

New Roles of Port and Container Terminal Automation

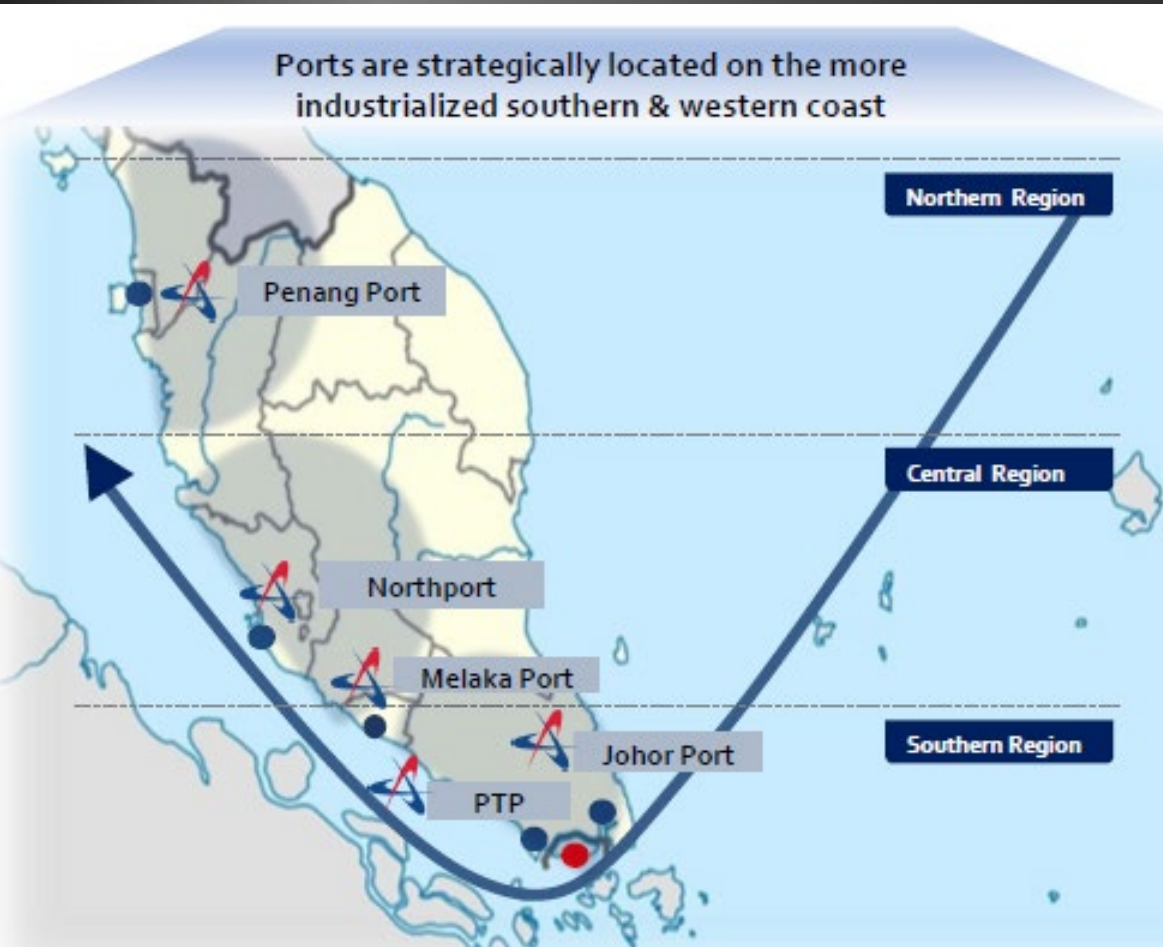
25 June 2020



MMC Port Holdings (Malaysia)
Luis Canto – Chief Technical Officer



Ports are strategically located on the more industrialized southern & western coast



MMC PORT HOLDINGS IS MALAYSIA'S LARGEST PORT OPERATING GROUP

MMC Ports are strategically located along Straits of Malacca

MMC Ports Capacity:

