AI Data Readiness Checklist

Use this **10-point checklist** to identify data strengths, gaps, and next steps before introducing AI into your facilities operations.

TRANE TECHNOLOGIES

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1. Asset Data Completeness

Goal: Build an accurate, standardized record of every physical asset.

- All assets inventoried — no “ghost” or duplicate entries
- Unique IDs assigned consistently across systems
- Standardized attributes (make, model, serial, location, install date)
- Linked to the right space, department, and owner

2. Maintenance & Work Order History

Goal: Ensure you have the performance data AI needs to learn from.

- Historical work orders stored in a searchable format
- Standard cause and failure codes applied
- Preventive and corrective tasks tracked separately
- MTBF, MTTR, and cost data available

3. Asset Condition & Sensor Data

Goal: Confirm the availability and reliability of real-time performance data.

- Critical assets monitored through sensors or meters
- Data frequency, calibration, and units standardized
- Alerts tied to specific assets and logged automatically
- Condition data integrated with your CMMS/IWMS

4. Space & Environmental Context

Goal: Link assets to the spaces and environmental factors that impact performance.

- Up-to-date building and floor maps
- Environmental data (temperature, humidity, occupancy) accessible
- Energy usage tracked and attributed to zones or equipment
- Renovations or layout changes reflected in the system

5. Data Governance & Ownership

Goal: Assign accountability and enforce standards.

- Data owners defined for each domain (asset, maintenance, energy)
- Naming and data entry standards documented
- Routine audits scheduled and completed
- Change history or version control in place

6. System Integration & Interoperability

Goal: Eliminate silos to create a unified data ecosystem.

- IWMS/CMMS integrated with BMS, EAM, or ERP systems
- APIs or data connectors available for automation
- Manual data transfers reduced or eliminated
- Consistent asset hierarchy across platforms

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7. Workforce & Workflow Data

Goal: Capture the human and process factors AI can optimize.

- Technician skills, certifications, and labor hours logged
- Assignment and response times tracked
- Mobile tools in use for real-time data entry
- Workflows digitized (no paper or email-based requests)

8. Data Quality & Accessibility

Goal: Ensure the data feeding AI is accurate, complete, and usable.

- Missing or inconsistent fields identified and cleaned
- Duplicates removed regularly
- Data stored in structured formats (not PDFs or notes)
- Authorized users can easily export or report on data

9. Analytics & Insight Capability

Goal: Establish a baseline for reporting and trend analysis.

- Key metrics and dashboards already in use
- Data visualizations reviewed by leadership
- Teams comfortable interpreting performance metrics
- Historical trends available for at least 12–24 months

10. Security, Privacy & Compliance

Goal: Protect sensitive data while enabling responsible AI usage.

- Role-based access controls and permissions enforced
- Data encrypted and backed up
- Compliance with internal and external standards (e.g., HIPAA, ISO, NIST)
- Clear data retention and disposal policies

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