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From legal to organizational formalization: A pyramid of organizational development approach to SME maturity a multiple case study of an Indonesian machining and MRO workshop

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Abstract

Small and medium-sized enterprises (SMEs) in Indonesia are increasingly converting into limited liability companies, but such conversion changes a firm's legal status without necessarily transforming how it operates. This study examines that gap in a family-owned machining and maintenance, repair, and operations (MRO) workshop in Jakarta that became a Perseroan Terbatas in 2023. The study applies the Pyramid of Organizational Development, extended by incorporating sustainability as a cross-cutting dimension, and uses a qualitative multiple-case design with polar reference cases. Data were collected through five semi-structured interviews, one focus group discussion, direct observation, and internal documents and were analyzed using framework analysis. Each dimension was scored on a five-level maturity scale derived from Flamholtz and Randle and the Capability Maturity Model Integration (CMMI). The focal firm scored 1.8 overall, positioning it between an unincorporated family business, which scored 1.1, and a formally managed peer, which scored 3.3. The relative ordering of the three cases remained consistent across all dimensions. Operational systems represented the weakest dimension, with the focal firm scoring Level 1, the same as the unincorporated case, compared with Level 4 for the formally managed peer. Two main findings emerged. First, the primary deficit concerned documentation rather than operational capability, as repeatable informal routines already existed but had not been formally documented. Second, organizational maturity did not increase automatically with firm age: the unincorporated case had operated since 2005 yet remained the least mature, whereas the formally managed peer was established in 2023. The study proposes a 15-month, dependency-ordered implementation sequence and argues that legal formalization represents a threshold rather than an endpoint in organizational development.

INTRODUCTION

Converting a family business into a limited liability company is a common milestone for Indonesian small and medium-sized enterprises (SMEs). Such conversion addresses issues related to liability, tax registration, and eligibility for larger contracts. However, it does not necessarily determine how the firm operates. A company may hold a deed of establishment, a corporate taxpayer identification number, and a business identification number while still assigning work based on memory, setting prices by referring to previous invoices, and channeling every operational decision through a single individual (Baumgartner & Ebner, 2010).

This research gap is significant for several reasons. First, Indonesian SMEs represent approximately 99% of all businesses and account for more than 60% of employment, yet many remain at relatively low levels of organizational maturity (Badan Pusat Statistik, 2023). Second, the government has actively encouraged SME formalization through regulatory reforms and incentives; however, without clear evidence of what occurs within these firms after formalization, such policies rest on an incomplete foundation. Third, existing studies on SME performance in Indonesia have tended to focus on economic outcomes rather than organizational processes, leaving the internal dynamics of formalization relatively underexamined (Wardhani et al., 2021). Addressing this gap can provide both theoretical and practical insights into the interaction between legal and organizational formalization in the SME sector.

This study examines a firm that reflects this condition. PT Norman Jaya Teknik, hereafter referred to as NJT, is a family-owned machining and maintenance, repair, and operations (MRO) workshop in Jakarta that serves clients in port equipment, heavy machinery, and industrial engines. It became a Perseroan Terbatas in 2023. Three years later, its management practices remained largely unchanged: no division operated under a written standard operating procedure, no individual performance targets had been established, inventory records did not correspond with physical stock, and the owner’s personal expenses continued to be mixed with business funds.

This paper distinguishes between legal formalization, which involves a change in legal status, and organizational formalization, which involves changes in how work is structured, documented, and controlled. These two forms of formalization are often treated as though the former automatically produces the latter. NJT suggests otherwise.

The paper has three objectives. First, it identifies the managerial and operational problems that persisted after legal conversion. Second, it assesses the firm’s organizational maturity against two reference points positioned at opposite ends of the formalization spectrum. Third, it proposes a sequenced set of interventions ordered according to dependency rather than ambition.

