FACTORYHELM DATA READINESS PROGRAMME

Data readiness and AI value: start here

How to pick the AI use cases worth doing, get the data ready and prove the business case with the files in this programme

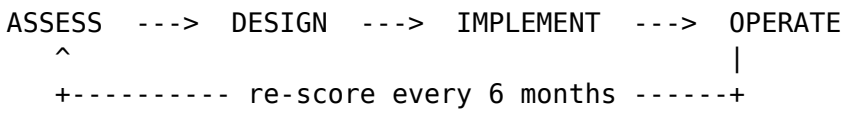
v1.1 (November 2026) | Worked example: Northbridge Components (fictional worked example)

Why this programme

Most industrial AI projects that fail, fail on data: no owner, no context, poor quality, or a failure history nobody recorded. This programme makes the choice of use cases explicit, checks the data behind them, puts owners and naming rules in place and builds a business case finance accepts, with a vendor selection that protects your data.

The method on one page

Phase	What you do
1. Assess	Score data readiness per source and use case; prioritise use cases on value, feasibility and risk.
2. Design	Name owners and stewards, agree naming and data contracts, define the pilot.
3. Implement	Select the vendor, run the pilot against the charter, fix the data gaps found.
4. Operate	Monitor data quality and model drift; reuse the data products across plants.



The files, in the order to use them

#	File	Phase	Who	Effort
1	AI Use-Case Prioritisation Matrix (Excel)	Assess	Head of Data + plant managers	half a day workshop
2	Industrial Data Readiness Assessment Workbook (Excel)	Assess	Data stewards	1-2 days
3	Data Catalogue and Tag Dictionary (Excel)	Design	Data stewards + OT engineers	1 day for the first use case
4	Industrial Data Governance Playbook (Word)	Design	Head of Data	1 day to adapt
5	Predictive Maintenance Business Case Workbook (Excel)	Design	Maintenance + Controller	1 day
6	PdM Vendor RFP and Scorecard (Excel)	Implement	Purchasing + Maintenance	1 day plus vendor demos

PdM asset ranking, pre-filled for three plants

From Predictive Maintenance Business Case Workbook (Excel), sheet "Asset Ranking". Worked example: Northbridge Components (fictional), three plants: Chemnitz (DE), Plzen (CZ), Greenville (US).

Asset Ranking

Last 24 months, averaged per year. Priority and shortlist are calculated. | FactoryHelm Predictive Maintenance Business Case Kit | factoryhelm.com | v1.1 (November 2026)

Asset	Plant / line	Unplanned downtime (h/yr)	Cost per downtime hour (EUR)	Downtime cost (EUR/yr, calc)	Reactive repair cost (EUR/yr)	Safety / quality consequence (1-5)	Detectability: measurable precursor (1-5)	Data available today (1-5)	Priority (0-100, calc)	Shortlist (calc)	Notes
Press P1 main drive and gearbox	Chemnitz / press shop	46	4,200	193,200	38,000	3	5	4	85	Shortlist	Bearing and gearbox wear; current and vibration available
Press P1 hydraulic unit	Chemnitz / press shop	22	4,200	92,400	15,000	3	4	3	57	-	Pump wear; pressure and temperature historised
Press P2 clutch and brake	Chemnitz / press shop	12	3,100	37,200	22,000	5	3	2	49	-	Safety-relevant: brake monitoring stays with OEM safety system
Transfer system P1	Chemnitz / press shop	31	4,200	130,200	9,000	2	2	2	46	-	Mostly jams and sensor faults: not a PdM case
Weld robots W2 (2x)	Chemnitz / weld	18	2,600	46,800	12,000	2	3	3	41	-	Reducer wear visible in torque
Paint oven burners	Plzen / paint	14	2,900	40,600	8,000	4	3	1	40	-	No historian data yet
CNC cell C4 spindles (3x)	Plzen / machining	64	1,800	115,200	54,000	2	4	3	63	Shortlist	Spindle bearing failures; spindle load available from CNC
Compressors (2x)	Plzen / utilities	6	900	5,400	7,000	1	4	2	30	-	Redundant; OEM monitoring contract exists
Heat treat furnace fans	Greenville / heat treat	20	3,500	70,000	16,000	3	4	2	50	-	Vibration retrofit needed
Cooling tower pumps	Greenville / utilities	9	1,200	10,800	4,000	2	4	1	30	-	