



SMART INDUSTRY READINESS INDEX

How to Prepare Your Facility for a Smart Manufacturing Assessment

A practitioner's blueprint: what data to gather, who to involve, and how to secure an accurate maturity score from your official SIRI assessment.

PREPARED FOR

Plant Managers, Operations Directors & Digital Transformation Leads — and the Certified SIRI Assessor onboarding call

FRAMEWORK BASIS

The LEAD and TIER frameworks, and how they turn a maturity score into a roadmap

DOCUMENT TYPE

Facility preparation blueprint & pre-assessment checklist

INTRODUCTION

Why Preparation Is Needed

01

Most facilities treat the SIRI assessment as an event — two days when a Certified SIRI Assessor walks the floor, interviews the team, and hands back a set of scores. That framing is the first mistake.

The assessment is not the two days on-site. It is the three to four weeks before, when your team decides which evidence exists, which stakeholders show up, and whether the facility's true operating reality will be visible to the assessor.

A well-prepared facility earns an accurate score — a defensible baseline for a multi-million-dollar roadmap. A poorly-prepared facility earns an optimistic one, then spends three years discovering the roadmap was built on a foundation that was never real.

This guide is the blueprint for earning the accurate score. It answers the three questions every preparation effort must resolve.

The assessment is not the two days on-site. It is the three to four weeks before.

The bottom line

Before you can prepare evidence, you must understand the exact rubric you will be measured against. That is where this guide begins.

Q1

What data do we gather?

Four evidence workstreams — Part 03

Q2

Who do we involve?

Eleven functions, 5–15 people — Part 04

Q3

Reality, not aspiration?

Evidence-based scoring — Part 05

WHERE THE SCORE IS ACTUALLY DECIDED



Figure 1
Preparation, not the site visit, determines score accuracy.

DECIDED BEFORE THE VISIT

Which evidence exists

DECIDED BEFORE THE VISIT

Which stakeholders show up

DECIDED BEFORE THE VISIT

Whether operating reality is visible

PART 02

Know the Rubric Before You Prepare

02

You cannot prepare effectively for a SIRI assessment if you do not first understand exactly what the framework measures. The single biggest cause of an inaccurate assessment is a team that self-assesses against what it *thinks* Industry 4.0 means, rather than against the precise architecture the assessor actually uses.

The framework is a three-layer structure: **3 building blocks, 8 pillars, 16 dimensions.**



3 **Building blocks**
Process · Technology · Organisation

8 **Pillars**
Three, three and two

16 **Dimensions**
Every one individually scored

Why the order matters

Using technology to digitise a poorly-designed process only produces a poorly-designed digital process. Process discipline is assessed first for a reason — do not let the assessment become a technology beauty contest.

Figure 2 — The three building blocks and eight pillars, with the scored dimensions each pillar carries. Read from the bottom up.

THE COMPLETE ASSESSMENT MAP

The 16 Dimensions

Every Official SIRI Assessment scores your facility across all sixteen. Every piece of evidence you gather and every stakeholder you assign should trace back to one of these cards.



The nine-cell grid where evidence goes missing

Each technology pillar — Automation, Connectivity, Intelligence — is assessed at three levels: Shop Floor, Enterprise and Facility. That three-by-three grid is where nine of your sixteen dimensions live, and it is where evidence is most often incomplete. **Assign owners to it first.**

Figure 3 — The complete 16-dimension assessment map, grouped by building block and pillar.

Nine of your sixteen dimensions live here. This is where evidence is most often incomplete.

Assign an owner to every cell in this grid before anything else in the evidence pack. These nine dimensions carry the technology half of your score, and they are the ones most often claimed without proof.

WHERE EVIDENCE GOES MISSING

The Technology Grid

Shop Floor

Enterprise

Facility

Automation

4 Shop Floor Automation

The degree and flexibility of automation in producing and handling goods on the shop floor.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

5 Enterprise Automation

The degree of automation in administrative processes such as sales, procurement and HR.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

6 Facility Automation

The degree of automation in building systems such as HVAC, chillers, security and lighting.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

Connectivity

7 Shop Floor Connectivity

How interconnected shop-floor equipment and systems are — by interoperability, security, real-time capability and scalability.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

8 Enterprise Connectivity

How interconnected enterprise and administrative systems are — on the same four criteria.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

9 Facility Connectivity

How interconnected the facility's building systems are — on the same four criteria.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

Intelligence

10 Shop Floor Intelligence

How far shop-floor data is analysed — from diagnosing deviations to predicting failures and adapting autonomously.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

