

# Shemeer B.K

OT Digital Transformation Architect

Critical Infrastructure | Industrial Asset Lifecycle | Enterprise Data Strategy

## Portfolios, Profiles

- <https://www.linkedin.com/in/shemeerbk>
- <https://learn.microsoft.com/en-us/users/shemeerbk/>

## Core Expertise

- Industrial Digital Transformation & OT Modernization
- Asset Lifecycle Data Architecture
- Enterprise Operational Intelligence Systems
- Cloud Architecture (Azure ecosystem)
- Industrial Automation and Process Optimization
- Systems Integration and Secure Identity Architecture
- Data Platform Strategy and Governance
- Engineering Operations Leadership

## Contact

### Address

Singapore 439069

### Phone

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Industrial digital transformation architect with 14 years of experience bridging operational technology and enterprise systems across rail, aerospace, and manufacturing environments. Defines architecture strategies that improve asset reliability, reduce operational risk, and enable enterprise decision intelligence through data driven platforms. Proven record delivering multimillion dollar cost avoidance, OT modernization, and large-scale operational automation in highly regulated environments.

## Selected Impact Highlights

- Enabled SGD 8M cost avoidance through industrial equipment modernization and lifecycle optimization.
- Architected enterprise data platform connecting OT systems with enterprise analytics for rail engineering operations.
- Delivered operational automation reducing manual effort by over 90 percent across 300+ users.
- Led secure migration of legacy OT systems to cloud aligned with transport cybersecurity requirements.
- Designed industrial intelligence dashboards supporting real time defect monitoring and operational triage.

## Certifications & Professional Development

- Microsoft Certified: Azure Fundamentals
- Training Completed: DP-203: Data Engineering on Microsoft Azure (2022)
- Training Completed: AZ-204: Developing Solutions for Microsoft Azure (2024)
- Microsoft Applied Skills: Create and manage canvas apps with Power Apps (2025)
- Training Completed: Azure Data Engineer Associate, Microsoft Fabric DP-700 (2025)

## Work history

### Section Manager & Digital Transformation Architect

#### Engineering Systems and Operational Intelligence

*SMRT Corporation Ltd, Singapore (2022-11 – Current)*

- Defined digital transformation strategy and scaled engineering data capabilities aligned with operational reliability goals.
- Architected enterprise data platform connecting operational systems with enterprise analytics to enable engineering decision intelligence.
- Directed enterprise automation initiatives reducing manual workload by over 90 percent across risk management, inspections, and emergency response processes.
- Defined architecture and led delivery of engineering automation platforms that reduced data processing time from three days to two hours while strengthening identity and access governance.

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**WWW**

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## Education

Diploma in Mechatronics  
Engineering (2006-2008)

- Led the secure cloud migration of legacy OT systems, ensuring full compliance with stringent transport **cybersecurity** standards.
- Defined operational intelligence dashboards adopted across engineering teams for real time defect monitoring and operational triage.

### Principal Equipment Engineer – Industrial Systems Optimization & Reliability

*Rolls Royce Singapore Pte Ltd, Singapore (2018-09 - 2021-05)*

- Delivered SGD 8M cost avoidance by defining modernization strategy for critical industrial control systems.
- Reduced critical machine defects by 60% and improved overall equipment uptime by implementing a data-driven predictive maintenance program using Maximo and VBA automation.
- Engineered a novel wet sandblasting fixture that improved operational safety and generated SGD 56K in annual cost savings.

### Application Consultant / Technical Project Manager

*NCS Pte Ltd, Singapore (2017-08 - 2018-08)*

- Led delivery of smart estate digitalization program spanning 39 buildings, integrating operational building systems into a unified monitoring platform.
- Defined enterprise integration architecture connecting facility energy management systems with centralized operational intelligence platforms.
- Architected high availability data infrastructure enabling real time energy monitoring and fault analytics across distributed sites.

### Technical Specialist / Test Trainer

*Sciex Pte Ltd, Singapore (2013-02 - 2017-07)*

- Recognized with multiple Continuous Improvement Awards for architecting and delivering full stack operational systems supporting compliance, traceability, and workforce capability management