

MERIDIAN PRECISION COMPONENTS SDN. BHD.

Current-State Operational Diagnostic Report

Process baselines, quantified inefficiencies and prioritised problems

Prepared for: Board of Directors and CEO

Engagement: Technology Strategy, Operations Transformation and Financial Advisory (8 weeks)

Evaluation horizon: 2027-2031 | **Transformation horizon:** 12 months

Document: Current-State Diagnostic

Simulated client engagement. All company figures are synthetic case data; vendor figures are preliminary estimates, not quotations. Analyst assumptions are labelled as such and listed in the appendix and in the Excel model.

2. Financial diagnosis: what does the evidence say?

2.1 Growth without profit

Revenue grew 22.1% between 2024 and 2026 (RM 39.8m to RM 48.6m), but EBITDA fell from RM 5.40m to RM 5.35m. Cost of goods sold rose 25.8%, faster than revenue, so gross margin slipped from 25.9% to 23.7%. At the 2024 margin, 2026 EBITDA would have been about RM 6.6m.

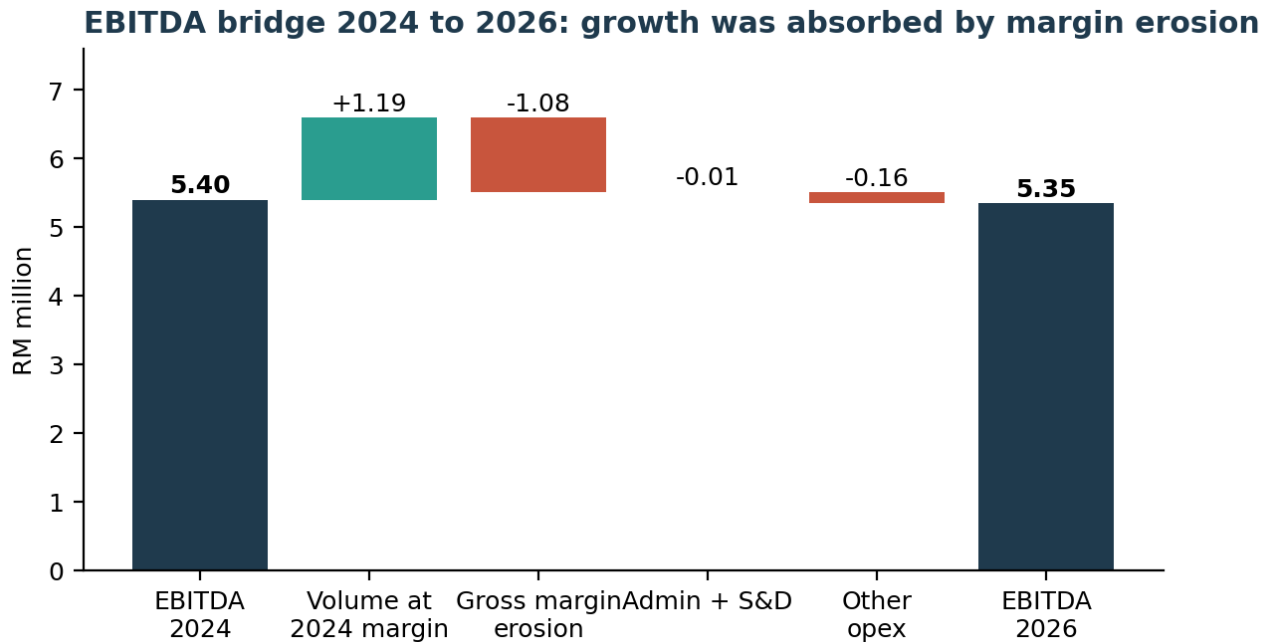


Figure 1. EBITDA bridge. Growth added RM 1.19m at constant margin; gross-margin erosion removed RM 1.08m and other opex a further RM 0.17m. Administrative and selling costs grew in line with revenue and are not the problem.

RM million	2024	2025	2026	Change 24-26
Revenue	39.8	44.2	48.6	+22.1%
COGS	29.5	33.2	37.1	+25.8%
Gross profit	10.3	11.0	11.5	+11.7%
Gross margin	25.9%	24.9%	23.7%	-2.2 pp
Administrative	2.8	3.1	3.4	+21.4%
Selling and distribution	1.7	1.9	2.1	+23.5%
Other opex	0.40	0.50	0.65	+62.5%
EBITDA	5.40	5.50	5.35	-0.9%
EBITDA margin	13.6%	12.4%	11.0%	-2.6 pp

2.2 CFO versus Operations Director: which explanation does the evidence support?

The CFO attributes the decline to rising material costs; the Operations Director to inventory mismanagement, production delays and procurement inefficiency. We tested both by comparing 2026 leakage lines with 2024 intensity (2024 values scaled by the 1.22x revenue growth).