11 Enterprise Intelligence

How far enterprise data is analysed — from diagnosing deviations to predicting and adapting autonomously.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

12 Facility Intelligence

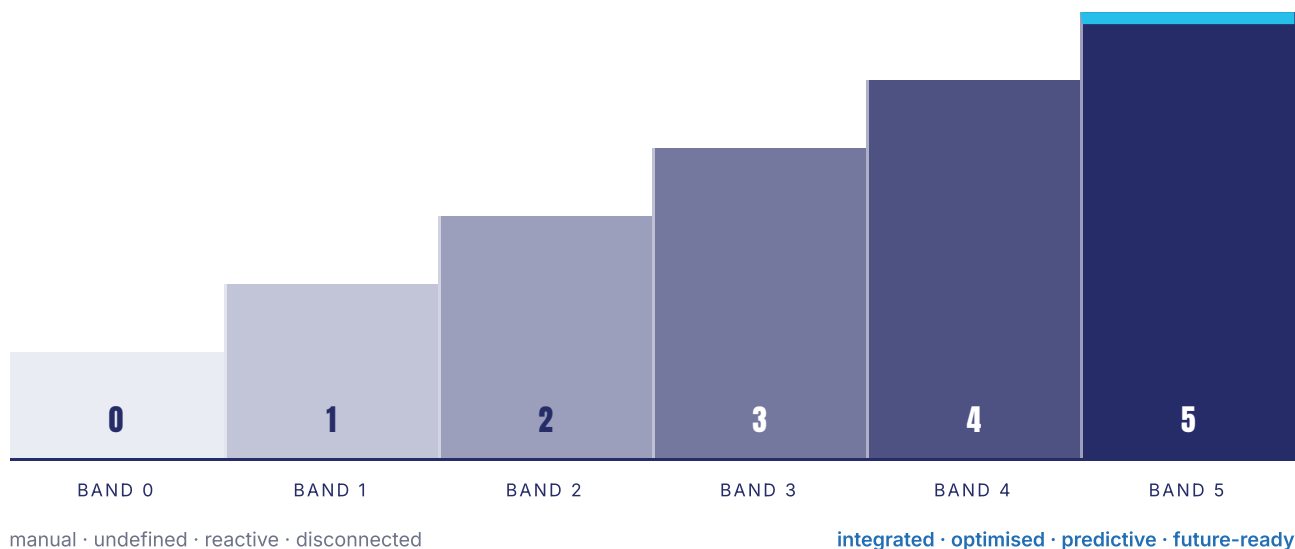
How far facility data is analysed — from diagnosing deviations to predicting and adapting autonomously.

OWNER
EVIDENCE HELD
GAPS TO CLOSE

Figure 4
The nine technology dimensions, as a worksheet. Assign an owner and confirm the evidence held for each card before the assessor arrives.

THE SCORING SCALE

Six Bands, Sixteen Dimensions



Every dimension has its own rubric

Each of the sixteen dimensions carries a detailed six-band description of what Band 0 through Band 5 looks like *for that dimension alone*.

Bands are matched, not felt

Your score is not a general impression. It is a specific match against specific, published criteria — which is why evidence cannot be talked upward.

There is no single, universal definition of ‘Band 3’. Each dimension has its own six-band rubric.

Each of the 16 dimensions is scored on a band from 0 to 5 — six ascending levels of maturity. Band 0 represents the lowest maturity: largely manual, undefined, reactive and disconnected. Band 5 represents the highest: fully integrated, optimised and, at the top end, predictive or autonomous — future-ready.

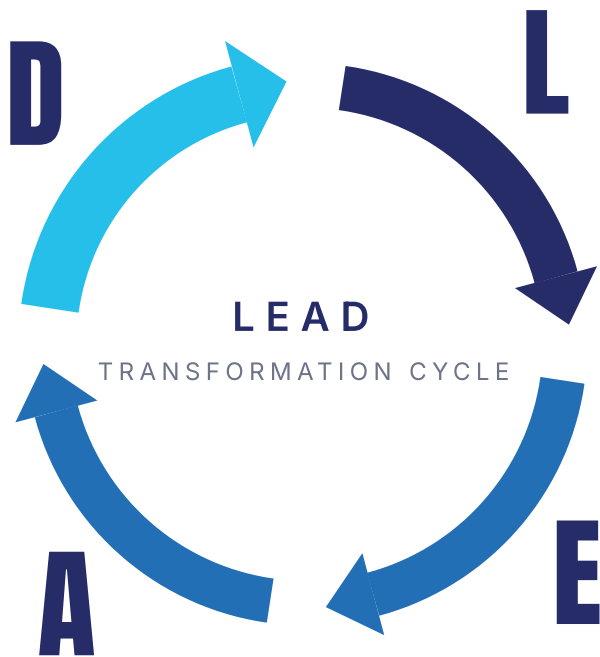
‘Band 4 Shop Floor Connectivity’ describes a very different reality than ‘Band 4 Leadership Competency’. Brief your team on the rubric for the dimensions they own, so the conversation on the day is about evidence rather than opinion.

