). The whole is more than the sum of its parts - or is it? A review of the empirical literature on complementarities in organizations. Journal of Management, 36(1), 207-233. https://doi.org/10.1177/0149206309350083

Farrell, M. (2024). Accountability as a mechanism and a virtue in Irish public sector recordkeeping. Records Management Journal, 34(2/3), 190-204. https://doi.org/10.1108/RMJ-09-2023-0051

Farrell, M., Gordijn, B., & Kearns, A. J. (2023). Accountability, human rights and social justice in public sector recordkeeping. Archival Science, 23(2), 161-185. https://doi.org/10.1007/s10502-022-09403-5

Gibbons, L., & Douglas, J. (2021). Markers of professional identity: Records management job advertisements in Australia. Records Management Journal, 31(1), 1-17. https://doi.org/10.1108/RMJ-03-2020-0007

Grömping, U. (2007). Estimators of relative importance in linear regression based on variance decomposition. The American Statistician, 61(2), 139-147. https://doi.org/10.1198/000313007X188252

Guardado da Silva, C., & Ascensão de Macedo, L. S. (2025). Funding and sustainability in archives: A metasynthesis. Revista General de Información y Documentación, 35(1), 109-122. https://doi.org/10.5209/rgid.103818

Handayani, T. (2018). Pemetaan masalah-masalah sumber daya manusia kearsipan pada perguruan tinggi negeri di Indonesia: Sebuah studi teoritis. Anuva: Jurnal Kajian Budaya, Perpustakaan, dan Informasi, 2(1), 77-98. https://doi.org/10.14710/anuva.2.1.77-98

Hendrawan, M. R., Mat Isa, A., & Samsudin, A. Z. H. (2025). The effect of records management on the effectiveness of human resource performance in public services. Record and Library Journal, 11(1), 70-82. https://doi.org/10.20473/rlj.V11-I1.2025.70-82

Hermanto, F. Y., Ranu, M. E., Pahlevi, T., Nugraha, J., Hidayati, B., Nnamdi, A. O., & Sholikah, M. (2024). Digitalization for family documents: Improving awareness of digital archives using Google Drive for facing industry 4.0. Journal of Community Service and Empowerment, 5(2), 364-375. https://doi.org/10.22219/jcse.v5i2.30323

Iqbal, M., Daraba, D., & Indrayani, E. (2024). Implementasi kebijakan tentang pedoman penerapan sistem informasi kearsipan dinamis terintegrasi dalam upaya pengelolaan naskah dinas elektronik di Sekretariat Daerah Kota Bekasi. Jurnal Kajian Pemerintah, 10(2), 110-122. https://doi.org/10.25299/jkp.2024.vol10(2).19930

Jacobs, L., & Lemekoana, T. (2022). Electronic records management at the Department of Justice and Constitutional Development, South Africa: Towards e-government. Mousaion: South African Journal of Information Studies, 39(4). https://doi.org/10.25159/2663-659X/9967

Julaihi, A. K., Jamaludin, S. N., Chik, N. K., & Johare, R. (2024). Digital record-keeping practices: Electronic records and archives in the cloud. International Journal of Engineering Trends and Technology, 72(10), 267-281. https://doi.org/10.14445/22315381/IJETT-V72I10P126

Karimah, A. F. Al, Gamaputra, G., Prasetyawan, A., Isbandono, P., Rosdiana, W., Lestari, Y., Utami, D. A., Effendi, I. F., & Ramadhan, N. H. (2022). Electronic archives management to realizing the development of information and communication technology in achieve SDGs in Kendal Village, Sekaran District, Lamongan Regency. JKMP: Jurnal Kebijakan dan Manajemen Publik, 10(2), 27-39. https://doi.org/10.21070/jkmp.v10i2.1699

Kurniadi, K., Ibrahim, S., & Badruzzaman, B. (2025). Evaluation of the efficiency of electronic filing systems in handling records: A case study of SRIKANDI applications in government institutions. Cogent Education, 12(1), 2562347. https://doi.org/10.1080/2331186X.2025.2562347

Kuswantoro, A., & Hartati, S. (2019). Pengaruh kompetensi pegawai dan sarana prasarana kearsipan terhadap pengelolaan arsip dinamis di kantor kelurahan se-Kecamatan Gunungpati Kota Semarang. Khazanah: Jurnal Pengembangan Kearsipan, 12(2), 171-185. https://doi.org/10.22146/khazanah.48843

Kuswantoro, A., Martono, S., & Murtadlo, M. N. (2024). Pengaruh sarana prasarana, pendanaan, dan kompetensi arsiparis terhadap akuntabilitas kinerja kearsipan universitas di Jawa Tengah. Shaut Al-Maktabah: Jurnal Perpustakaan, Arsip dan Dokumentasi, 16(1), 21-36. https://doi.org/10.37108/shaut.v16i1.1300

Lestari, A. D. (2022). Pemanfaatan teknologi informasi pada pengelolaan arsip dinamis di bidang pencatatan sipil Disdukcapil Kabupaten Karanganyar. Al-Kuttab: Jurnal Kajian Perpustakaan, Informasi dan Kearsipan, 4(2), 13-23. https://doi.org/10.24952/ktb.v4i2.5193

Listiyani, M., & Alamsyah, A. (2019). Analisis autentikasi dan pengelolaan arsip elektronik di Dinas Kearsipan dan Perpustakaan Kabupaten Semarang. Jurnal Ilmu Perpustakaan, 8(3), 1-9. https://doi.org/10.14710/jip.v8i3.1-9

