What happens during shutdown, reopening, and what we can test

Analysis of CTCT operating instructions and response patterns.
A Lean management perspective on disruptive event mitigation

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LEAN INSTITUTE AFRICA

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Who we are

- Established in 2008 as a centre of excellence, operating as a **specialized unit within the UCT Graduate School of Business**
- We are the **only African member of the Lean Global Network**, comprising more than 30 institutes globally.

Who we work with

- Manufacturing operations
- Supply chain & logistics
- Hospitals
- Public service systems

What we specialize in

- Optimizing material and information flows across complex systems
- Designing operating rules that mitigate operating disruption
- Training and developing people's capability to solve problems

Our clients include:

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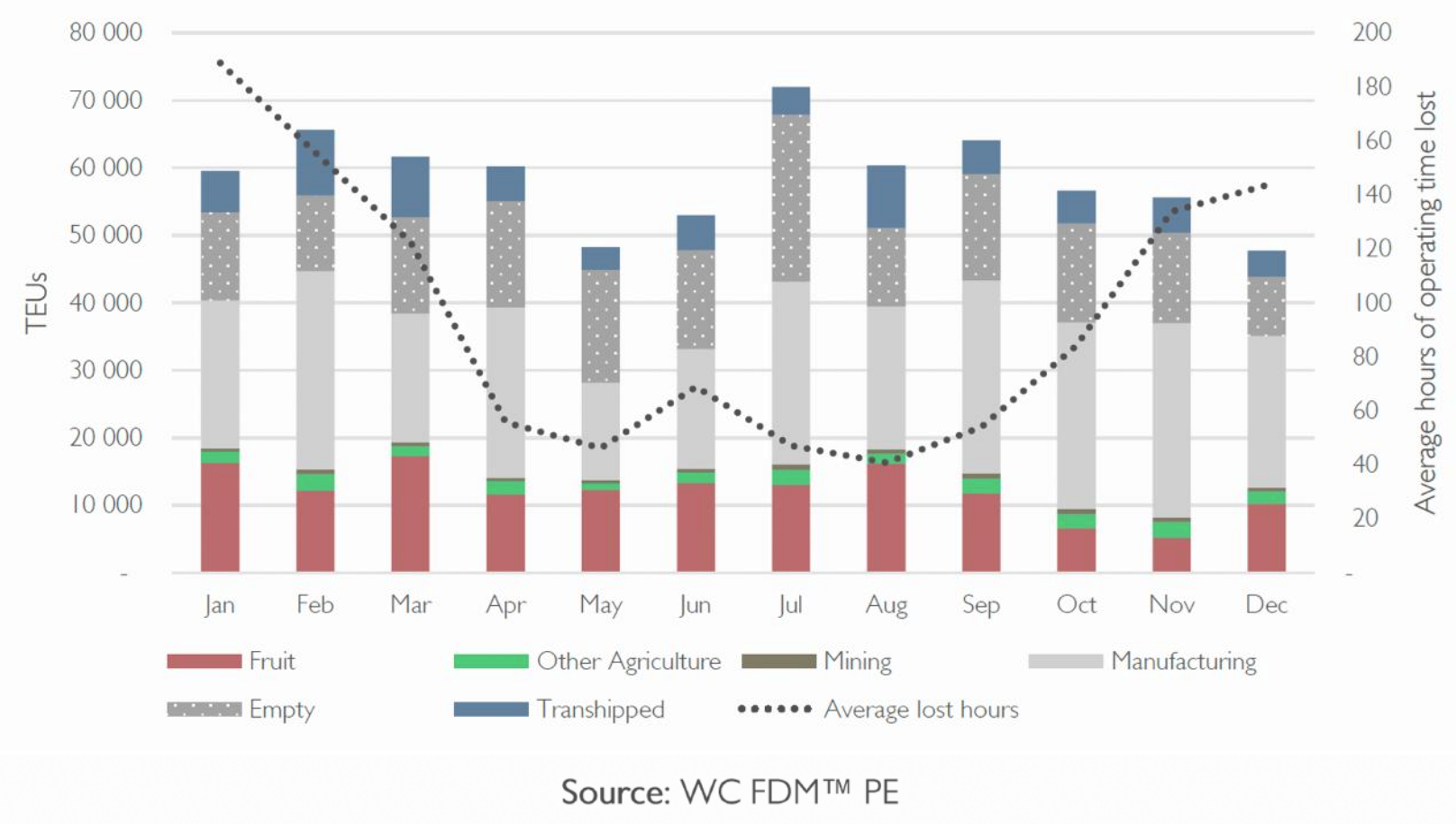
Disruptive event mitigation