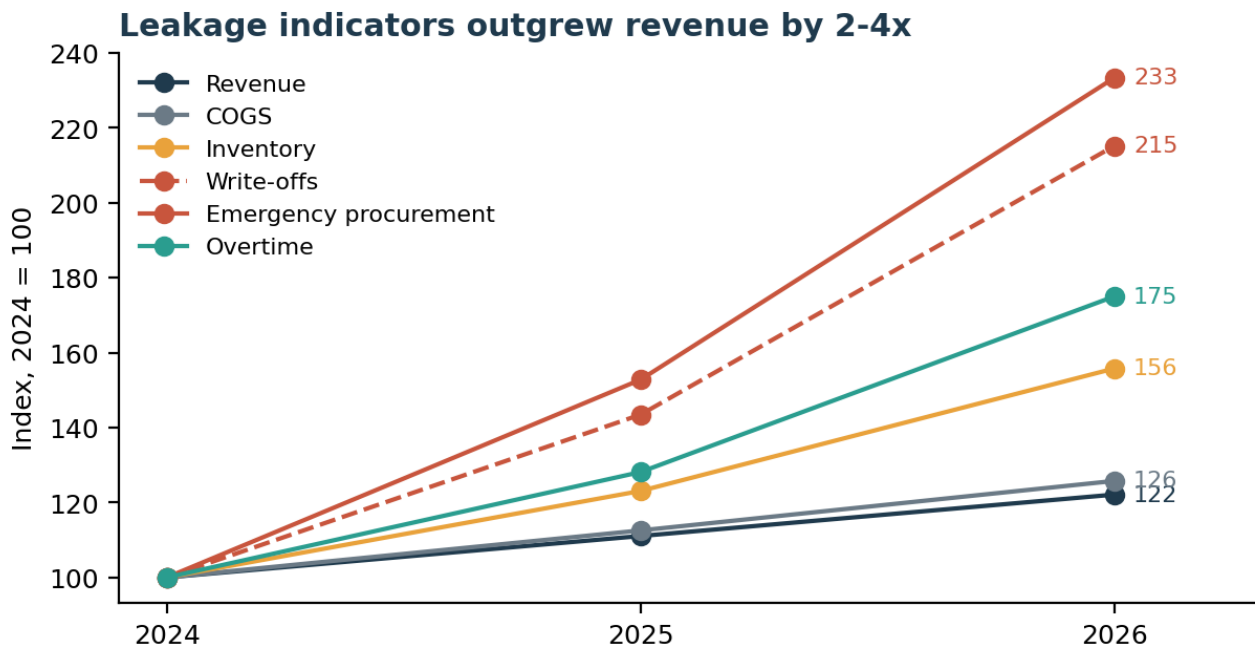


Figure 2. Index of revenue and leakage indicators (2024 = 100). Inventory +56%, overtime +75%, write-offs +115%, emergency buying +133% against revenue +22%.

Component of gross-profit gap (RM 1,077k)	RM k	Share	Evidence quality
Emergency procurement above normalised 2024	200	19%	Reported (Exhibit 2)
Inventory write-offs above normalised 2024	135	13%	Reported
Overtime above normalised 2024	169	16%	Reported
Rework: (4.6% - 3.2%) x COGS x 40% conversion share	208	19%	Estimate - cost-per-rework assumption
Identified operational leakage	712	66%	
of which excluding rework estimate	504	47%	
Residual: material price, mix, pricing, unexplained	365	34%	Cannot be tested - no price data

Operational leakage explains about 66% of the RM 1.08m gross-margin gap (47% excluding the rework estimate)

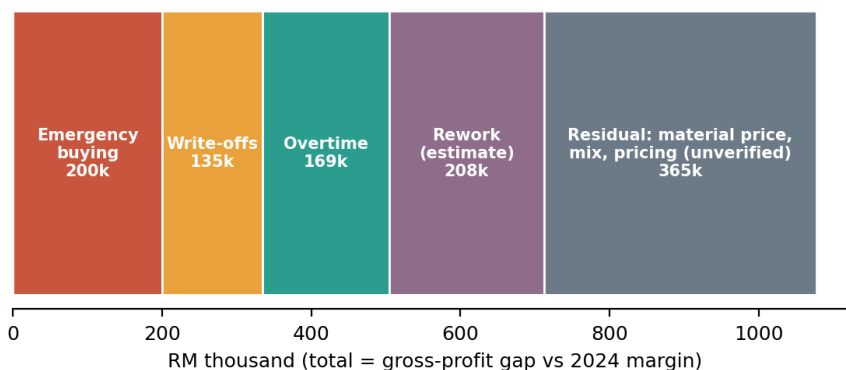


Figure 3. Attribution of the gross-margin gap. The operational share is 47-66% depending on the rework estimate.