- 20 mil TEU

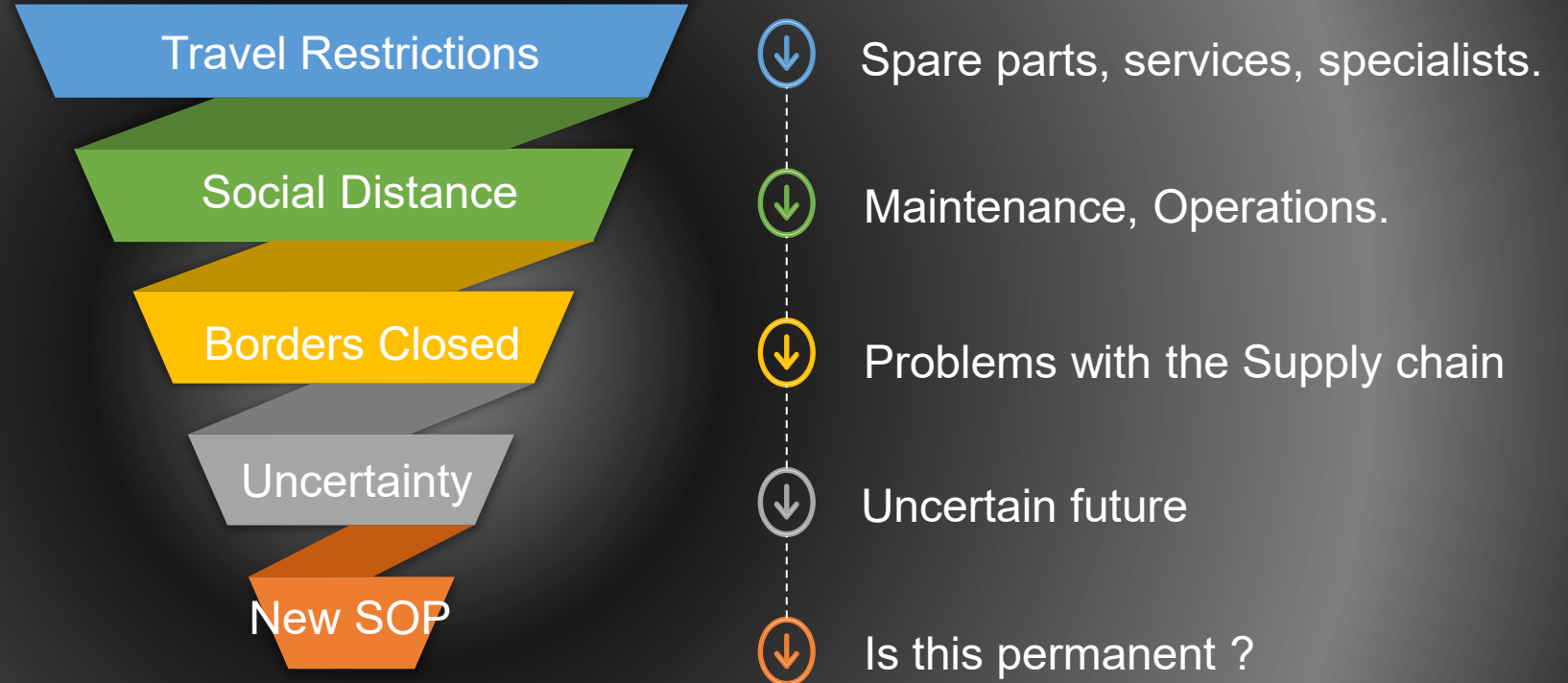
2019 Volume

- 14.5 mil TEUs
- 37 mil FWT (conventional)



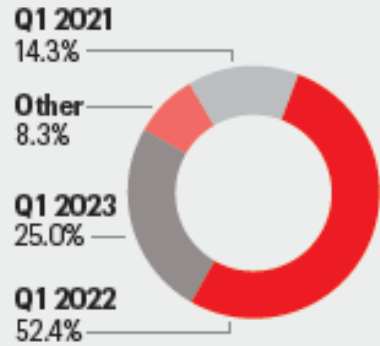
What did COVID 19 bring ?

