

10TH JUNE - 2021

**MICT journey
into the AI world
to enhance
Operational Productivity
& Efficiency**

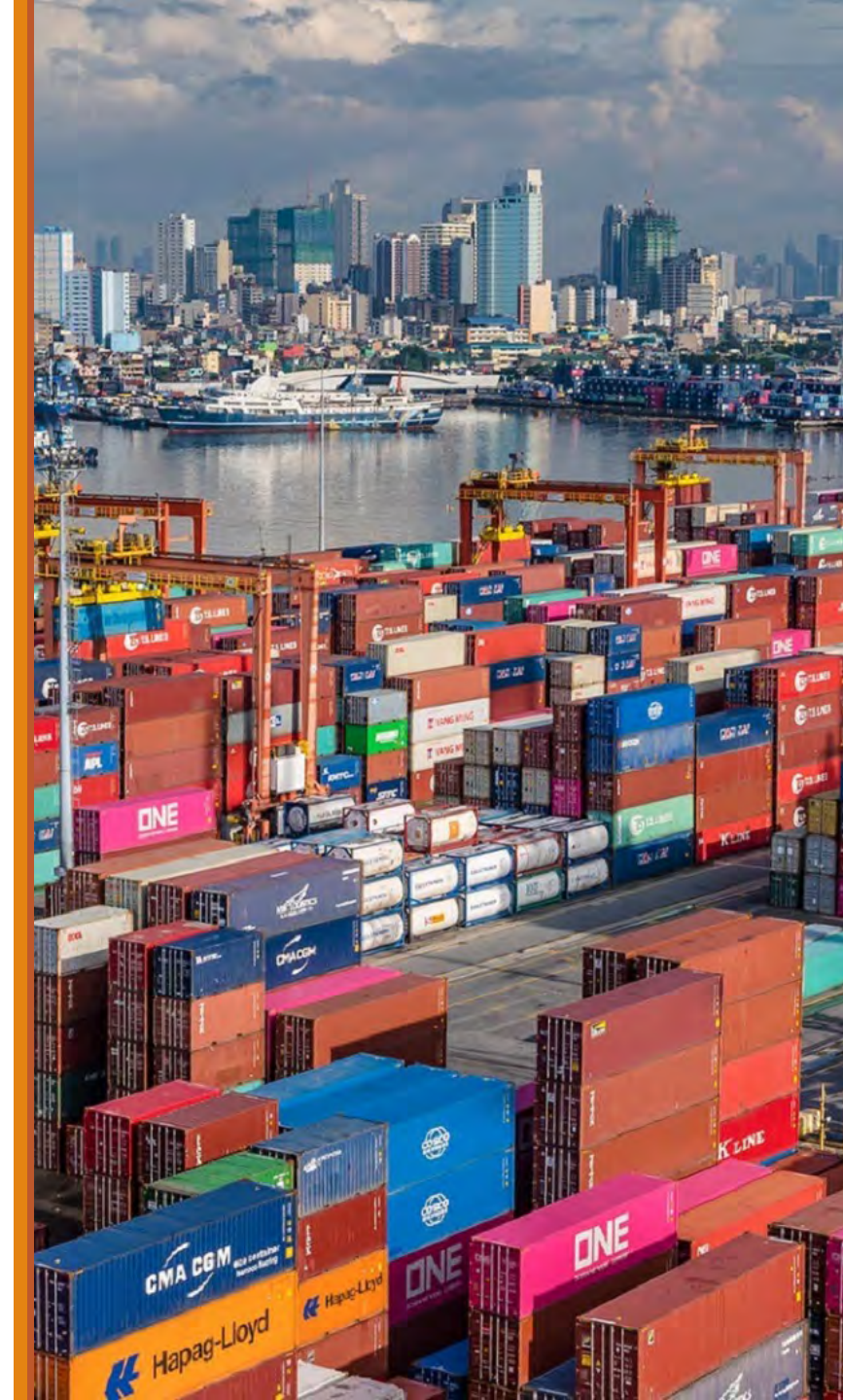


Why AI at MICT?

Challenges

- Congestion at RTG's (productivity ranging from 1-35mph despite expert decking and detailed truck appointment system)
- 'Wait at RTG' (queue) for internal and outside truck impacts congestion and productivity.
- High no. Yard shiftings with delivery (import ~55% of MICT business)

We did not find that our TOS settings and options would provide the solutions needed so we looked at alternatives that would be cost effective and manageable in terms of implementation



How did MICT review this AI option

Traditional approach trying to 'customize' TOS

- Costly – all by the hour and no cure, still pay
- Leadtime long – 'We can do anything' but you are in the back in the queue
- Risk to business with new change in hairball TOS?
- Bug fixing / testing slow

Not attractive for most !

