

# Position Description



Position Title	<b>Industry 4.0 Lead</b>
Position No	00087854
Delegation Level	006
Job Designation	Manager
Organisational Unit	Advance Digital Capabilities Ready for Growth
Work Centre	Brisbane
Position Type	Temporary
Rail Safety Worker	No
Medical Fitness Standard	Refer to relevant business instructions.
Performance Plan Type	Tech Professional Expert
Shiftworker	No
Classification (Range)	AS7 .1 - AS7 .4
Pay Scale Type	ASPT
Reports to Position	Initiative Owner (Digital)

## QUEENSLAND RAIL VALUES:

1 Queensland Rail - We do better together  
Treat others with respect - We appreciate everyone's contributions and differences  
Empower our people - We have confidence in our people  
Act Safely - We work safe, to go home safe  
Make a positive difference - We learn from today, to improve tomorrow

## Position Purpose

Drive the strategic adoption and technical integration of advanced Industry 4.0 technologies, including Industrial Internet of Things (IIoT), AI, machine learning, digital twins, and edge computing, into rail operations to bridge the IT-OT gap, optimising operational efficiency, enhancing predictive capabilities, and transforming decision-making processes through advanced solutions.

## Position Responsibilities

1. Lead the development and implementation of Industry 4.0 digital innovations, integrating technologies like AI, IIoT, cloud and edge computing, and digital twins into rail operations.
2. Oversee the convergence of IT and OT systems, ensuring the integration of automation, industrial control, and intelligent maintenance solutions.
3. Evaluate emerging technologies and provide strategic recommendations for their adoption within the organisation, aligning with the digital strategy.
4. Develop and maintain technical frameworks and standards for Industry 4.0 technologies, focusing on data governance and industrial connectivity.
5. Collaborate with multidisciplinary teams to architect and implement scalable digital solutions, from prototype development through to operational deployment.
6. Lead advanced data-driven initiatives, utilising AI and machine learning to optimise system performance, improve failure prediction, and reduce downtime through advanced analytics.
7. Design, develop and implement proof-of-concept models, prototypes and products to test and iterate emerging technology solutions.
8. Partner with key stakeholders, including business analysts and UX

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designers, to ensure technology solutions are aligned with business requirements, while maintaining a focus on system efficiency and user experience.

## **Additional Factors**

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;

## **What is the key selection criteria**

1. Extensive knowledge of Industry 4.0 technologies, including AI, IIoT, digital twins, and edge computing, and their application in rail operations.
2. High level of skill in integrating IT and OT systems, enabling seamless convergence of automation, industrial control, and predictive maintenance.
3. Extensive knowledge in evaluating emerging technologies and providing strategic recommendations to align with the organisation's digital transformation goals.
4. High level of skill in leveraging data-driven insights, utilising AI and machine learning to optimise system performance and improve predictive capabilities.
5. High level of skill in designing and testing new technologies to ensure their practical viability and alignment with organisational objectives.
6. High level of skill in collaborating with cross-functional teams, to deliver scalable and user-centric digital solutions.
7. Knowledge of and willingness to commit to and work within Queensland Rail's Value and Behaviours.

## **Pre-employment Checks:**

Not Applicable

## **Mandatory Qualifications (If not already held, I will gain these when in position)**

- 40007588 Wunya Induction
- 40001627 Building Emergency Procedures

## **Enterprise Qualifications (If not already held, I will gain these when in position)**

- 40009601 Code of Conduct Refresher
- 40013480 Fraud Awareness Induction
- 40006537 Rail Safety Awareness

## **Health, Safety and Environment Responsibilities**

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

## **Personal Protective Equipment needs:**

Refer to relevant business instructions.

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## **Safety Publications**

Refer to relevant business instructions.

### **Please Note:**

Queensland Rail has a random alcohol and other drug testing program.

Testing can occur anywhere, at any time, on any day.