Life for some was at a standstill, while front line workers were facing a new normal.

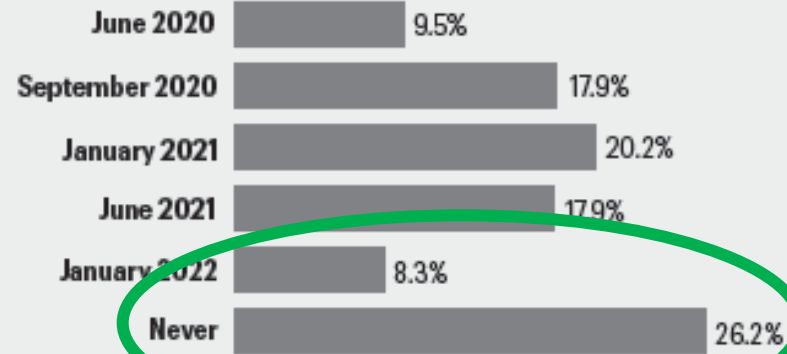


FORTUNE SURVEYED THE CEOS OF THE 2020 FORTUNE 500 LIST ... AND HERE ARE THE RESULTS.

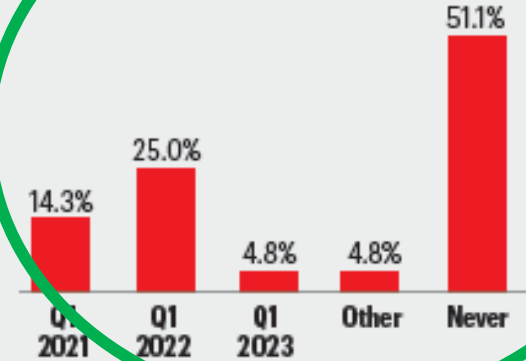
Q. WHEN WILL ECONOMIC ACTIVITY RETURN TO THE LEVEL IT WAS BEFORE THE PANDEMIC?



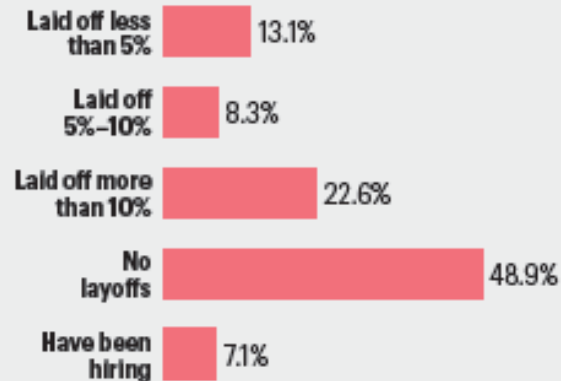
Q. WHEN WILL AT LEAST 90% OF YOUR WORKFORCE HAVE RETURNED TO THEIR USUAL WORKPLACE?



Q. WHEN WILL BUSINESS TRAVEL AT YOUR COMPANY RETURN TO THE LEVELS IT WAS BEFORE THE PANDEMIC?



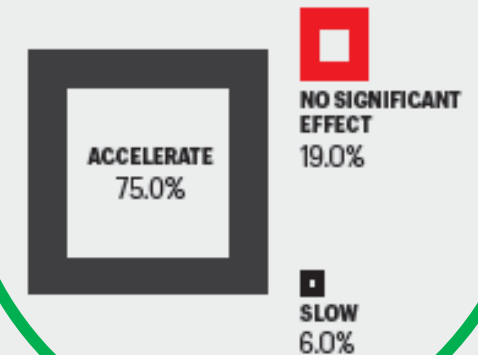
Q. HAVE YOU LAID OFF OR FURLOUGHED WORKERS IN RESPONSE TO THE CRISIS?