Manyeke, M., & Joshua, A. (2023). Records management audit using the ARMA information governance maturity model: A case of the Department of Teacher Training and Technical Education, Botswana. Mousaion: South African Journal of Information Studies, 41(4). https://doi.org/10.25159/2663-659X/14035

Marlinda. (2020). Pengelolaan arsip dokumen kependudukan pada Dinas Kependudukan dan Pencatatan Sipil Kota Pariaman. JESS: Journal of Education on Social Science, 4(2), 211-220. https://doi.org/10.24036/jess.v4i2.286

Marutha, N. S., & Ngoepe, M. (2017). The role of medical records in the provision of public healthcare services in the Limpopo province of South Africa. South African Journal of Information Management, 19(1), a873. https://doi.org/10.4102/sajim.v19i1.873

Milgrom, P., & Roberts, J. (1995). Complementarities and fit: Strategy, structure, and organizational change in manufacturing. Journal of Accounting and Economics, 19(2-3), 179-208. https://doi.org/10.1016/0165-4101(94)00382-F

Moid, A., Raza, M. M., Javed, M., & Jahan, K. (2025). Global research mapping in records and archives management: An investigation. Global Knowledge, Memory and Communication, 74(9/10), 2946-2961. https://doi.org/10.1108/GKMC-08-2023-0307

Mojapelo, M., & Ngoepe, M. (2021). Contribution of Auditor-General South Africa to records management in the public sector in South Africa. New Review of Information Networking, 26(1-2), 33-49. https://doi.org/10.1080/13614576.2019.1608573

Mosweu, O., & Rakemane, D. (2025). Archives and records management Fourth Industrial Revolution skills and competency requirements on the job adverts in Botswana. Journal of the South African Society of Archivists, 58(1), 133-152. https://doi.org/10.4314/jsasa.v58i1.9

Muhammad, J. S., Mat Isa, A., Shamsuddin, A. Z. H., & Miah, S. J. (2021). Constituent of information governance framework for a successful implementation in Nigerian universities. Education and Information Technologies, 26(5), 6447-6470. https://doi.org/10.1007/s10639-021-10528-w

Nasution, E. S. A., & Darmayanti, D. (2020). Pengelolaan arsip vital pada Kantor Dinas Kependudukan dan Pencatatan Sipil Kota Sibolga. Al-Kuttab: Jurnal Kajian Perpustakaan, Informasi dan Kearsipan, 2(2), 46-58. https://doi.org/10.24952/ktb.v2i2.2978

Netshakhuma, N. S. (2019). The role of archives and records management legislation after colonialism in Africa. Records Management Journal, 29(1/2), 210-223. https://doi.org/10.1108/RMJ-09-2018-0024

Ngoepe, M., Jacobs, L., & Mojapelo, M. (2024). Inclusion of digital records in the archives and records management curricula in a comprehensive open distance e-learning environment. Information Development, 40(2), 190-201. https://doi.org/10.1177/02666669221081812

Osebe, R., Maina, J., & Kurgat, K. (2018). Records management practice in support of governance in the county governments of Kenya, a case of Nyamira County. Records Management Journal, 28(3), 293-304. https://doi.org/10.1108/RMJ-06-2018-0017

Packalén, S., & Partanen, L. (2025). Competencies, skills, and personal attributes in job advertisements for archivists and records managers in Finland. Records Management Journal, 35(2), 118-133. https://doi.org/10.1108/RMJ-01-2024-0002

Pereira, R. A., & Marutha, N. S. (2025). Disposal strategies for personal identification information in Mozambique. Information Discovery and Delivery. Advance online publication. https://doi.org/10.1108/IDD-01-2024-0011

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

Qolby, A. N., & Taufik, Y. (2025). Analisis implementasi arsip digital dokumen Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Kota Bandung. Aplikasi Administrasi: Media Analisa Masalah Administrasi, 28(1), 59-70. https://doi.org/10.30649/aamama.v28i1.278

R Core Team. (2024). R: A language and environment for statistical computing (Version 4.4.1). R Foundation for Statistical Computing. https://www.R-project.org/

Raihan, A. N., & Irham, M. (2023). Sistem kearsipan di bagian umum pada Kantor Kelurahan Bunga Tanjung, Kecamatan Datuk Bandar Timur, Kota Tanjungbalai. El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam, 4(4), 1181-1190. https://doi.org/10.47467/elmal.v4i4.1949

Rouget, M.-L. (2023). Grave concerns: The state of public cemetery records management in South Africa. Archives and Records, 44(1), 73-90. https://doi.org/10.1080/23257962.2022.2155117

Sholikah, M., & Oktarina, N. (2019). Pelaksanaan pengelolaan kearsipan untuk menunjang akuntabilitas sekolah. Economic Education Analysis Journal, 7(3), 1178-1192. https://doi.org/10.15294/eeaj.v7i3.28348

Suprayitno, S., Rahmi, R., & Sofiyani, Z. (2024). Imagining the future of records management: An analysis of the SRIKANDI in Indonesia through documentation studies. Proceedings from the Document Academy, 11(2), Article 8. https://doi.org/10.35492/docam/11/2/8

Undang-Undang Republik Indonesia Nomor 43 Tahun 2009 tentang Kearsipan (2009).