Two contributions follow from this study. From a practical perspective, the study provides a small manufacturing firm with a diagnostic baseline and a prioritized implementation sequence. From a theoretical perspective, it applies the Pyramid of Organizational Development to the specific problem of post-incorporation SME formalization, a context in which the framework has received limited empirical application. It also extends the framework by treating sustainability as a cross-cutting dimension rather than as a separate layer positioned at the top of the pyramid.

METHOD

Design

The study employed a qualitative multiple-case design (Yin, 2018; Eisenhardt, 1989). The organization served as the unit of analysis, with its level of development assessed across the dimensions of the Pyramid of Organizational Development. A multiple-case design was selected to enable cross-case comparison and strengthen analytic generalization.

Case selection

Three firms were studied. NJT is the focal case and the problem owner, studied in the greatest depth. Two firms in the same industry serve as polar reference points that bracket NJT on the formalization continuum.

The selection follows Eisenhardt's (1989) logic of polar types, in which cases are chosen because they occupy opposite ends of the phenomenon under study, and Yin's (2018) logic of theoretical replication, in which each case is expected to produce a contrasting result for reasons the theory predicts. This is not statistical sampling and the two firms are not benchmarks. Company C in fact scores below the focal case, which is why the benchmark framing would be misleading.

Three criteria governed selection: the same industry, so that technical context is held constant; comparable SME scale, so that the comparison stays relevant to the focal firm's resources; and opposite positions on formalization, so that the focal case is bracketed rather than simply measured against something better.

Table 1. Profile of the two polar reference cases

Attribute	Company B (upper reference)	Company C (lower reference)
Service focus	Forklift maintenance and repair, diesel units	Automotive spare parts retail that expanded into repair
Year established or formalized	2023	2005
Legal form	Perseroan Terbatas	Unincorporated family business
Approximate employees	Not disclosed	8
Overall maturity	3.3	1.1

Note. The upper reference case was formalized in the same year as the focal firm. The lower reference case has traded since 2005.

Data collection

Evidence for the focal case comes from five semi structured interviews spanning the ownership, technical, and administrative levels, one focus group discussion with four administrative and supervisory participants, direct observation of the workshop floor and the administrative area, and internal documents including work orders, invoices, and accounting records. The focus group was held away from direct management oversight so that participants could confirm or contest each other's accounts, following Krueger and Casey (2015). The two reference cases rest primarily on leadership interviews and limited secondary material.

Interview quotations were retained in the original Bahasa Indonesia so that wording can be checked against interpretation. Company names for the reference cases are withheld at the participants' request.

Analysis

Transcripts were analysed using framework analysis (Ritchie & Spencer, 1994), which proceeds through familiarisation, construction of a thematic framework, indexing, charting, and interpretation. The pyramid dimensions supplied the thematic framework, so that indexing mapped evidence directly onto the analytical structure rather than onto categories generated inductively.

Scoring

Each dimension was scored on a five level scale adapted from Flamholtz and Randle (2007) and CMMI. Level 1 means practice is absent or ad hoc. Level 2 means practice exists but is inconsistent and undocumented. Level 3 means basic structures exist without systematic monitoring. Level 4 means practice is documented, monitored, and actively managed. Level 5 means practice is reviewed and improved through structured feedback.

Scoring is a match against observable conditions rather than an impression. At Level 1 the question is whether a written procedure exists at all. At Level 4 the question is whether it exists and is monitored. Both are verifiable. Three rules constrain assignment. A level is assigned only where at least two independent sources support it. Where evidence places a dimension between two levels, the boundary is recorded as a range and treated as its midpoint in calculation. Sustainability is scored and reported but excluded from the overall mean, a decision declared in the method rather than introduced with the results.

Validity

Triangulation across interviews, focus group, observation, and documents provides the main validity check (Creswell & Creswell, 2022). Observation functions as an independent test of interview claims rather than as illustration. Where sources disagreed, the study records the discrepancy: the owner reported a young hire regeneration policy that the observed floor workforce did not reflect, and this is noted rather than reconciled.