Figure 5 — The six-band maturity scale, applied independently to each of the sixteen dimensions.

THE TWO FRAMEWORKS THAT TURN SCORES INTO STRATEGY

LEAD – The Continuous Cycle

You do not need to operate these frameworks during preparation, but you must understand them — because they dictate what data makes your eventual score useful.



L

Learn

Build a common language and a baseline understanding. This is your preparation phase.

E

Evaluate

The on-site assessment itself — walkthrough, interviews, validation workshop.

A

Architect

Design the prioritised transformation roadmap from the scored baseline.

D

Deliver

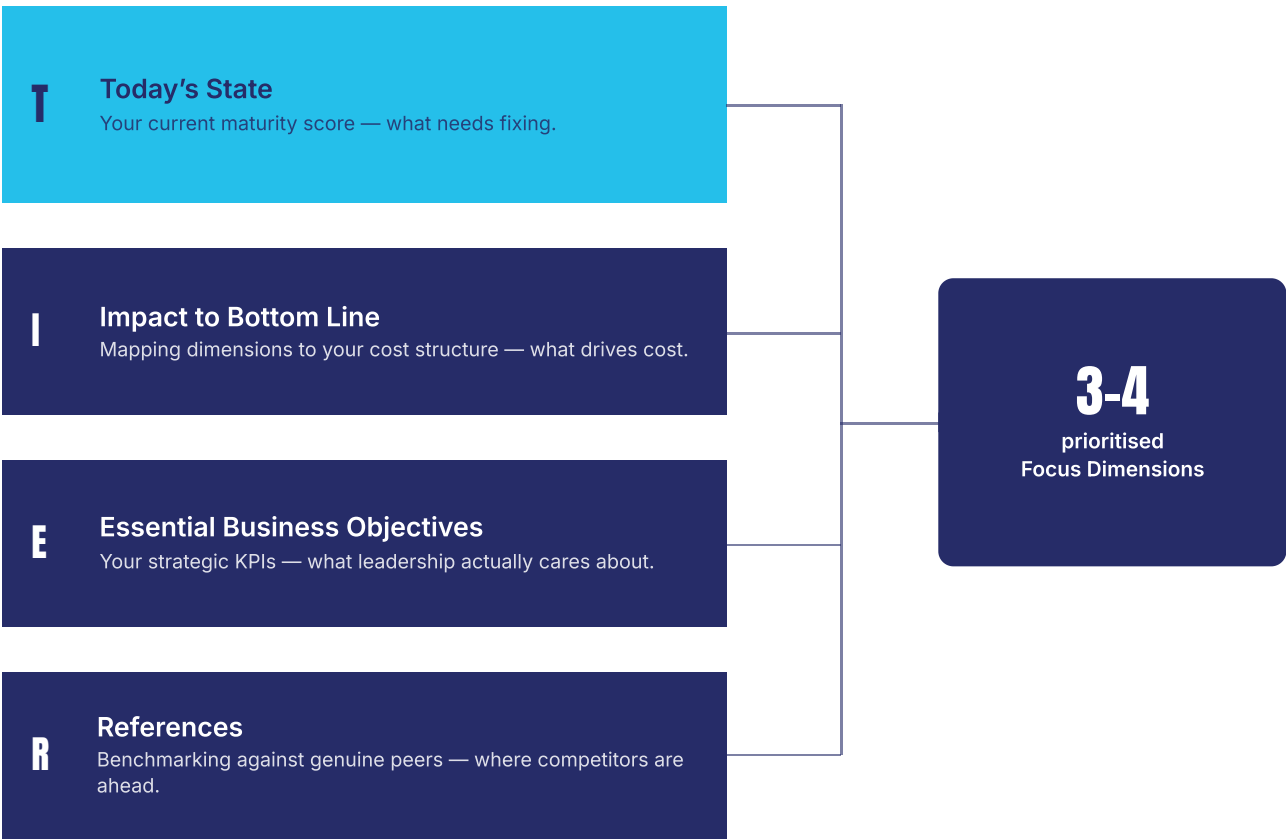
Execute, then loop back to Learn. SIRI is designed to be re-run.