Finding. Neither executive is fully right. Operational leakage explains roughly half to two-thirds of the margin gap; material price, product mix and pricing may explain the remainder but the data to test the CFO's view was not supplied. We request a commodity price index against BOM material content, purchase price variance by supplier, and price pass-through clauses by customer. The model therefore credits only the operational pools, and no ERP benefit is claimed against the unverified residual.

Two further observations: (1) administrative and selling expenses rose roughly in line with revenue, so overhead bloat is not the issue; (2) other operating expenses rose 62.5% (RM 0.16m above normalised level) without explanation and should be reviewed by the CFO.

3. Working capital and inventory

Average inventory rose from RM 5.2m to RM 8.1m (+56%) against COGS growth of +26%. Inventory days (average inventory / COGS x 365) rose from 64 to 79, turnover fell from 5.7x to 4.6x, write-offs more than doubled and stock accuracy fell from 94% to 86%.

3.1 Why has inventory grown? Decomposition and open hypotheses

Driver of the RM 2.9m increase	RM m	Basis
Volume: COGS growth at 2024 inventory days (64)	1.34	5.2m x (37.1 / 29.5) - 5.2m, approximate
Increase in days from 64 to 79 (inefficiency)	1.57	8.1m less 6.53m at 64 days
Of which: genuine safety stock, duplicate procurement, slow movers, record errors	not separable	Needs stock-movement audit and ABC-XYZ analysis

Roughly 55% of the increase is explained by volume; the remaining RM 1.57m is excess relative to 2024 discipline. Management cannot split that excess among safety stock, duplicate purchasing, slow-moving items, poor forecasting and inaccurate records, which is why the first 8 weeks of Phase 1 include an ABC-XYZ classification and an ageing analysis. The Warehouse Manager's concern is valid: stock cuts applied across the board would raise stockouts (45 incidents a month today). Targets must differ by class.

3.2 Consulting challenge: reducing inventory days from 79 to 65

Step	Calculation	Result
Daily COGS (2026)	RM 37.1m / 365	RM 101,644
Days to release	79 - 65	14 days
Working capital released (one-time cash)	14 x RM 101,644	RM 1.42m
Cross-check on reported balance	RM 8.1m - 65 x RM 101,644	RM 1.49m
Memo: interest saved at 6% (not counted)	RM 1.42m x 6%	RM 85k
Recurring cash holding-cost saving (2%)	RM 1.42m x 2%	RM 28k a year
One-time liquidation haircut on slow movers (5%)	RM 1.42m x 5%	RM 71k (cost)

3.3 Working-capital release versus operating cost savings

These are different financial benefits and must never be added together:

	Working-capital release	Operating cost saving
Nature	Cash freed once from lower inventory investment	Recurring reduction in cost lines
Examples	RM 1.42m for 14 days	Write-off reduction, 2% holding cost (storage, insurance, handling), emergency freight
Balance sheet / P&L;	Balance sheet only; no EBITDA effect	EBITDA
Model treatment	One-time cash inflow, shown in its own row, with the haircut cost	Annual benefit line, ramped
Interest on released cash	Excluded: the 12% discount rate already prices cash	n/a

If the same inventory fall were also credited with financing savings, the case would be counted twice. In the model the headline NPV includes the cash release as a cash flow and reports a second NPV excluding it, so the board can see how much of the case depends on one-time cash.