The evidence base is asymmetric by design. The focal case carries the full method set while the reference points rest on leadership interviews. This is appropriate to a design in which the reference points bracket the focal case rather than standing as equally evidenced cases, but it limits what can be claimed about the two comparison firms individually.

RESULTS AND DISCUSSION

The focal case

NJT scores 1.8 overall. The profile is uneven. Markets, products and services, resources, management systems, and corporate culture all sit at Level 2, which is to say practices exist but are inconsistent and undocumented. Operational systems sits at Level 1.

Operational practice runs on memory. No division holds a written standard operating procedure, and observation found no posted work instruction at any workstation. This does not mean the work is disorganised. Sequential work order numbering exists, complaint routing follows a repeatable path from administration to the responsible mechanic, and quality is checked at the bench by re measuring against the requested specification. None of it is written down. The routines are real but they live in people rather than in documents.

Inventory is the clearest failure. The parts store operates without stock cards, labels, or a logbook, and parts are issued without being recorded. Staff confirmed that stock records do not match physical stock. Costing and planning inherit that unreliability.

Management practice has moved further. Weekly and monthly reporting to the owner is established, each division logs jobs through a shared online form, and a monthly commission is calculated per person. A division head layer has been created. What is missing is measurement at the individual level and a follow up loop: results are collected but not managed. Observation found no reporting or target board, and operational queries still routed directly to the owner rather than to the division heads.

Financial recording is improving. The firm has moved from spreadsheets to accounting software under an external consultant, and the business entities have been separated. The owner's personal expenses, however, remain mixed with business funds, which limits what the financial statements can be used for.

Sustainability is uneven across its three pillars. Governance is the relative strength, with tax compliance handled by a consultant and improved discipline since incorporation. Social provision is partial: all employees have BPJS Ketenagakerjaan and work shoes are mandatory, but no broader occupational health and safety procedure exists. Environmental practice is weakest. Scrap metal is sold informally by weight, there is no waste management system, and observation found no safety signage, first aid point, extinguisher, or posted K3 procedure.

The reference cases

Company B scores 3.3. Its standard operating procedures are embedded in a server based system that tracks each job from attendance through to completion, which is what produces a Level 4 score in operational systems. Waste is handled through a licensed partner and recognised K3 safety standards apply.

Company C scores 1.1. After two decades of trading it has no written procedures, no inventory control, and owner centred decision making. Its one relative strength is financial recording, kept in good order by a family member with an accounting background. That strength is instructive: it rests on an individual rather than on a system, and it does not lift the rest of the organization.

Cross case comparison

Table 2. Maturity scores across the three cases

Dimension	Company C	NJT	Company B
Markets	1	2	3
Products and services	1	2	3
Resources	1 to 2	2	3
Operational systems	1	1	4
Management systems	1	2	4
Corporate culture	1	2	3
Sustainability (reported separately)	1 to 2	1 to 2	3
Overall mean, six dimensions	1.1	1.8	3.3

Note. Sustainability is excluded from the overall mean because it cuts across the six dimensions rather than forming one of them.

The ordering holds without exception: Company C is at or below NJT on every dimension, and NJT is at or below Company B on every dimension. That consistency is what the polar design was built to test, and it holds.

NJT sits between its two reference points but not in the middle. Its mean is 0.7 above the informal case and 1.5 below the formal one. On five of six dimensions it stands one level above the lower reference and one to two levels below the upper.

The decisive row is operational systems. NJT scores Level 1, identical to the unincorporated firm, against Level 4 for the formal peer. Three years after becoming a limited liability company, the focal firm's operational maturity is indistinguishable from that of a business that never incorporated at all.