SIRI is designed to be re-run. The cycle closing back to **Learn** is what turns a single assessment into a tracked transformation — and it is why the first baseline has to be true. Everything in Parts 03 to 06 of this guide sits inside that first **Learn** window.

Figure 6 — LEAD, the continuous four-step transformation cycle that structures the whole engagement.

PRIORITISATION

TIER – From Maturity to Priorities



▲ First input — accuracy here determines everything downstream.

Why this page matters during preparation

TIER turns SIRI maturity findings into transformation priorities. It takes **Today's State** as its first input, which is why an inflated score misdirects everything that follows it.

WHAT EACH INPUT NEEDS FROM YOUR PREPARATION PACK

T	I	E	R
The 16 scored dimensions	Cost profile information	Strategic KPIs	A genuine peer cohort
Your consensus bands — Parts 02 and 05	Gathered at T-3 weeks — Part 06	The EPIK baseline — Part 03	Benchmarking against comparable facilities

Figure 7 — TIER, the prioritisation framework that converts sixteen scores into three or four funded priorities.

ENTERPRISE PERFORMANCE IMPACT KPIS

Your KPIs are evidence. This is what each one is evidence of.

EPIK links maturity gaps to enterprise performance, translating performance-metric scores into operational and financial impact across five categories. The KPIs you gather in Part 03 are what make EPIK work.



ASSESSMENT RELEVANCE — WHAT EACH CATEGORY EVIDENCES

Operational Efficiency

Shows whether digital capability is translating into measurable operational performance. How the data is captured, integrated and analysed supports evidence for Shop Floor Connectivity, Shop Floor Intelligence and — where production data flows into enterprise systems — Vertical Integration.

Quality & Defects

Indicates whether quality is measured at source and acted upon. Automated in-line capture through machines, sensors or scanners supports Shop Floor Connectivity; systematic analysis, diagnosis and prediction demonstrates increasingly mature Shop Floor Intelligence.

Maintenance & Flow Reliability

MTTR shows how effectively equipment is restored after failure; condition and failure data supports Shop Floor Connectivity and Intelligence. Inventory turnover — and the planning, logistics and enterprise integration behind it — supports Horizontal Integration.

Resource Consumption

Energy metering linked to production activity supports Facility Connectivity and Facility Intelligence; automated utility control may support Facility Automation. Circularity evidences supply-chain integration and digital traceability.

Enterprise Agility

Lead time and capacity flexibility evidence Horizontal Integration and broader process agility. The implementation rate of team-initiated digital improvement ideas evidences workforce participation, collaboration and leadership support.

Pragmatic note. For each KPI document two things: the current value and trend, and the source system it comes from. Gather at least twelve months of trended data — not a single snapshot.

Figure 8 — The five EPIK categories and the dimensions each one supports evidence for.

PART 03

What Data to Gather

03

Preparation maps onto the **Learn** phase of LEAD — roughly three to four weeks before the on-site assessment. The goal is not more paperwork. It is the right evidence, owned by a named person.



3.1

Facility Context Pack

Where and what are we assessing?

- ☐ Organisational chart — facility and reporting lines into the enterprise.
- ☐ Assessment scope definition — the exact plant, building(s) and lines in scope.
- ☐ Plant layout / floor plans — material flow, equipment placement, area boundaries.
- ☐ Product families — categories, variance / complexity and volume mix.

OWNER DUE



3.2

KPI Baseline

What is the facility actually achieving?

- ☐ At least 12 months of trended data — not a single snapshot.
- ☐ Current value and trend for every KPI.
- ☐ The source system each KPI comes from.
- ☐ Documented data gaps, flagged honestly.

OWNER DUE



3.3

Technology & Systems Landscape

What is the digital backbone?

- ☐ Enterprise / business systems inventory — ERP (live vs. shelfware), PLM, APS, CRM, WMS.
- ☐ Manufacturing systems inventory — MES / MOM, SCADA, historians, LIMS, quality systems.
- ☐ Shop-floor control layer — PLCs, HMIs, CNC controllers, vintage and protocol support.
- ☐ Systems integration / interface map — real-time or batch, automated or re-keyed by hand.
- ☐ Network & OT infrastructure — plant topology, wireless coverage, IT/OT segmentation.
- ☐ Data & analytics tooling — dashboards, BI, predictive / ML use cases in production.
- ☐ Automation inventory — robots, cobots, AGVs / AMRs, automated inspection.
- ☐ Facility / building systems — BMS, energy monitoring, automated utilities.