The port faces two primary problems…

- Wind closes the port
- After reopening, the terminal becomes congested

The terminal follows a repeating, seasonal pattern

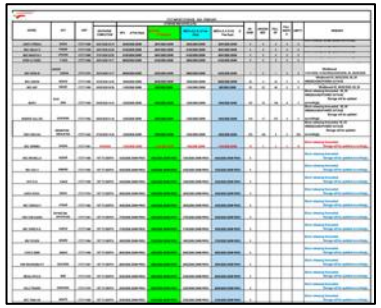


Source: WC FDM™ PE

This is not occasional. It is the normal operating pattern.

When the terminal reopens, three signals go into the system:

1. Export stacks open
(Arrivals into terminal)



2. Imports release
(Departures from terminal)

10 February 2026

Dear Valued Customer

The terminal is still windbound since 09/19H41.

Post-windbound recovery the below will apply:

- 2 hours after operational start-up, the terminal will only allow **Reefers** (imports and exports) **and Import MTY's** (no Full imports or Export GP's).
- 4 hours after operational start-up, the terminal will allow all exports, imports, full and empty containers.

NB: All transporters are to ensure that trucks have valid appointments before dispatching trucks to the terminal.

Vessels alongside
Maersk Vallvik – Working
CMA CGM Kribi – Working
MSC Hermes – Working

Current Stack Status:

Reefer stack occupancy – 63%

Hitstack stack occupancy – 29%
General stack occupancy – 30%

Full Import Reefers – 8 units

3. Recovery notice
(Operating permissions and forecast)

Terminal gate / yard

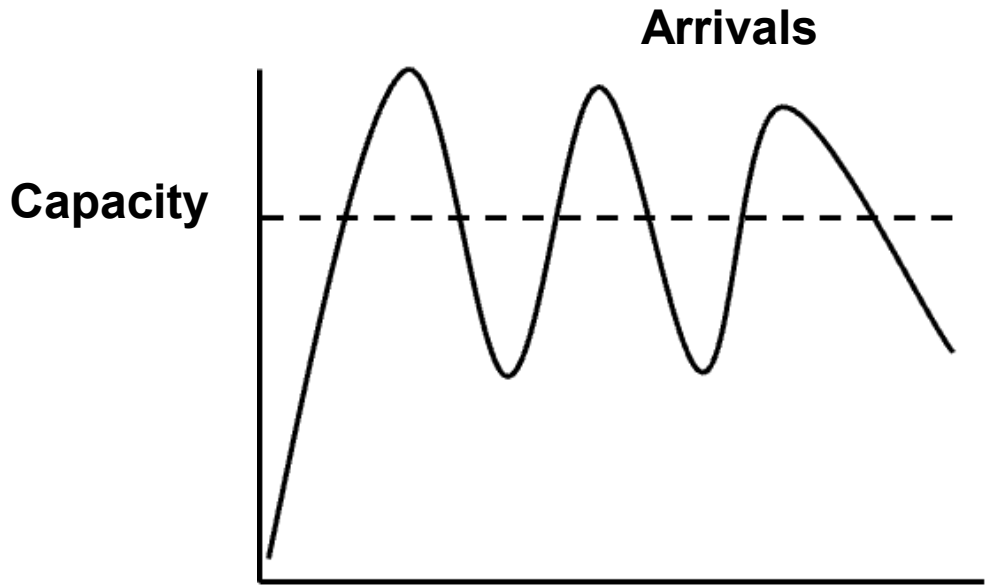
The current system gives permission, but not sequence.

