

# Note from the editor

*“We are not here to survive disruption. We are here to make waves.”*

*(Self-quotation from the keynote)*

In October, I had the honour to present a keynote at the SAlE35 conference. This highlighted a reality of our time: disruption is no longer an anomaly but the permanent operating environment for modern systems. Industrial Engineers, therefore, stand at a strategic frontier: uniquely equipped to design, govern, and evolve systems under persistent uncertainty.

The keynote examined recent shocks that reshaped industries and societies: the Cape Town “Day Zero” drought, the COVID-19 pandemic, chronic load shedding, the global shift to electric mobility, international tariff turbulence, and the rapid rise of AI. Each exposed systemic fragilities across infrastructure, supply chains, governance, and human capital. Yet each also revealed that crises can accelerate innovation when systems are designed to adapt.

This is the new mandate for Industrial Engineering. Beyond efficiency and optimisation, our discipline now centres on **resilience, adaptability, and ultimately anti-fragility**, i.e., systems that improve under stress rather than merely withstand it. Recovery is no longer enough; the goal is learning, evolution, and transformation.

South Africa illustrates this vividly. Water scarcity prompted new behavioural and technological systems; the energy crisis catalysed decentralised generation and microgrids; global disruptions forced supply chain redesign; AI created both capability and ethical tension. In each scenario, Industrial Engineers are essential to reconciling complexity, data, technology, and human behaviour into coherent redesign.

For this journal, this calls for intensified scholarship in adaptive systems, sustainable energy and mobility, AI-integrated operations, crisis analytics, and socio-technical redesign shaped by South African realities. Our historical roots show that Industrial Engineering has always evolved through change. Industrial Engineers must lead in designing tomorrow by shaping systems that thrive in uncertainty and strengthen through it.

This edition has a total of 15 articles, with 8 articles from authors with South African connections and the balance from international authors.

If you have suggestions on how we can take this journal forward, please let me know.

Corne Schutte  
Editor