Bespoke addition with AI is low/focused spend on high value challenge

- Did not have to write any bespoke Software to implement the solution through simple SaaS engagement model
- Integrates seamlessly with the existing IT Systems – on/off button and use open API / query
- Cloud native solution, 100% uptime, <250ms response times
- Zero workflow changes
- MICT operational staff directly engaged to define business outcome + does all the follow up = Added ownership
- AI engine now in place to address any new challenges as they occur

PAYBACK for MICT < 1 year

Why AI at MICT?

Outcomes agreed

- Better RTG work load distribution across and less traffic congestion
- Improved Truck turn for vessels (internal pm) and Outside trucks
- Operational Cost Reduction through less unproductive moves

AI Optimization Results

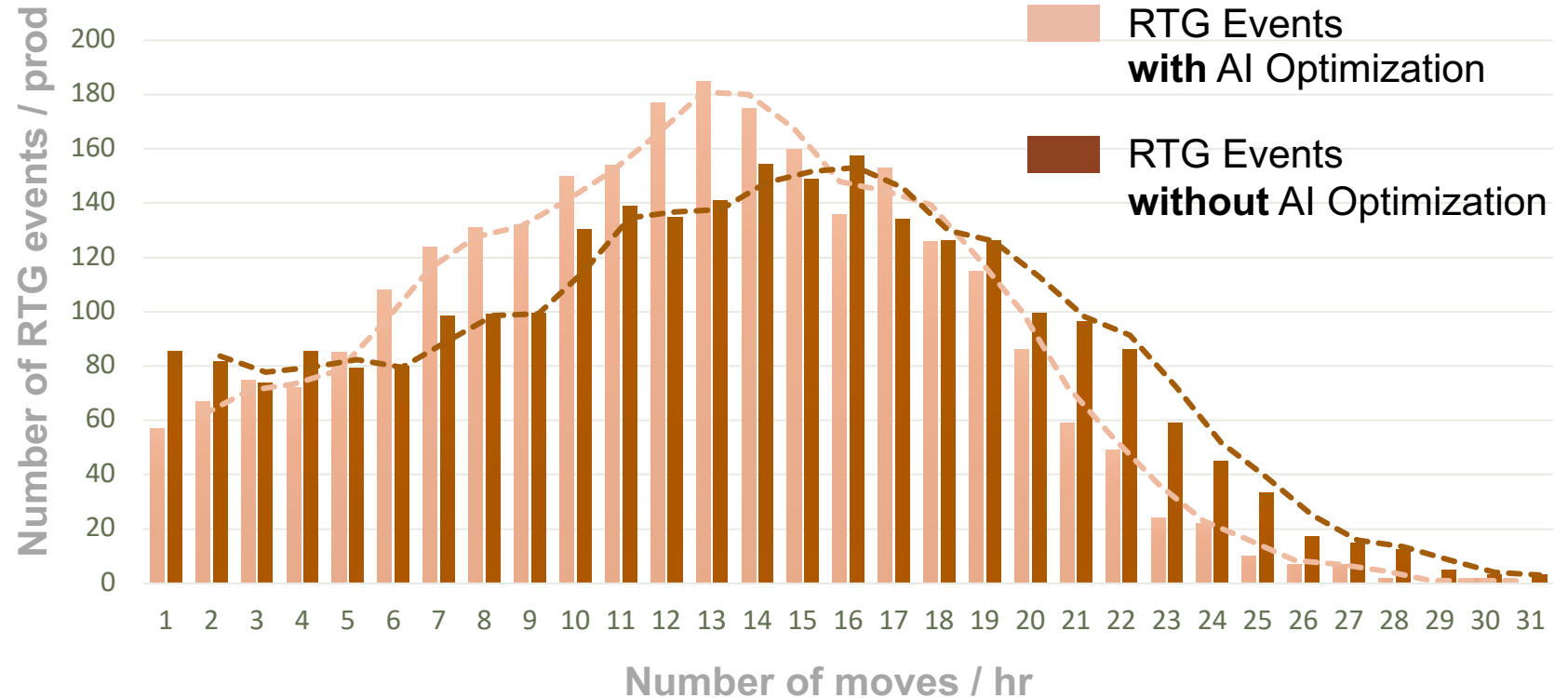
MICT quickly saw an improved bell curve with better RTG work distribution.