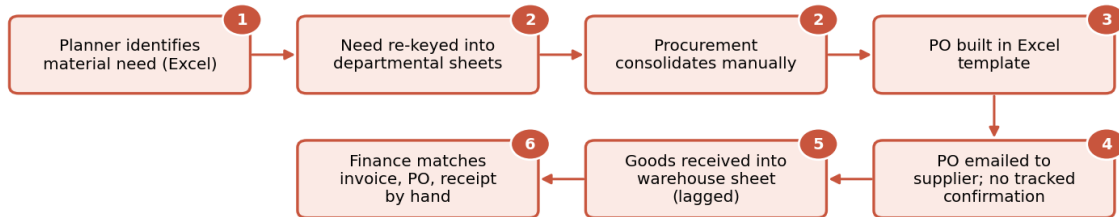
4. Procurement operations

4.1 Current process and bottlenecks

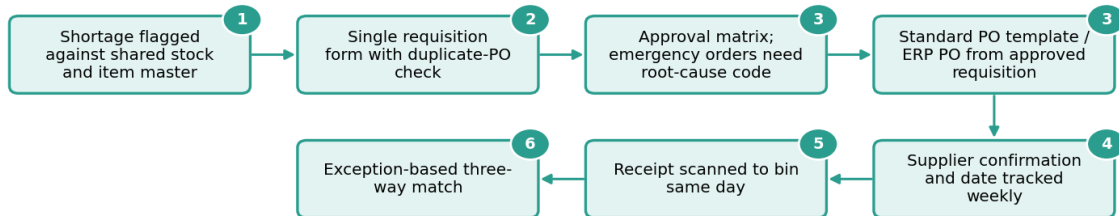
Seven manual steps connect a production need to a paid invoice: planner identifies need, entry into departmental sheets, manual consolidation, Excel PO, email to supplier, goods receipt in warehouse sheet, manual three-way match by finance. Each hand-off re-keys data and none is checked against a shared stock position.

Process map 1: Procure-to-pay

CURRENT STATE (spreadsheets, email, manual re-keying)



FUTURE STATE (Phase 1 controls first; Phase 2 ERP where gated)



Pain points: (1) No visibility of stock held elsewhere (86% accuracy) (2) Duplicate and re-keyed requests (2.8% duplicate POs) (3) 42 min per PO; 14% need correction (4) No supplier confirmation tracking; 11% emergency orders (5) Receipts booked late (6) Manual matching (finance rework)

Improvements: (1) Shared item master and stock view (2) One requisition entry with duplicate check (3) Approval matrix, fewer errors and re-work (4) Supplier dates tracked; early warning (5) Same-day receipt, real-time stock (6) Review exceptions only

Figure 4. Procure-to-pay: current and future state (also in the stand-alone process-maps file).

4.2 Labour required for purchase-order processing

Item	Calculation	Value
PO processing time	4,800 POs x 42 min / 60	3,360 hours a year
Hourly cost	RM 66,000 / 1,920 paid hours	RM 34.4 per hour
Annual labour cost of PO processing	3,360 x RM 34.4	RM 115,500
Share of procurement capacity	3,360 / (8 FTE x 1,920)	21.9% (1.75 FTE)

Time reduction	Hours saved	Value of time (RM)	FTE equivalent	Payroll cash saved
30%	1,008	34,700	0.53	RM 0
40%	1,344	46,200	0.70	RM 0
50% (Procurement Manager claim)	1,680	57,800	0.88	RM 0

Time saved is not cash saved. Even at a 50% reduction only 0.88 FTE of an 8-person team is freed, so payroll cannot fall without redundancy, which the client has not proposed and which would damage adoption (44% of surveyed staff fear job losses). The saving is capacity. We value it at a 35% monetised share in the base case (zero in the downside) and credit a 35% reduction for Option B, not 50%, because no time study exists, automatic PO generation needs a clean item and supplier master, and a share of the 42 minutes is supplier negotiation rather than keying.

4.3 Reassigning capacity and other procurement benefits

- **Redeploy to supplier management.** Freed hours should fund weekly supplier-date confirmation, supplier scorecards and dual-sourcing of single-source A-items. This is where capacity converts to cash: fewer emergency orders and better prices.
- **Emergency orders (11% of POs).** Today RM 420k is spent on emergency procurement (we treat this as the incremental premium; at 528 orders this is RM 795 per order, too low to be total order value). Only the RM 200k above 2024 intensity is treated as avoidable.
- **Duplicate POs (2.8%, about 134 a year).** Duplicates inflate stock and eventually write-offs. They are valued through the inventory and write-off lines, never separately, to avoid double counting.
- **Corrected POs (14%, 672 a year).** Included in the PO time reduction credit.
- **Sourcing and price compliance.** Spend visibility across 126 suppliers may yield 0.05% (A) to 0.20% (B) of an assumed RM 18.6m material spend (50% of COGS), RM 9k to RM 37k a year. This assumption needs a spend cube.
- **Invoice matching.** Exception-based matching reduces finance rework; not separately monetised.