Robustness

Every dimension of the focal case rests on at least two independent sources, and the two dimensions that carry the conclusion are the most heavily evidenced. The absence of written procedures was stated by all five internal interviewees, confirmed in the focus group, and verified by observation. Inventory unreliability was corroborated by interview, by observation of a store operating without stock records, and by the absence of any stock control document. Testimony, observation, and documentary absence agree.

The score is also stable under variation. Moving every boundary case half a level in either direction produces an overall mean between 1.7 and 1.9. Neither the classification at the Level 1 to Level 2 boundary nor the ordering of the three cases changes. The conclusion rests on the position rather than on the decimal.

Legal formalization is a threshold, not a destination

The 2023 conversion gave NJT a deed of establishment, a corporate taxpayer number, a business identification number, and the reporting obligations attached to limited liability status. It gave the firm nothing else. No procedure was written, no target was set, no decision right moved away from the owner, and personal and business money stayed mixed. Asked in the focus group what had changed in their daily work since the company became a PT, participants described essentially nothing.

The identical operational systems score for NJT and the unincorporated case isolates the effect. Two firms differ in legal form and are indistinguishable in operational maturity. Whatever incorporation does, it does not produce documented process.

Maturity is a systems problem, not an efficiency problem

It would be easy to read NJT's difficulties as inefficiency. Two pieces of evidence argue against that reading.

The first is distribution. Inefficiency is confined to execution and can be corrected inside an existing system. NJT's deficit appears in every dimension at once: no market segmentation, mixed finances, undocumented procedure, unmeasured performance, dependence on individuals, informal environmental practice. A fault present across all six building blocks simultaneously is infrastructure that has not kept pace with size, which is what Flamholtz and Randle mean by growing pains.

The second is Company C. If inefficiency were the problem, twenty years of practice would have reduced it. Instead the oldest firm in the study is the least mature. Meanwhile Company B, formalized in the same year as NJT, scores 3.3. Maturity does not accumulate with age. It is built, or it is not.

A documentation gap, not a capability gap

The operational systems finding needs care in interpretation. A Level 1 score can suggest the work is chaotic. At NJT it is not. Work order numbering is sequential, complaint handling follows a consistent path, and bench level quality checking happens as a matter of routine. The technical capability is present and the routines are repeatable.

What is absent is the written form. This changes the nature of the intervention. NJT does not need to design new processes. It needs to record the ones it already runs, which is a smaller task and a different one. It also explains why the intervention should start here: writing down an existing routine asks nothing of the technician except that the description be accurate.

Sustainability inside the pyramid

The field evidence supports treating sustainability as cross cutting rather than as a separate block. ESG did not appear at one level of the organization. Customer safety conditions surfaced in the market relationship with port sector clients. Asset life extension is inherent in the repair service itself. Welfare provision appeared in resources. Waste handling and safety belong inside the operational procedures that do not yet exist. Governance appeared in management systems, where mixed finances limit what entity level reporting can show.

This has a methodological consequence. Because the dimension cuts across the tiers, it cannot be averaged with them, so the sustainability score is reported but held out of the mean. The exclusion is not a convenience. It is what the cross cutting claim requires.

Sequencing the intervention

The pyramid's dependency structure produces an order, and the order matters more than the content of any single recommendation. Performance cannot be measured until the work is documented and the records are reliable. Authority cannot be delegated until procedures and targets exist against which delegated decisions can be judged. This is why a Level 1 score in operational systems takes priority over management systems even though both sit a comparable distance from the upper reference.

NJT supplies its own evidence for this. The firm already introduced a shared job logging form, which staff fill in and nobody reviews. That is what a measurement instrument does when it arrives before the process it is meant to measure has been defined. Prioritisation criteria, applied in order, are whether an action is a precondition for others, the size of the gap, feasibility against limited spare capacity, and the risk of inaction.