Cargo returns in waves, not flow

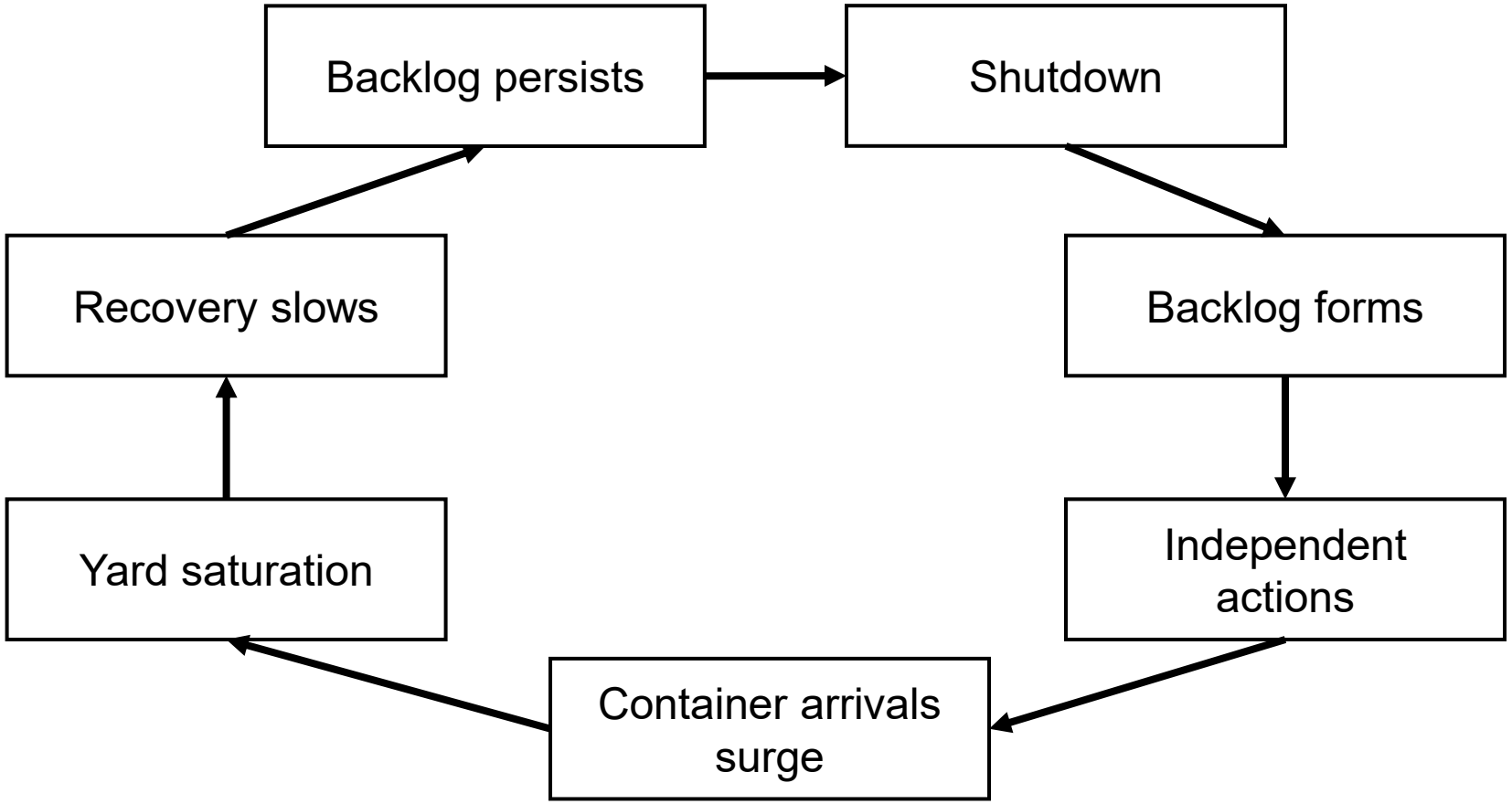
When the terminal reopens:

Everyone responds correctly, but at the same time

The terminal oscillates between idle and overload



What we observe after reopening



Nobody is doing the wrong thing on their own.

- Exporters dispatch when stacks open
- Trucks collect when imports release
- Transporters move when restrictions lift

Each decision is rational. Together, they exceed terminal handling rate.