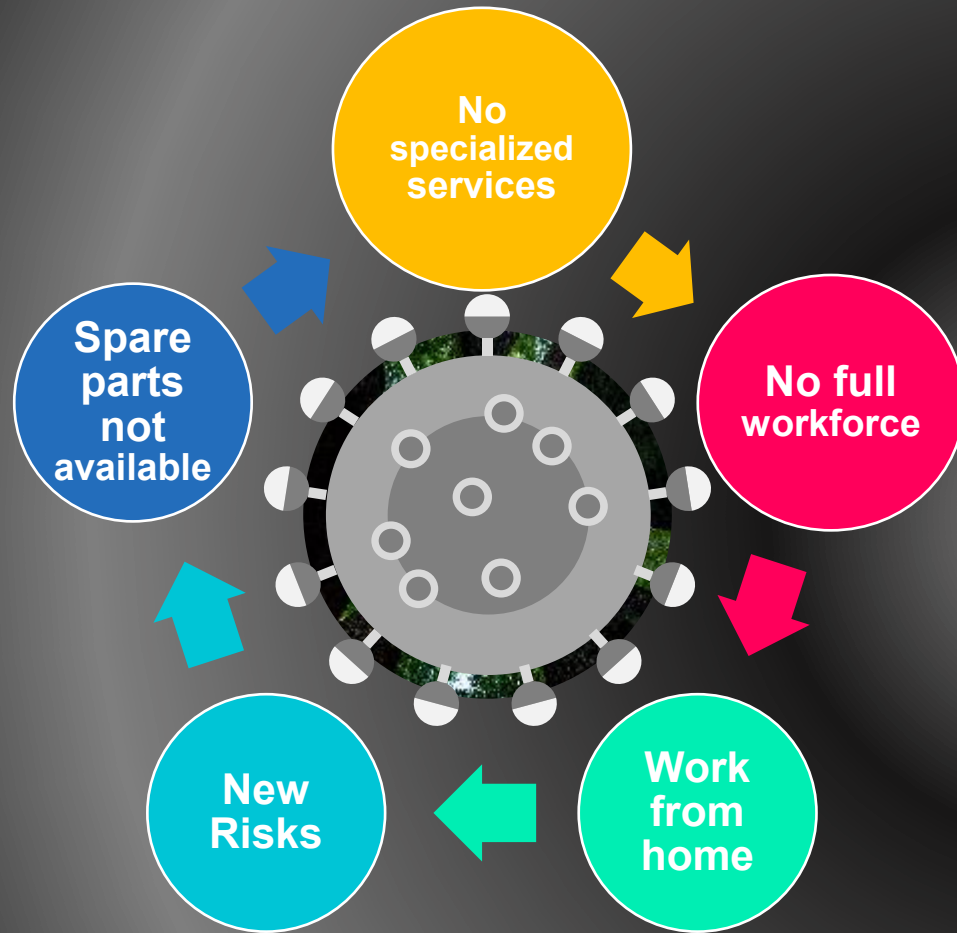
Q. IN JANUARY 2021, HOW DO YOU EXPECT YOUR COMPANY'S TOTAL EMPLOYMENT TO COMPARE TO WHAT IT WAS IN JANUARY 2020?



Q. AT MY COMPANY, THIS CRISIS WILL HAVE WHAT EFFECT ON THE PACE OF TECHNOLOGICAL TRANSFORMATION?



How Covid-19 affected ?



Spare Parts not available

The normal supply chain was interrupted. Borders closed. Parts were not readily available.



Specialized Services

They were not available for a period of time. The Ports had to depend on their own capabilities and workforce.



Workforce

The social distancing reduced the workforce capabilities at certain areas, this might become critical.



Work from Home

We were not ready to sent the support services to work from home. Hardware, connectivity and training problems.



New Risks

Uncertain volume. Covid inside the Port ?