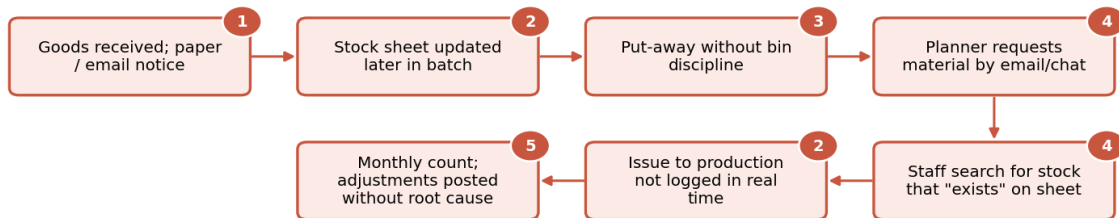
5. Inventory and warehouse management

KPI	Plant A	Plant B	Combined / comment
Active SKUs	1,650	1,200	2,850 total; duplicates inflate this
Inventory accuracy	88%	83%	86% overall; 94% in 2024
Average picking time	14 min	19 min	Plant B 36% slower
Monthly adjustments	145	210	355 a month; 4,260 a year
Stockouts per month	18	27	45 a month; 540 a year
Warehouse staff	12	9	21

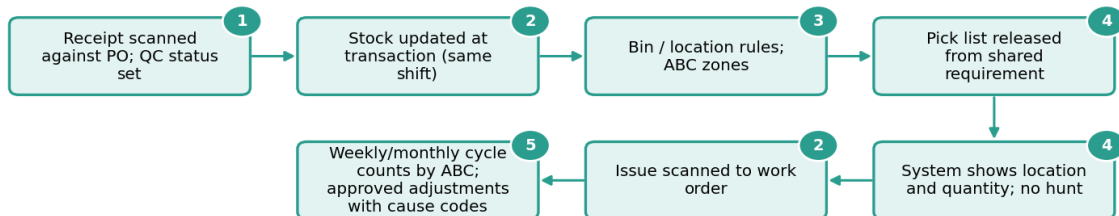
Planners request material that appears available on the sheet but cannot be found; staff search; procurement sometimes buys emergency stock that already exists elsewhere in the company. Plant B is the weakest on every indicator, which is why we recommend it as the first inventory cutover (lower customer risk than semiconductor work at Plant A, largest accuracy gain).

Process map 2: Inventory and warehouse control

CURRENT STATE (spreadsheets, email, manual re-keying)



FUTURE STATE (Phase 1 controls first; Phase 2 ERP where gated)



Pain points: (1) Late receipt information (2) Records lag physical stock (Plant A 88%, Plant B 83%) (3) No location control (4) Planners cannot trust stock; emergency buying (5) Monthly count too slow to detect errors

Improvements: (1) Same-day receipt (2) Transaction-time updates (3) Findable stock (4) Trust restored; fewer emergency POs (5) Errors found in days not months

Figure 5. Inventory and warehouse control: current and future state.

5.1 Methodology to quantify the cost of poor inventory control

The Operations Director estimates RM 600,000 a year, not independently validated. We built a bottom-up method with six cost categories, each mapped to a single financial line so that overlaps are visible and removed.

Cost category	How measured	Estimate	Treatment / overlap control
Inventory record discrepancies	355 adjustments a month; cost = investigation hours; value of adjustments from GL (to be extracted)	Inside search labour	Measured as hours; value of net adjustments flows to write-offs

Cost category	How measured	Estimate	Treatment / overlap control
Labour locating material	540 stockouts x 5 hours (2 staff x 2.5h) + 4,260 adjustments x 0.5h = 4,830 hours x RM 25/h	RM 121k (analyst estimate)	Capacity, not payroll; monetised at 35%; needs 4-week time study
Emergency procurement	Premium and expedite cost on 528 orders; split by root cause code (stock existed / forecast / supplier / customer change)	RM 420k gross; RM 200k above 2024	Counted once; duplicate-PO value NOT added
Inventory obsolescence	Write-offs by SKU age and cause	RM 312k gross; RM 135k excess	Write-off only; stock value sits in working capital
Production interruptions	Line-stoppage log (does not exist); proxy = overtime above 2024 intensity	RM 169k	Valued once via overtime; not as a separate line, because overtime is the recovery cost
Working capital in excess inventory	Days above 2024 level x COGS per day	RM 1.42m for 14 days	One-time cash; financing excluded

Validation of the RM 600k. Search labour (RM 121k) + emergency premium excess (RM 200k) + overtime excess (RM 169k) + write-off excess (RM 135k) = **RM 625k**. The Operations Director's order of magnitude is therefore reasonable. But RM 121k is capacity rather than cash, rework (RM 208k excess) lies outside his figure, and not all of it can be removed by any system. We use **RM 0.71m of avoidable cash pools** (including rework) and credit only a share of each.