OWNER DUE



3.4

Shop-Floor & Governance Documentation

What proves the capability exists?

- ☐ SOPs and work instructions for key processes.
- ☐ Maintenance strategy — reactive / preventive / predictive split, CMMS records, PM compliance.
- ☐ Sample live dashboards / control-room screens — or a live walkthrough plan.
- ☐ Digital transformation strategy & roadmap, if one exists.
- ☐ Workforce development records — training matrices, upskilling, competency frameworks.
- ☐ Governance artifacts — steering-committee charters, KPI review cadences, decision rights.
- ☐ Supplier / customer integration evidence — EDI, portals, collaborative planning records.

OWNER DUE

Do not over-assemble

SIRI is explicitly designed so that no sensitive operational or commercial data needs to be surrendered during the assessment — the assessor observes and validates evidence, they do not extract confidential datasets. Gather what proves capability; you are not building a data room for due diligence.

Figure 9 — The four evidence workstreams. Assign every line an owner and a due date.

PART 04

Who to Involve

SIRI is a facility-level, consensus-based assessment. Optimal group size is **5–15 participants** — too few and dimensions go unrepresented; too many and the workshop cannot reach genuine consensus.

THE CROSS-FUNCTIONAL STAKEHOLDER MATRIX — YOUR INVITATION LIST *AND* YOUR EVIDENCE-OWNERSHIP MAP

Plant / General Manager C-SUITE	16 · 14	Facility strategy, investment context, transformation vision. Sponsors the assessment.
Operations / Production Mgr SENIOR	1 · 4	OEE, cycle time, production reality on every shift, and other EPIK-related information.
Supply Chain / Logistics Mgr SENIOR	2 · EPIK	Supplier integration, lead time, inventory turnover, logistics flows.
Quality Manager SENIOR	3 · 10–12	First pass yield, scrap and rework, quality-system connectivity.
Engineering / Automation Eng. TECHNICAL	4 · 7 · 6	Shop-floor automation detail and control-layer architecture.
IT Manager (Enterprise) TECHNICAL	5 · 8 · 11	ERP and PLM landscape, enterprise integration map.
OT / Shop-Floor IT Manager TECHNICAL	1 · 7	MES, SCADA and historian architecture; the IT/OT integration reality.
Maintenance Manager SENIOR	6 · 9 · 12	Maintenance strategy, logbooks and records, MTTR, CMMS records.
Facility / Building Manager SENIOR	6 · 9 · 12	BMS, energy monitoring, utilities automation.
HR / People & Capability Lead SENIOR	13 · 14	Training matrices, upskilling programmes, competency frameworks.
Digital Transformation Lead CROSS-FN	16 · 15	The transformation roadmap and the single-source-of-truth narrative.

Facility Consensus Score

All sixteen dimensions, validated collaboratively and in the open

Numbers in each chip are the dimensions that function is the primary evidence source for. Assign a named individual to every row before the T–4 week mobilisation call.

Figure 10 — The cross-functional stakeholder matrix, colour-coded by seniority band.

THE BOARDROOM DESCRIBES

WHAT LEADERSHIP BELIEVES IS RUNNING

REAL-TIME INTEGRATION

'ERP and MES are integrated in real time.'

DEPLOYED CAPABILITY

'The line is automated, connected and running.'

STRATEGY IN PLACE

'The digital transformation roadmap is in place.'

1

2

3

The gap the collaborative validation workshop exists to close

THE SHOP FLOOR LIVES IN

WHAT THE OPERATORS WORK WITH EVERY DAY

WHAT THE ASSESSOR FINDS

Production numbers are re-keyed into a spreadsheet at the end of every shift.

WHAT THE ASSESSOR FINDS

It runs on one line, on the fully-staffed day shift. Nights and weekends look different.

WHAT THE ASSESSOR FINDS

The roadmap is a document. Execution against it has not started.

THE FAILURE MODE TO DESIGN AGAINST

Boardroom versus Shop Floor

Assessment accuracy depends on getting the right cross-functional people into the structured interviews and the collaborative validation workshop — and no more than the framework recommends. The 'boardroom versus shop floor' gap is where leadership describes the facility it *wants* and the operators describe the facility that *is*. The stakeholder matrix exists to force those two realities into the same room.

