

1. AUTOMATION IN ACTION: REAL-WORLD SUCCESSES & CHALLENGES IN CONTAINER TERMINALS

- How does automation processes & equipment boost port and terminal competitiveness?
- Greenfield vs Brownfield automation & what are the key considerations when upgrading running container terminals?
- Applications of AI-based technology for automation
- Striking a balance: Global port automation & the future of port labour
- What needs to be considered once the automation process is complete? (Maintenance, measuring ROI over time etc)

2. AI / ML: LESSONS LEARNT & FUTURE DIRECTIONS

- The tangible benefits, the applications & lessons learnt from utilising AI in ports and terminals
- AI integration: how can it support current systems instead of being an isolated addition?
- Addressing the human aspect behind AI adoption (training, a cultural change and management)
- How does AI improve the interaction and touch points between the carrier and terminal operator?
- AI's role in driving sustainability in the container terminal industry
- The importance of high-quality data when integrating AI solutions

3. THE CONNECTED TERMINAL & BEYOND: TECHNOLOGIES ENHANCING SEAMLESS VISIBILITY

- Which digital tools can provide visibility across the terminal & to other stakeholders?
- What requirements & digital infrastructure does a port/terminal operator need for these digital tools to function properly?
- The crucial role of high-quality data and how can it be utilised
- How does enhanced visibility translate into measurable improvements for the port/terminal?
- Examples of technologies & systems enhancing visibility: TOS systems, the digitalisation of berth & vessel scheduling, digital twin modelling, OCR applications improving operational visibility etc.

4. THE NEXT GENERATION OF CARGO HANDLING: OPTIMIZING CONTAINER TERMINAL THROUGHPUT & CAPACITY

- How can the equipment optimize terminal throughput and increase storage capacity at a terminal?
- What business, technical & infrastructure considerations need to be made when selecting the right container yard solution (changing business requirements, fluctuations in demand, and evolving market dynamics etc).

- Measuring the ROI of cargo handling equipment: What are the KPIs and benchmarks?
- Balancing sustainability with efficient operations: What cargo handling equipment can facilitate this?
- Optimizing container throughput and capacity through horizontal & intermodal transportation

5. ENERGY TRANSITION & CLEAN TECHNOLOGIES

- Transitioning from diesel-powered equipment to battery-electric alternatives & the challenges of electrification in container terminals
- Design & manufacturing processes for green equipment
- Energy diversification: alternative sources of power for port equipment
- Infrastructure/charging solutions to power cargo handling equipment & vehicles
- The challenges & opportunities of shore power for ports & how can it be upscaled across the world?
- Technologies to track, control & report emissions

6. EQUIPMENT MAINTENANCE & ASSET MANAGEMENT

- What smart tools, infrastructure & best practices are required to enhance equipment maintenance in container terminals?
- Reactive maintenance vs predictive maintenance
- Measuring the ROI of smart equipment monitoring tools
- The role of AI in predictive maintenance
- Examples of technologies: to measure equipment exhaustion, extend the use of life equipment, predictive maintenance, asset management strategies

7. SAFETY IN THE TERMINAL OPERATIONS*

- What are the practical benefits of investing in new safety technologies in ports and terminals?
- How can collaboration between technology providers and terminals facilitate safer port operations?
- Measuring the value of integrating safety technology: What are the KPIs?
- How can different safety technologies and systems interact with each other within the port ecosystem?