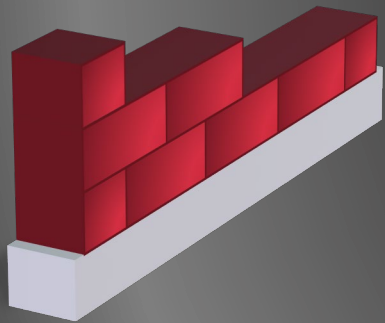
How to reinvent our technical mindset ?

Rethink our connectivity

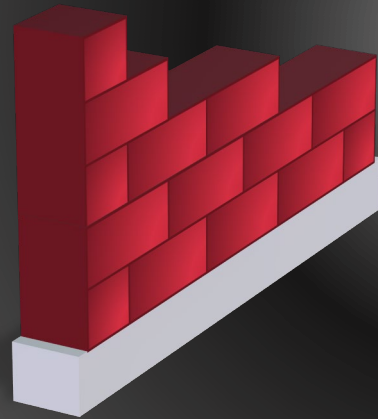
Redesign the supply chain including new risks

Digitalize process and access.
Remote control ?
Automation ?

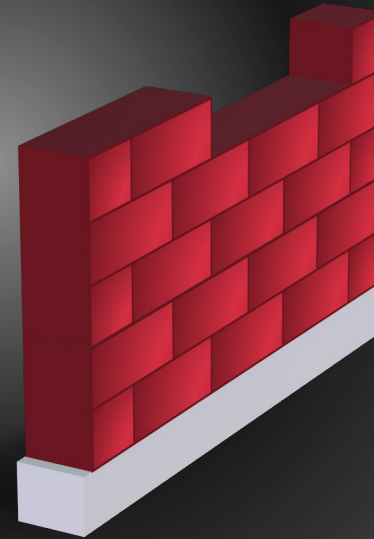
Training
Training
Training



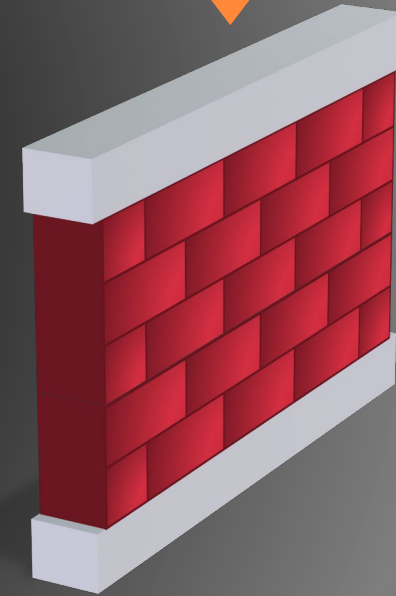
Connectivity



Supply Chain



Digitalization



Training

Focus on the Essentials:

1

Connectivity

Central Control

Fiber Optic

4G – Intranet - Hardware

Real time tracking

Network inter Ports

Now

2

Supply Chain

Redefine Inventory

Parts Agreements

Logistics

Shared Inventory

Suppliers to work from remote

Short Term

3

Automation

Digitalization

OCR (QC-Gates)

Remote Control & Access

Horizontal Transport

Pinning Station

Mid Term

4

Training

Technical

E-learning

E-tools

Specialized Training

Suppliers Trained for Remote

Always

THANK YOU



(A member of MMC Corp Group of Companies)

HOW TO PREVENT



WASH

your hands well and often to avoid contamination



COVER

your mouth and nose with a tissue or sleeve when coughing or sneezing and discard tissue



AVOID

touching eyes, nose, or mouth with unwashed hands



CLEAN

and disinfect frequently touched objects and surfaces



STOP

shaking hands or hugging when saying hello or greeting other people.



DISTANCE

yourself at least 2 meters (6 feet) away from other people, especially those who might be unwell.

SYMPTOMS



FEVER

(High Temperature)



COUGH



SHORTNES S OF BREATH



BREATHING DIFFICULTIES