Structured interviews

Dimension-by-dimension, with the relevant function. Depth beats breadth — interview the Maintenance Manager on maintenance topics, not the Quality Manager.

Collaborative validation workshop

The whole cross-functional group validates the emerging scores together, in the open. This is where consensus is forged.

Pre-assign an internal coordinator

One person — typically the Digital Transformation Lead — owns the stakeholder matrix, the evidence pack and on-site logistics. Without a single owner, evidence arrives fragmented and the assessor's time is wasted chasing it.

Figure 11 — The failure mode the stakeholder matrix is designed against.

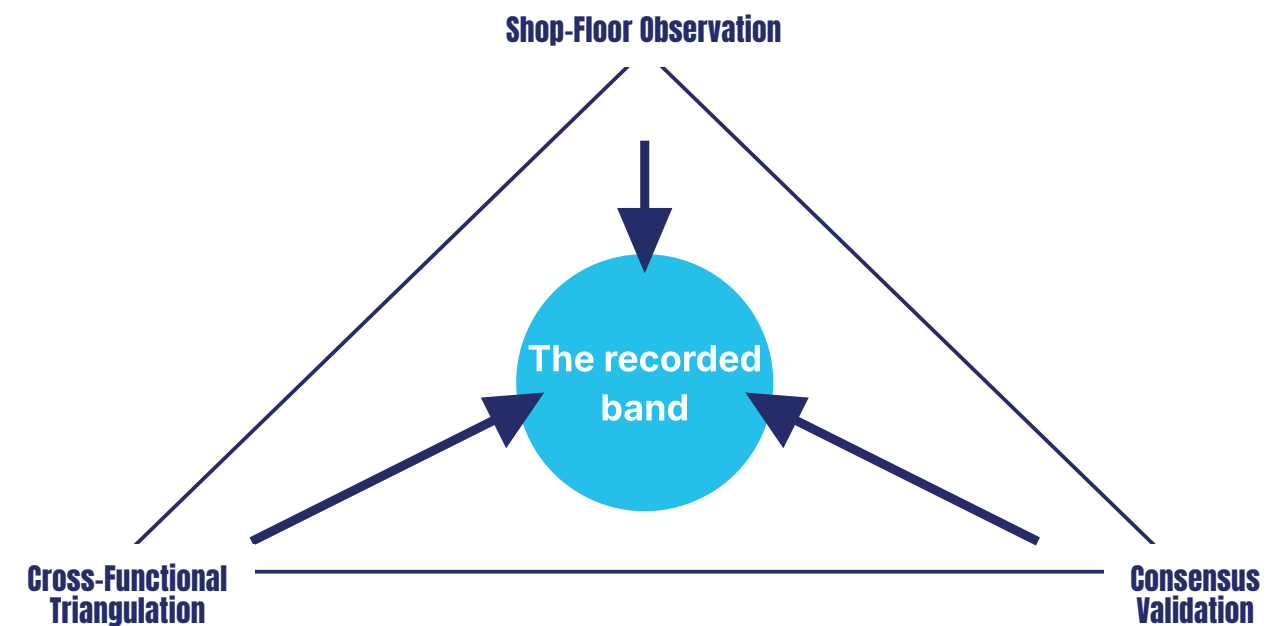
We are not being graded. We are being measured. An accurate measurement is the most valuable thing we can leave this room with.

PART 05

How to Get an Accurate Maturity Score

05

An accurate score is not the highest score. It is the true one — the band each dimension genuinely meets, evidenced and defensible. For each of the 16 dimensions the assessor does not ask ‘how good do you feel you are?’ A band is awarded when the facility **demonstrably meets the published criteria** — not when a stakeholder asserts it. Three mechanisms enforce that.



Shop-floor observation

The assessor walks the floor and audits the technology. A claim of ‘Band 4 Shop Floor Connectivity’ is checked against what is installed, running and integrated — on every shift, not just the demo line. This is why observation cannot be replaced by a questionnaire.

Cross-functional triangulation

The same capability is discussed with multiple functions. When IT claims real-time ERP-MES integration but Operations still re-keys production numbers into a spreadsheet at end of shift, the discrepancy exposes the true band.

