

IBM SAP Payroll System Collapse — GL Framework Structural Diagnostic Report

GFI Flow Intelligence | May 2026 | Public Diagnostic Brief | SAMPLE REPORT

Diagnostic Context: A\$6.19M Contract That Cost A\$1.2 Billion

In December 2007, Queensland Health contracted IBM Australia to replace its ageing LATTICE payroll system with SAP ECC5 and Workbrain — budgeted at A\$6.19 million, deliverable July 2008. The system served 85,000+ staff across 12 industrial awards, 3,200 concurrent employment arrangements, and 24,000 distinct pay combinations. IBM was awarded the contract despite this being its first attempt at a project of this scale. Only two weeks were allocated to scope critical business requirements. The system went live 14 March 2010 — 20 months late, cost already A\$101M — with 2,422 known defects including high-severity payroll errors. Result: 35,000+ payroll anomalies; 78,000 staff underpaid, overpaid or unpaid for months; A\$400M in extraordinary operational costs by 2013; A\$1.2B projected 8-year total. The Commission of Inquiry (2013) called it 'the worst failure of public administration in this country.' IBM won a subsequent lawsuit; Queensland received no compensation.

GL Diagnostic Question: IBM was contracted to deliver a functioning payroll system for 85,000 Queensland Health workers. Did those workers receive accurate, timely pay after go-live?

EXECUTIVE SUMMARY

Queensland Health scores GL = 0.029 — Structural Failure. For every A\$1 of payroll intent, only 2.9 cents reached Queensland Health staff as accurate, timely pay. 78,000 workers were underpaid, overpaid, or not paid at all for months. The system went live with 2,422 known defects. IBM had never attempted a project of this complexity. Two weeks were allocated to scope requirements for a system covering 24,000 pay combinations. The denominator — whether a nurse finishing a night shift could rely on receiving correct pay — was never measured before go-live, during testing, or in the contract.

GL Score

0.037

STRUCTURAL FAILURE

Estonia benchmark: 4.20

$$GL = (Fs \times Vn) / (Pd \times Cf) = (0.22 \times 1.5) / (3.0 \times 3.0) = 0.33 / 9.0 = 0.037$$

Fs = 0.22: 78,000 of 85,000 staff received incorrect pay — a payroll accuracy failure rate exceeding 90% in the acute phase. Pd = 3.0x (maximum): 35,000+ anomalies; 8 months to clear backlog; 1,000 staff required to manually process pays. Cf = 3.0x (maximum): 24,000 pay combinations; 2,422 defects at go-live; 1,507 SAP customisations and 1,029 Workbrain customisations.

GL FORMULA VARIABLES — QUEENSLAND HEALTH IBM SAP PAYROLL ASSESSMENT

Variable	Score	Definition	Observed Conditions
Fs — Flow Success Rate	0.22	Proportion of Queensland Health staff who received accurate, timely pay post go-live	78,000 of 85,000 staff received inaccurate pay or no pay at all in the months following the March 2010 go-live — a payroll accuracy failure rate exceeding 90% in the acute phase. 35,000+ payroll anomalies documented by 2013. Eight months required to process the initial backlog of payroll adjustments. Some staff waited months for corrections to underpayments. Overpayments totalling A\$400M created debt recovery obligations for affected staff. Sources: Commission of Inquiry 2013; KPMG review 2010, 2012; Wikipedia case record.
Vn — Strategic Value	1.5 / 1.5	Importance of accurate, timely payroll to 85,000 healthcare workers (scale: 0.8–1.5)	Payroll is not optional infrastructure for healthcare workers — it is their economic survival. Queensland Health employs nurses, doctors, allied health professionals, and support staff working rostered shifts including nights, weekends, and overtime under 12 industrial awards. Incorrect pay creates immediate financial hardship: rent, mortgage, food, utilities. Rated 1.5: maximum. A payroll system failure in healthcare is directly equivalent to a patient safety failure — it affects the people who deliver patient care. Sources: Commission of Inquiry 2013; staff testimony; Queensland Government response.
Pd — Pain Duration	3.0x (max)	Operational burden on staff and payroll officers attempting to correct the system (1.2–3.0)	1,000 additional staff were required to manually process fortnightly pays — a payroll processing overhead that persisted for years. Staff whose pay was incorrect spent hours documenting errors, lodging corrections, following up, and managing personal financial consequences. The backlog took 8 months to clear. KPMG estimated A\$836M would be required to stabilise the system over the following 5 years. IBM continued operating under varying scope while the state signed off on repeated change requests. Pd rated at maximum. Sources: Commission of Inquiry 2013; KPMG 2012; Payroll Experts Australia analysis.
Cf — Cognitive Friction	3.0x (max)	Complexity of 24,000 pay combinations, 2,422 go-live defects, dual-system integration (1.2–3.0)	The system managed 85,000 staff under 12 awards, 3,200 concurrent employment arrangements, and 24,000 distinct pay combinations — described by the Commission as 'the most complex' Queensland government agency. IBM allocated only 2 weeks to scope these requirements. 2,422 defects were identified before go-live including high-severity payroll errors — the go-live proceeded anyway. 1,507 customisations were made to SAP and 1,029 to Workbrain. Integration between SAP and Workbrain caused long processing times and synchronisation failures. Cf rated at maximum: 3.0x. Sources: Commission of Inquiry 2013; academic analysis 2014.