5.2 Overlap map (double-counting control)

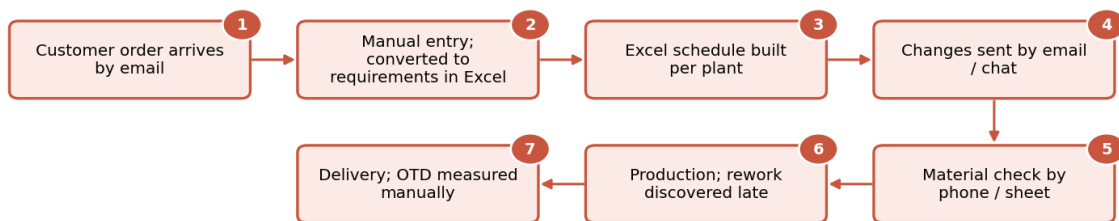
Cost / effect	Counted in	Overlaps with	Treatment
Emergency premium	Emergency line	Duplicate POs, stockouts	Premium only
Excess and duplicate stock	WC release (one-time)	Write-offs, holding cost	Only write-off excess and 2% holding are P&L;
Search labour	Capacity line	Stockout downtime, overtime	Hours valued once
Production interruption	Overtime line	Search labour, expedite freight	No standalone line
Late deliveries	OTD retention line	Overtime, expedite	Margin on retained revenue only; no penalties assumed
Financing of inventory	Memo only	WC release	Excluded from NPV
PO and report hours	Capacity line	-	Not payroll savings

6. Production planning

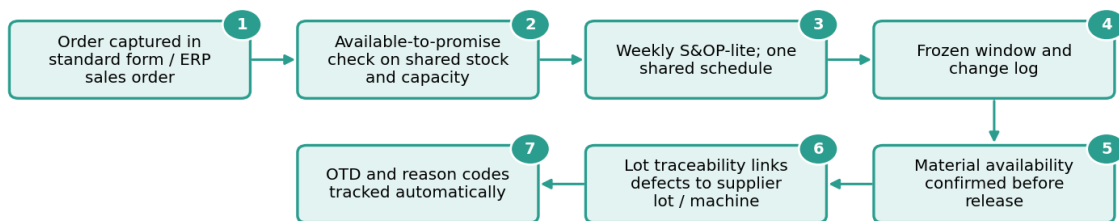
Indicator	2024	2025	2026	Change
On-time delivery	94%	91%	87%	-7 pp
Schedule adherence	92%	88%	82%	-10 pp
Machine utilisation	76%	74%	71%	-5 pp
Rework rate	3.2%	3.8%	4.6%	+1.4 pp
Production lead time	12 days	14 days	17 days	+5 days
Overtime	RM 320k	RM 410k	RM 560k	+75%

Process map 3: Order-to-plan-to-deliver

CURRENT STATE (spreadsheets, email, manual re-keying)



FUTURE STATE (Phase 1 controls first; Phase 2 ERP where gated)



Pain points: (1) Orders re-keyed (2) Promise dates ignore stock and capacity (3) Two schedules, no shared truth (82% adherence) (4) Uncontrolled changes drive overtime (5) Shortages found at the machine (6) Rework 4.6%: causes are calibration, materials, skills (7) OTD 87% with no root-cause data

Improvements: (1) Single order record (2) Realistic promise dates (3) One schedule, one owner (4) Stability inside freeze window (5) Fewer line stoppages (6) Targeted quality actions (outside ERP scope) (7) Actionable delivery data

Figure 6. Order-to-plan-to-deliver: current and future state.

6.1 Which problems need technology, process redesign, or both?

We did not attribute every production inefficiency to the absence of ERP. Each problem was tested against the question: if the software existed tomorrow, would the problem disappear?

Problem	Root cause hypothesis	Needs	Reasoning
Schedule adherence 82%	Uncontrolled changes by email/chat; material shortages; no freeze window	Process first, then basic planning module	A frozen plan with change log is discipline; software enforces it once data is right
Lead time 12 to 17 days	Waiting for material, queueing, rework loops	Both	Material availability is a data problem; queueing is a scheduling-rule problem
Utilisation 76% to 71%	Material shortages, changeovers, maintenance	Mostly process	ERP indirectly helps via material availability; not a driver of machine downtime

Problem	Root cause hypothesis	Needs	Reasoning
On-time delivery 87%	Shortages + schedule instability + capacity	Both	Promise dates ignore stock and capacity
Overtime +75%	Recovery of lost time from shortages and re-plans	Both	Valued only on the excess over 2024 intensity
Rework 4.6%	Calibration, material quality, operator skill, inadequate process control	Neither (quality engineering)	Only lot traceability and revision control are ERP-related; credited at 12% of the excess pool for B
Advanced scheduling (APS)	Production Manager preference	Not yet	No clean routing data, utilisation falling for non-scheduling reasons; defer to Gate 3

Position on the three-way disagreement. The CFO is right that production discipline must improve first. The IT Manager is right that basic ERP functionality is sufficient for now. The Production Manager is right that scheduling needs a better tool eventually, but advanced planning on today's data would automate inconsistent inputs. Our roadmap therefore puts schedule governance (S&OP-lite;, freeze window) in Phase 1 and defers advanced planning to a gated Phase 3.