Every proposal has its strengths…

Capacity Expansion (Add Supply)

Examples:
- Procure new RTGs
- Additional quay wall cranes
- Dry port development
- PSP/private terminal operator
- Manufacture reefers locally
- Adjust empty container flows
- Incentivize industrial expansion around port
- SEZ / super hub logistics development

Scheduling & Flow Control (Better Planning)

Examples:
- Night shift operations
- Truck booking system expansion
- Traffic management plan
- Staging area redesign
- Truck identification at gate
- Gate movement reconfiguration
- Prioritization of reefers
- Adjust imports during weather downtime

Governance & Collaboration (Better Relationships)

Examples:
- Stakeholder workshops
- WhatsApp coordination groups
- Institutional dialogue platforms
- Policy integration & oversight capability
- Government coordination role

Data & Visibility (Better Information)

Examples:
- Shared web-based coordination platform
- Integrate OCR systems
- Container tracking across supply chain
- Expand turnaround time metrics
- Data sharing across stakeholders
- Agrihub integration
- Terminal intelligence calculations

Among other…

Improvements support stability, yet reopening still has its challenges.

The port has improved capacity.
Restart behavior has not iterated and evolved.

- Equipment increased handling capacity
- Arrival timing is still variable
- Recovery notices inform stakeholders, but they do not sequence their actions

We cannot control wind.
We can control the reopening.

- The first hours determine the recovery.
- Shared, equitable decision-making is a priority.

How a controlled restart could look

State	Description	How we operate
Disruption	**Wind stops operations**	Prepare the yard
Constrained	**Operations limited**	Let work back in slowly
Recovery	**Operations reopen**	Match inflow to handling
Normal	**Stable conditions**	Return to normal operation

Shared Operating Behaviors and Standards

Stabilize (during closure)

- One coordination point
- Equitable decision-making
- Shared visibility

Reopen (recovery)

- Controlled release sequence
- Priorities defined in advance
- No simultaneous surge

Prepare (normal operations)

- Standard work for disruption
- Agreed operating modes
- Train & rehearse

Facilitated operating changes after paced restart

When arrival rate matches handling rate:

Truck arrivals

- Arrivals spread over time
- Less batching and queueing

Yard utilization

- Filled progressively
- Fewer rehandles

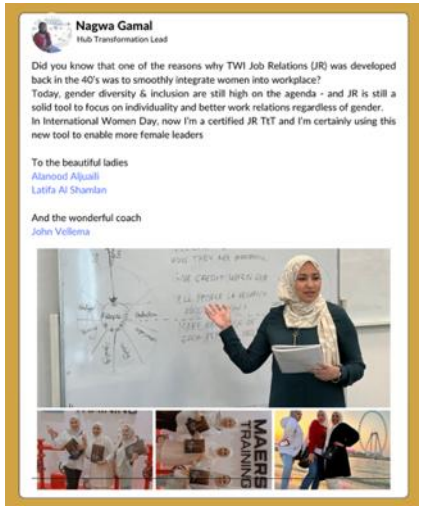
Equipment operation

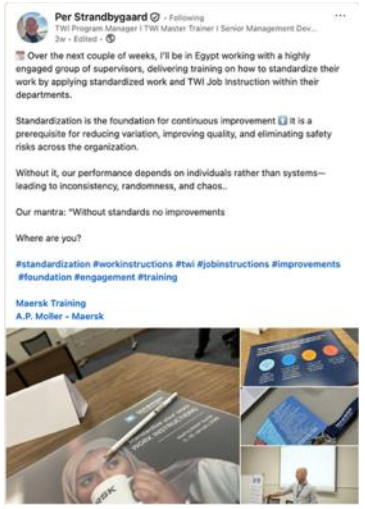
- Continuous sequencing
- Stable moves

Vessel work

- Loading order maintained
- Fewer sequence breaks

Shared behavior is definable and repeatable





Global case studies of Job Instruction and Job Relations

A common standard can be trained and executed.

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We support your teams in developing practical Lean operating capabilities—identifying operational waste, managing abnormal conditions, setting and following standards, and improving cross-functional systems—to enhance performance and financial results.

Consulting

We facilitate engagements to develop and implement processes, systems, and leadership strategies to solve the unique problems of your operating environment and achieve your company's vision and goals.

References

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