GL = 0.037 → Structural Failure | Delivery efficiency: 3.7%

The system went live with 2,422 known defects. IBM had never delivered a project of this complexity. Two weeks were allocated to scope 24,000 pay combinations. Queensland pursued damages and lost — IBM was released from liability by a 2010 agreement the state later could not challenge. The denominator was never measured. 78,000 healthcare workers paid the price.

INTERNATIONAL BENCHMARK COMPARISON

System	GL Score	Key Structural Characteristic
Estonia Digital Government	4.20	Pre-loaded civil service data; automatic entitlement calculation; payroll errors <0.1%
New Zealand Public Sector Payroll (Datacom)	2.10	Phased complexity management; pre-go-live validation across all pay rule combinations
Queensland Health IBM SAP ← Diagnostic Subject	0.037	2,422 defects at go-live; 78,000 staff mispaid; A\$1.2B 8-year cost; IBM released from liability
California MyCalPay (SAP)	-0.06	Similar pattern: SAP implementation failure; contract terminated 2013; \$150M lawsuit filed

Estonia's GL is 114x Queensland Health's. The pattern is identical across all four cases: the SI that sets the go-live date also determines when the system is ready. Independent outcome verification — measuring Fs before go-live — is the missing layer.

DENOMINATOR ANATOMY — WHERE FAILURE OCCURS

Friction Source	Leverage	Reform Pathway
2-week requirements scoping for 24,000 pay combinations (Cf)	HIGHEST	No ERP implementation covering 24,000 pay combinations should begin without a minimum 3-month requirements analysis independently validated against all industrial awards. Reform path: mandatory complexity audit — total pay combination count must be independently verified before contract award; scope must be fixed before go-live date is set.
Go-live proceeded with 2,422 known defects including high-severity payroll errors (Fs)	HIGHEST	Queensland Health accepted the inherent risks and opted to go-live without fixing high-severity defects. Reform path: mandatory independent defect certification gate — zero high-severity payroll defects permitted at go-live. Severity classification must be validated by a party independent of IBM and Queensland Health project management.
IBM appointed despite no prior experience at this project scale (Pd)	HIGHEST	IBM Australia had never delivered a project of this complexity. This was not disclosed in procurement evaluation. Reform path: mandatory demonstrated reference — SI must provide independently verified evidence of successful delivery of equivalent-complexity payroll system before contract award. Unverified capability claims disqualify.
2010 liability release — Queensland waived damages claim against IBM (Pd escalation)	HIGH	The state signed a 2010 agreement releasing IBM from liability while the system was still barely functional — fearing IBM would stop work. Reform path: ERP contracts must include escrow provisions releasing 40% of fees only upon independent GL certification post go-live. Vendor cannot leverage service dependency to negotiate liability release.
SAP/Workbrain integration failure — 2,536 combined customisations (Cf)	HIGH	1,507 SAP and 1,029 Workbrain customisations created synchronisation failures. Reform path: integration stress testing across all customisation combinations required before go-live; no customisation accepted without independent integration test sign-off.
No parallel payroll run validating all 24,000 pay combinations before cutover (Fs + Pd)	MEDIUM	The pre-go-live payroll test compared only 10% of employees and found A\$1.2M discrepancy. A second test excluded casuals and overtime. Full parallel run was never completed. Reform path: 100% parallel payroll run across all employee groups, all pay combinations, all awards — independently audited — as mandatory go-live criterion.

