Illustrative example. Norval Components is a fictional company. The people, situation and figures are invented to show the format and depth of a Sprint deliverable. They are not a real client result.

One illustrative case: a manufacturer weighing a €1.6M ERP/MES replacement. The same method applies to any significant system.

ARCHITECTURE & AI SPRINT · DECISION DOCUMENT · ILLUSTRATIVE

Norval Components: should we commit €1.6M to a new ERP and MES?

Prepared for: Board of Directors | Sprint: 2 weeks | Version 1.0 · Final | Classification: Board confidential (fictional)

11 min read

1. Decision on a page

Decision requested: Approve a €1.6M ERP + MES replacement (vendor quote, 24–30 months).

Our recommendation: **Don't approve it now.** Approve a €380k–€520k staged programme instead: a data and integration layer, shop-floor data capture and two targeted AI use cases. Re-decide the ERP at month 15 using real data.

CAPITAL DEFERRED **€1.0M–€1.3M** not committed now	3-YEAR TCO VS. REBUILD **€0.8M–€1.6M lower**
TIME TO FIRST VALUE **12 weeks** (live shop-floor dashboard, plant 1)	FIRST GO/NO-GO GATE **Month 5** no more than €300k committed before Gate 1
CONFIDENCE **Medium–high** Main uncertainty: ERP vendor API support, to be confirmed in week 1	

All figures are illustrative ranges for a fictional company. All figures are planning estimates from a 2-week review, with an accuracy of ±20–30%, to be refined at each gate.

3. Options compared

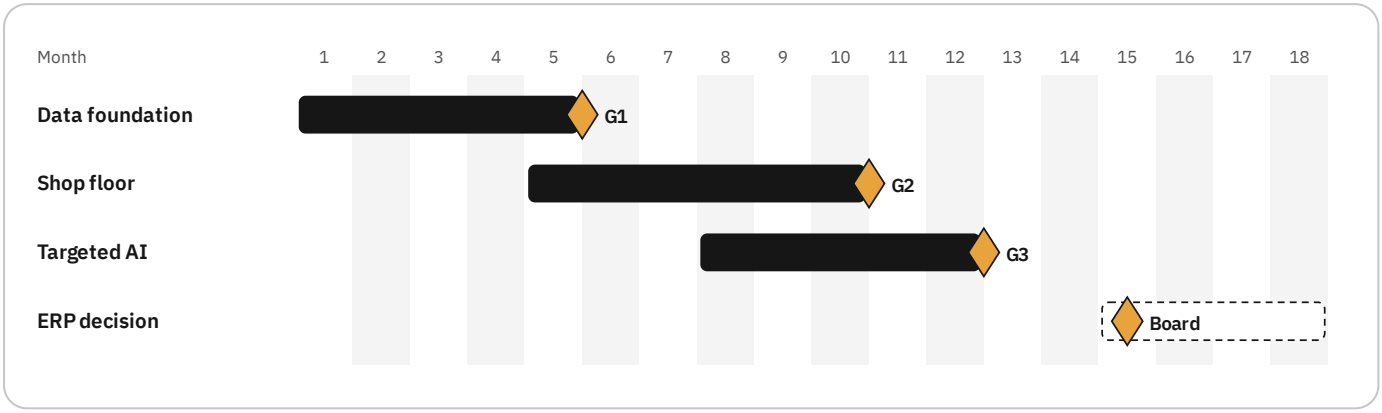
Scores run from 1 (poor) to 5 (best). A higher score is always better, so “Risk 5” means lowest risk.

Criterion (weight)	A. Full ERP + MES replacement	B. Keep everything, add AI on top	C. Data layer + shop-floor data + targeted AI (recommended) RECOMMENDED
Cost (25%)	**1** ■□□□□ €1.4M–€1.8M capex	**5** ■■■■■ €150k–€250k	**4** ■■■■□ €380k–€520k
Time to value (20%)	**1** ■□□□□ 18+ months	**4** ■■■■□ 3–4 months	**4** ■■■■□ 12 weeks
Delivery risk (25%)	**1** ■□□□□ two-plant cutover	**3** ■■■□□ low build, weak results	**4** ■■■■□ staged, gated
Lock-in (15%)	**2** ■■□□□ single vendor suite	**3** ■■■□□ AI tied to legacy data	**4** ■■■■□ owned data layer
AI leverage (15%)	**3** ■■■□□ later, after go-live	**2** ■■□□□ AI on dirty data	**5** ■■■■■ clean data by month 5
Weighted score	**1.5**	**3.6**	**4.2**

How we scored: each option is rated 1–5 on cost, time to value, delivery risk, vendor lock-in and AI leverage, weighted by what the board said matters most (cost and delivery risk 25% each, time to value 20%, vendor lock-in and AI leverage 15% each). Scores are judgements from the Sprint's evidence, not measurements.

> *B is cheaper but doesn't fix the data, so the AI underdelivers. A fixes everything, but too late and at too high a risk. C fixes the data now and keeps A as an option.*

5. Roadmap: 18 months, three phases, three gates



Phase	Months	What ships	Cost	Gate (go/no-go)
1. Data foundation	1–5	Integration layer, master data clean-up, live dashboard in plant 1 by week 12	€220k–€300k	**G1, month 5:** ERP integration stable; ≥90% of plant 1 machines reporting; part master ≥95% clean
2. Shop floor	5–10	Plant 2 roll-out, operator tablets, scrap and downtime reasons	€100k–€140k	**G2, month 10:** scrap reasons captured on ≥80% of shifts; baseline OEE agreed; machine data ready for phase 3 alerts
3. Targeted AI	8–12	Quote assistant (pilot with 3 estimators), quality alerts	€60k–€80k	**G3, month 12:** quote lead time ≤2 days on pilot; estimator acceptance ≥70%
ERP decision	15–18	Re-decide the ERP with 12 months of real data	Estimated then	**Board decision, month 15**

Total for phases 1–3: **€380k–€520k**. The phases overlap from months 8–10 by design. Phase 3 quality alerts depend on phase 2 machine data, checked at G2.

If G1 fails, stop. You've spent at most €300k, and the data clean-up is still worth having.