7. Finance, reporting, IT landscape and data quality

7.1 Current landscape

System	Current arrangement	Gap
Accounting	Standalone package	No link to inventory, procurement or production
Procurement	Excel + email	No audit trail, no approvals, duplicate entry
Inventory	Independent spreadsheets per plant	No real-time position; 86% accuracy
Production planning	Excel schedules	Two schedules; changes by chat
Customer orders	Email + manual entry	Re-keying; no available-to-promise
Reporting	Excel consolidation, ~40 reports	260 hours a month (3,120 a year, about 1.6 FTE)
Infrastructure	Local servers + cloud storage	Daily local backup only; basic endpoint protection
IT team	3 people	No capacity for a large implementation without backfill

7.2 Finance and reporting workflow

Finance gathers data from five sources, reconciles inventory and procurement manually, and re-cuts the same figures in about 40 recurring reports. Reporting labour is 3,120 hours a year (RM 89k at RM 28.6 per hour). Management expects to cut this to 55 hours a month under Option C; we credit 215 (A), 130 (B) and 100 (C), because validation, ad-hoc requests and commentary do not disappear. A first step costs almost nothing: rationalise 40 reports to about 15 owned KPIs before automating any of them.

7.3 Data quality and system fragmentation

The IT Manager warns that identical materials carry different codes. This is the single most important implementation risk. ERP projects commonly fail or overrun because dirty master data is migrated, and in this case the item master drives purchasing, stock, costing and planning. Phase 1 therefore includes a master-data standard (naming, unit of measure, status), a golden-record process for items, suppliers and customers, named data owners, and a duplicate-rate KPI (<2% at Gate 1).

Data domain	Records	Known issue	Action before migration
Item master	2,850 active SKUs	Same material under different codes	De-duplicate; one code per item; classify ABC-XYZ; retire dead SKUs
Supplier master	126	Duplicate supplier entries, inconsistent terms	Merge, verify bank/tax data, standard lead times
Customer master	74	Different names across order emails	Single customer ID and ship-to
Stock balances	Two plant sheets	86% accurate	Full count at cut-over baseline; cycle count thereafter
Open documents	POs, SOs, WIP	Spread across mail and sheets	Migrate open items only; archive history read-only

8. Bottlenecks and root-cause analysis

We traced each symptom backwards until reaching a cause that management can act on. The chain below summarises the findings; the "why" at each level was confirmed by at least two data points.

Symptom	Why 1	Why 2	Root cause	Type
Emergency buying 11% of POs; RM 420k	Planners cannot trust stock, so they order again	Stock records 86% accurate; two plant sheets	No transaction-time stock control; no cycle counting	Process + data
Inventory days 64 to 79	Safety stock set by fear of stockouts	Stockouts caused by record errors and late supplier dates	No ABC-XYZ policy; no supplier-date tracking	Process
Write-offs RM 312k	Items bought twice or never used	Duplicate codes and duplicate POs (2.8%)	No master-data governance; no duplicate check	Data + process
Schedule adherence 82%	Plans change daily	Changes by email/chat; materials missing	No frozen window; no change control; no shared schedule	Process
OTD 87%	Promise dates unrealistic	Orders re-keyed; no stock/capacity check	Order-to-plan disconnected	Both
Overtime +75%	Recovering lost hours	Shortages and re-plans	Same as above	Both
Reporting 260 hours/month	Manual consolidation	Five unconnected sources	No central database; 40 uncontrolled reports	Technology + process
Rework 4.6%	Defects found late	Calibration, material, operator skills	Quality system gaps	Quality engineering

Prioritised problem list

Ran k	Problem	Annual effect	Fix first with	Technology needed?
1	Master data and record accuracy	Enables every other benefit	Master-data programme, cycle counts	Partly (to hold it)
2	Inventory control and excess stock	RM 1.42m one-time; RM 135k + 28k a year	ABC-XYZ policy, slow-mover clearance	Visibility helps
3	Emergency and duplicate purchasing	RM 200k a year excess	Requisition form, duplicate check, approvals	Yes for real-time stock view
4	Schedule instability and overtime	RM 169k a year excess	Freeze window, S&OP-lite;	Basic planning module later
5	Reporting burden	3,120 hours (capacity)	Rationalise to ~15 KPIs	Yes for integration
6	Rework	RM 208k a year excess (estimate)	Quality engineering programme	No (traceability only)
7	Unverified material-cost effect	Up to RM 365k (unverified)	Spend cube, price pass-through	No