Table 3. Dependency ordered implementation sequence

Phase	Actions	Verifiable milestone	Expected shift
1 Months 1 to 4	Document core division SOPs from existing routines; introduce stock in and stock out recording; formalize owner compensation	SOPs in use in each core workflow; monthly stock variance recorded; no personal expense entries in company books	Operational systems 1 to 3 Resources 2 to 3
2 Months 5 to 9	Set output based KPIs per role; fix a review and follow up cadence; contract a licensed waste partner; add a K3 procedure to the SOPs	One measured KPI per role reviewed monthly; meeting minutes record follow up actions; waste manifest on file	Management systems 2 to 3 Sustainability to 3
3 Months 10 to 15	Delegate defined decision rights to division heads; introduce customer segmentation; establish a companywide quality procedure	Routine decisions closed at division level without owner involvement; quality procedure applied in all divisions	Corporate culture 2 to 3 Markets 2 to 3 Products 2 to 3

Note. Milestones are stated as conditions rather than activities, so that completion can be verified. Completed as specified, the overall score moves from approximately 1.8 to approximately 3.0.

Resistance and how the design responds

Long tenured employees accustomed to informal practice are commonly assumed to resist formalization. The measures NJT has already attempted give a more specific picture.

Formalization advanced where a new practice attached to an existing routine, as with the accounting software and the back office reporting. It stalled where the practice required a new habit of review or discipline, as with the separation of finances and the job logs that are completed but never examined.

Resistance at NJT is therefore reluctance toward unfamiliar routine rather than objection to formality. Three design choices follow. Procedures are written up from what technicians already do, so the documented process asks for no change of method. The technicians and division heads draft those procedures themselves, which gives the operational group authorship of the change. The review cadence sits inside the existing monthly meeting rather than in a new forum. This is the participative, incremental approach Cummings and Worley (2015) describe, in which change moves through structures that already exist.

CONCLUSION

Legal formalization represents a threshold, whereas organizational formalization represents a broader developmental objective. Crossing the first does not necessarily move a firm toward the second. Three years after becoming a limited liability company, the focal firm scored 1.8 on a five-level maturity scale and remained comparable in operational maturity to an unincorporated peer.

Two findings extend beyond the focal case. First, organizational maturity did not necessarily increase with firm age, as demonstrated by the contrast between the 20-year-old informal firm and the three-year-old formally incorporated firm. Second, a Level 1 score did not always indicate an absence of capability. At NJT, it reflected undocumented capability, which represented a more limited problem and required a different type of intervention.

From a practical perspective, the study provides a diagnostic baseline and a sequenced implementation pathway. The sequence was structured according to dependency: documentation and reliable records were prioritized first, followed by measurement and then delegation. Introducing measurement before establishing adequate documentation may result in tools that are not consistently used, a pattern already observed in the focal firm.

From a theoretical perspective, the study applies the Pyramid of Organizational Development to post-incorporation SME formalization, a context in which the framework has received limited empirical application. It also extends the framework by treating sustainability as a cross-cutting dimension across the six organizational development blocks rather than as an additional layer positioned above them. The scoring approach was aligned with this structural interpretation.

The evidence base was asymmetric. The focal case was supported by five interviews, one focus group discussion, direct observation, and documentary evidence, whereas the two reference cases relied primarily on leadership interviews. Accordingly, findings relating to the reference firms should be interpreted with caution, although these cases were used primarily to bracket the focal case rather than to serve as independent cases of equal evidentiary depth.

Scoring was conducted by a single researcher. Independent coding of a subset of the data or the use of a structured employee perception survey across the workforce could strengthen the reliability of the maturity assessments in future research. These procedures were beyond the scope of the present study.

The proposed implementation sequence should be understood as a design recommendation rather than an empirical outcome. Whether the focal firm can progress from a maturity score of 1.8 toward 3.0 remains an empirical question. The proposed 15-month horizon provides an appropriate basis for longitudinal follow-up. Future research could also include a larger sample of recently incorporated Indonesian SMEs to determine whether the observed gap between legal and organizational formalization is typical or specific to the focal firm.

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