~12% Positive shift

Reduced turn for internal PM ~2 minutes

AI now going through 2nd iteration of optimization, which mostly to optimise around external jobs flow from gate-yard

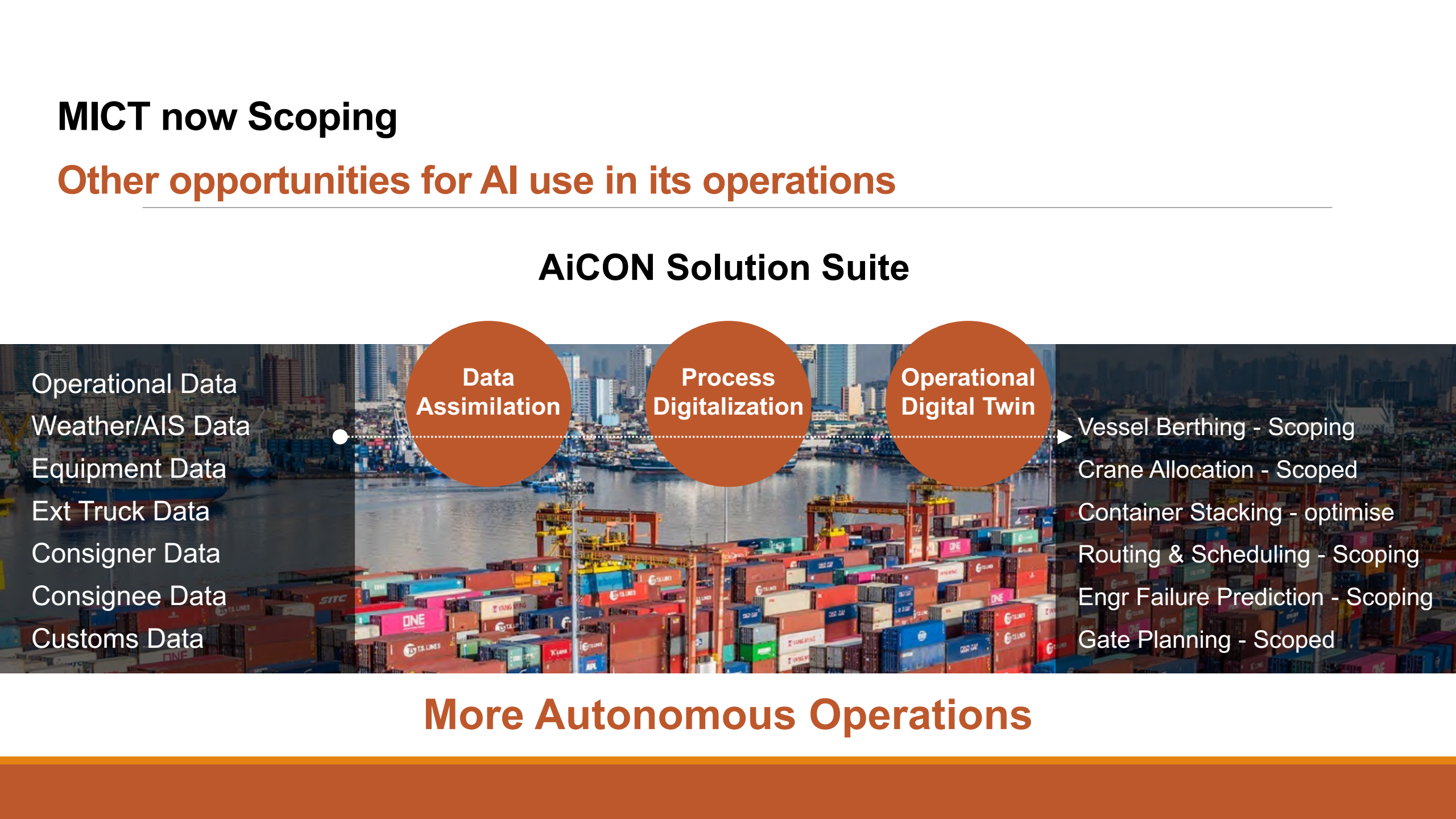
Discharge RTG Work Distribution, April 14-24 with same Average Prod.



MICT now Scoping

Other opportunities for AI use in its operations

AiCON Solution Suite



Operational Data
Weather/AIS Data
Equipment Data
Ext Truck Data
Consigner Data
Consignee Data
Customs Data

Data
Assimilation

Process
Digitalization

Operational
Digital Twin

Vessel Berthing - Scoping
Crane Allocation - Scoped
Container Stacking - optimise
Routing & Scheduling - Scoping
Engr Failure Prediction - Scoping
Gate Planning - Scoped

More Autonomous Operations



Q&A