WHAT IBM'S ENGAGEMENT ADDRESSED VS. WHAT GL MEASURES

IBM Deliverables (Infrastructure Layer)	GL Diagnostic (Payroll Outcomes Layer)
SAP ECC5 + Workbrain implementation and configuration	78,000 of 85,000 staff received incorrect pay at go-live
Payroll system modernisation replacing LATTICE (end-of-support 2008)	35,000+ payroll anomalies; 8 months to clear backlog
Payroll processing for 85,000 staff under 12 industrial awards	1,000 additional staff required to manually process fortnightly pays
1,507 SAP customisations + 1,029 Workbrain customisations	2,422 known defects at go-live; high-severity errors not resolved
Ongoing system support post go-live	IBM released from liability by 2010 agreement; state lost subsequent lawsuit

IBM delivered a payroll system. GL measures whether 85,000 Queensland Health workers received accurate, timely pay. These are not the same thing. The Commission called the failure 'the worst in Australian public administration.' The denominator was never measured.

REFORM SCENARIO SIMULATION

Scenario	Intervention	Simulated GL	GL Gain
Current	System stabilised after A\$1.2B; IBM released from liability; state received no compensation	0.037	Baseline
A	Mandatory full parallel payroll run (100% of employees, all pay combinations) before go-live. Fs 0.22→0.75. GL=(0.75x1.5)/(3.0x3.0)=0.125	0.125	+238%
B (Recommended)	Scenario A + zero high-severity defect gate + independent SI capability verification + payment escrow. Pd→2.0x, Cf→2.0x, Fs→0.88. GL=(0.88x1.5)/(2.0x2.0)=0.330	0.330	+792%
C (Estonia-comparable)	Pre-documented pay rules for all combinations + phased rollout by award group + independent GL certification per phase. Fs→0.96, Pd→1.3x, Cf→1.5x	0.738	+1,895%

Scenario B requires no new technology and no new vendor. It requires denominator design: measuring whether workers receive correct pay before the legacy system is decommissioned.

STRUCTURAL RECOMMENDATIONS

#	Recommendation	Target Variable	Expected Impact
1	Mandatory complexity audit before contract award: total pay combination count, award complexity, and customisation estimate independently verified. Scope fixed before go-live date is set.	Cf — complexity control	Prevents the 2-week scoping failure: 24,000 pay combinations require months of requirements analysis, not weeks.
2	Zero high-severity payroll defect gate at go-live. Severity classification validated by an independent party, not the SI or the client project team.	Fs — go-live readiness	Prevents the core failure: going live with 2,422 known defects including high-severity payroll errors.
3	100% parallel payroll run across all employee groups, all pay combinations, all awards — independently audited — as mandatory go-live criterion. A\$1.2M discrepancy in 10% test should have stopped the project.	Fs + Pd — payroll accuracy	The pre-go-live tests were incomplete. Full parallel run is the only way to validate 24,000 pay combinations before cutover.
4	Mandatory SI reference verification: demonstrated successful delivery of equivalent-complexity payroll system, independently confirmed. IBM Australia had no prior experience at this scale.	Cf — vendor capability	Prevents first-time-at-scale delivery failure. Unverified capability claims must disqualify vendors from complex payroll contracts.
5	Payment escrow: 40% of SI fees released only upon independent GL certification at 3 and 12 months post go-live. Vendor cannot leverage service dependency to negotiate liability release while system is still failing.	Pd — financial accountability	Prevents the 2010 liability release: Queensland signed away damages while IBM's system was still producing mass payroll errors.
6	Real-time GL monitoring dashboard: track Fs (payroll accuracy rate), Pd (correction processing time), and Cf (defect count by severity) weekly during stabilisation period — published to Queensland Auditor-General.	Fs — continuous governance	Converts GL from one-time diagnostic to continuous accountability instrument. Mass payroll failure should trigger automatic escalation, not months of silence.

METHODOLOGY NOTE

GL scores computed using $GL = (Fs \times Vn) / (Pd \times Cf)$. All input values derived from publicly available sources: Queensland Health Payroll System Commission of Inquiry — The Hon Richard Chesterman AO RFD QC (31 July 2013); KPMG Queensland Health Payroll Implementation Review Interim Report Stage 2 (18 May 2010); KPMG Review of the Queensland Health Payroll System (31 May 2012); Queensland Auditor-General's Report 2010; IEEE Spectrum reporting (2013); Henrico Dolfing case study analysis; Payroll Experts Australia witness account; Wikipedia case record (verified 2025). This is an independent structural assessment — not a political statement. No internal system access required. Delivery timeline: 2 weeks.

The GL Framework is published in PA Times (ASPA, March & April 2026) and SSRN (abstracts 6050695, 6178024, 6242658). Validated across 18 systems in 14 countries.