Consensus-based validation

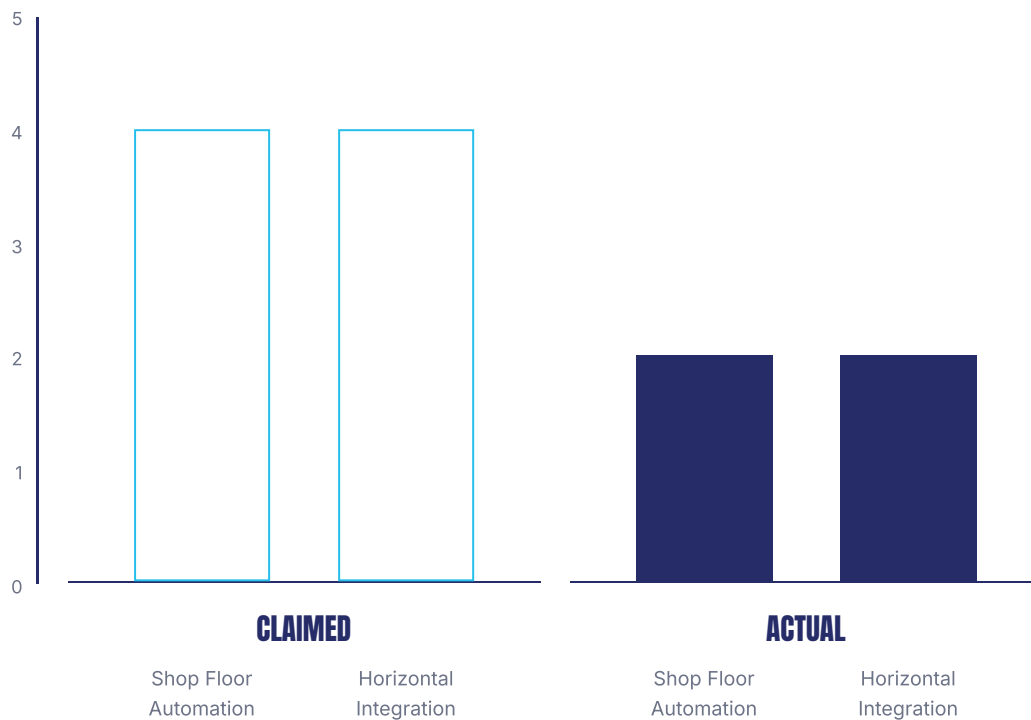
Scores are validated collaboratively, in the open, against evidence. A band one department wants to claim must survive the scrutiny of the others who live with the same systems.

Brief every participant on evidence-based scoring before the visit — it is a T-1 week item on the checklist in Part 06. A team that understands how bands are awarded stops arguing for a band and starts producing the evidence for one.

Figure 12 — The three mechanisms that enforce score accuracy.

WHY TRANSPARENCY BEATS OPTIMISM

The Inflation Trap

**Figure 13**

The inflation trap. **Illustrative** — the bands shown are the worked example described below, not benchmark data.

CAPEX follows the claim

Advanced robotics is green-lit against an inflated Shop Floor Automation band — and then sits idle, waiting for parts.

The real bottleneck goes untouched

Horizontal integration — the dimension actually holding the facility back — is never funded. Materials keep arriving late.

The temptation to ‘present well’ is the single greatest threat to score accuracy, and it is self-defeating. TIER uses **Today’s State** as its first input. If Today’s State is wrong, TIER points your CAPEX at the wrong dimensions, and you invest millions solving a problem you do not have while the real bottleneck stays broken.

The classic failure: a facility inflates its Shop Floor Automation score, so the roadmap green-lights advanced robotics — while the true bottleneck in horizontal integration goes untouched. Materials keep arriving late; the expensive robots sit idle waiting for parts.

An inflated Band 4 that is really a Band 2 does not give you a better facility — it gives you an inaccurate roadmap. A low band is not a failure. It is a funded opportunity.

BRIEF YOUR TEAM

Six Scoring Pitfalls

Each of these produces a band the facility cannot defend. Walk the group through all six before the assessor arrives.



01

The Pilot Mirage

WHAT HAPPENS

A promising pilot on one line is presented as a facility-wide capability.

HOW TO PREVENT IT

Only claim what is deployed and sustained across the facility and all shifts. Have evidence of scale.



02

The Best-Case Shift

WHAT HAPPENS

Capabilities that exist only on the fully-staffed day shift.

HOW TO PREVENT IT

Prepare data and interviews that reflect every shift, including nights and weekends.



03

The Aspirational Roadmap

WHAT HAPPENS

The strategy document is scored as if it were execution.

HOW TO PREVENT IT

Separate what is planned from what is running. Governance rewards execution, not slideware.



04

The Single-Voice Score

WHAT HAPPENS

One confident senior leader sets a band no one else validates.

HOW TO PREVENT IT

Insist on cross-functional triangulation. Let OT and shop-floor voices speak on technical dimensions.