9. Quantifying avoidable operating cost

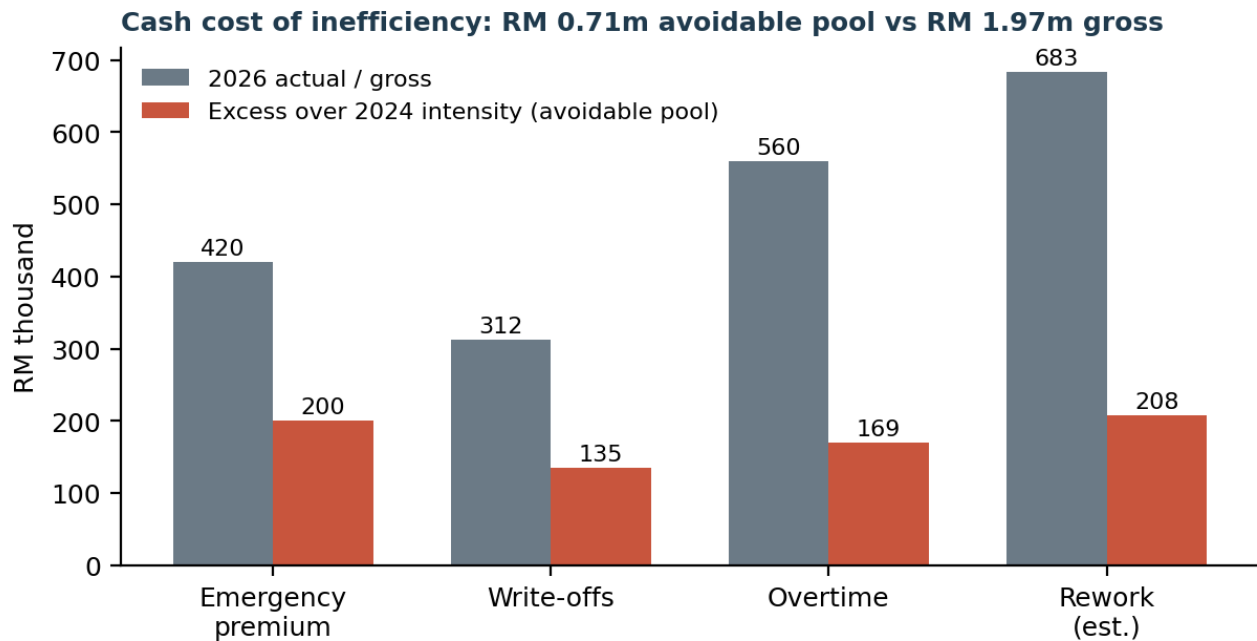


Figure 7. Gross 2026 cost versus avoidable excess over 2024 intensity.

Cost pool	2026 gross	Avoidable excess	Nature	Credited capture (A / B / C)
Emergency procurement premium	RM 420k	RM 200k	Cash	20% / 55% / 65%
Inventory write-offs	RM 312k	RM 135k	Cash	20% / 55% / 65%
Overtime	RM 560k	RM 169k	Cash	10% / 35% / 50%
Rework (estimate)	RM 683k	RM 208k	Cash; weak ERP link	0% / 12% / 20%
PO labour	RM 115k	capacity	Capacity (3,360 h)	12% / 35% / 42% of hours
Reporting labour	RM 89k	capacity	Capacity (3,120 h)	215 / 130 / 100 hours after
Search / recount labour	RM 121k	capacity	Capacity (4,830 h)	Pro rata to accuracy gain
Sourcing	n/a	RM 18.6m spend base	Cash	0.05% / 0.20% / 0.25%
OTD retention	n/a	unvalidated	Cash (margin)	+2 / +5 / +7 pp

Total avoidable cash pool: RM 0.71m a year (RM 0.50m without the rework estimate), plus RM 0.33m of capacity. Even a perfect system would not remove all of it, because some emergency buying is supplier-driven and some overtime is genuine demand. We therefore capture 20-65% of each pool depending on the option.

Why the sums are smaller than management expects

- The pool is the excess over 2024 intensity, not the gross cost.
- Capacity hours are valued at a 35% monetised share in the base case.
- Rework gets minimal credit because calibration, material quality and operator training are not software problems.
- Customer retention is valued at 0.10% of revenue per percentage point of OTD, at a 25% margin, because no penalty or churn data exists.
- Scalability benefits (avoided back-office hires as volume grows) are excluded and shown as upside only.