05

The Hidden Manual Step

WHAT HAPPENS

An 'integrated' data flow that secretly relies on a manual re-key.

HOW TO PREVENT IT

Map every integration honestly, including the manual bridges. The assessor will find them anyway.



06

Technology Equals Maturity

WHAT HAPPENS

Owning advanced equipment, software, robotics, AI or MES is assumed to translate into a high band.

HOW TO PREVENT IT

Score the capability the technology creates — its coverage, integration, use and operational impact.

Figure 14 — Six common scoring pitfalls — what happens, and how to prevent it.

PART 06

The Pre-Assessment Preparation Checklist

Master control document for the 3–4 week Learn window.
Assign an owner and a due date to every line.

LEARN · 3–4 WEEKS

EVALUATE · ON-SITE

1

T-4 Weeks SCOPE & MOBILISE

- ☐ Confirm assessment scope — plant, buildings, lines — with the Certified SIRI Assessor. OWNER DUE
- ☐ Appoint the internal assessment coordinator (usually the key contact person). OWNER DUE
- ☐ Build the stakeholder matrix; secure calendar commitments from all 5–15 participants. OWNER DUE
- ☐ Distribute the Official SIRI Global Whitepaper and the 16-dimension map to all participants. OWNER DUE

2

T-3 Weeks GATHER CONTEXT & SYSTEMS

- ☐ Compile the Facility Context Pack (3.1): layouts, product families, org chart. OWNER DUE
- ☐ Prepare the facility's technology and systems landscape (3.3). OWNER DUE
- ☐ Gather cost-profile information (e.g. raw-material cost proposition). OWNER DUE

3

T-2 Weeks ASSEMBLE THE KPI BASELINE

- ☐ Compile 12-month trended KPIs across all five EPIK categories (3.2). OWNER DUE
- ☐ For each KPI record value, source system and calculation method (auto / semi / manual). OWNER DUE
- ☐ Flag data gaps honestly — a documented gap is itself accurate evidence. OWNER DUE

4

T-1 Week EVIDENCE & REHEARSAL

- ☐ Assemble shop-floor and governance documentation (3.4). OWNER DUE
- ☐ Plan the walkthrough route so the assessor sees real, running operations across shifts. OWNER DUE
- ☐ Brief all participants on evidence-based scoring, the inflation trap and the 'measured, not graded' mindset. OWNER DUE
- ☐ Confirm on-site logistics: rooms, floor access, PPE, shift coverage during the visit. OWNER DUE

On-Site EVALUATE · ~2 DAYS

- ☐ Facility walkthrough and technology audit. OWNER DUE
- ☐ Dimension-by-dimension structured interviews. OWNER DUE
- ☐ Collaborative validation workshop → consensus scores across all 16 dimensions. OWNER DUE

Figure 15 — The pre-assessment preparation checklist, mapped onto the Learn and Evaluate phases of LEAD. **Tear-out:** print this page separately and add the facility name and assessment date.

PART 07

What an Accurate Score Unlocks

07

Preparation is not paperwork for its own sake — it is what converts the assessment output from a certificate into a strategy. When your 16-dimension score is accurate, four things become possible. An inflated score forfeits all four.

AN ACCURATE 16-DIMENSION SCORE

TIER

Prioritises CAPEX at the highest-impact dimensions, instead of the loudest ones

Misdirects investment

EPIK

Quantifies the financial upside of closing each gap, for a board-ready case

Quantifies a gap that isn't there

BENCHMARKING

Compares you against genuine peers, so leadership sees where competitors are ahead

Compares you to the wrong peers

LEAD

Re-runs in future assessments to prove transformation progress

Measures progress from a false baseline

WHAT AN INFLATED SCORE PRODUCES

That is the entire return on the three to four weeks of preparation this guide describes.

Figure 16 — What an accurate score unlocks — and what an inflated one produces instead.

An accurate score is not a verdict on your facility. It is the first honest measurement of it.

INTERNATIONAL CENTRE FOR INDUSTRIAL TRANSFORMATION · SMART INDUSTRY READINESS INDEX

Begin your assessment

Official SIRI Assessments are conducted by Certified SIRI Assessors. To scope an assessment for your facility, contact INCIT or visit incit.org.



incit.org



ABOUT INCIT

The International Centre for Industrial Transformation is the custodian of the Smart Industry Readiness Index — the framework behind the Official SIRI Assessment, the LEAD transformation cycle, the TIER prioritisation model and the EPIK performance-impact layer.