

Smart Ports

Michael Houen

Director – Smart Port Strategy

Hatch

What is a Smart Port about:



Operational cost reduction is a feature of a “Smart Port” which is heavily influenced by the level of digitization / automation, and the realisation of organisation and process change opportunity

The primary benefits of a “Smart Port”:

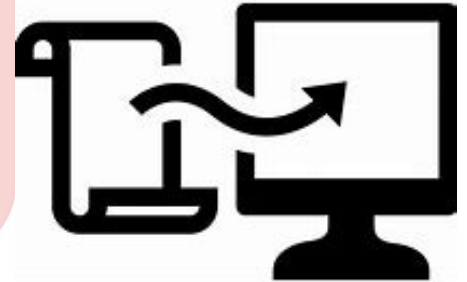
- Improved Safety
- Improved service delivery and flexibility
- Opportunity to reduce cost
 - Labour
 - Improved asset utilisation
 - Maintenance
 - Other operational costs



Smart Ports – a digital operational model

Solutions

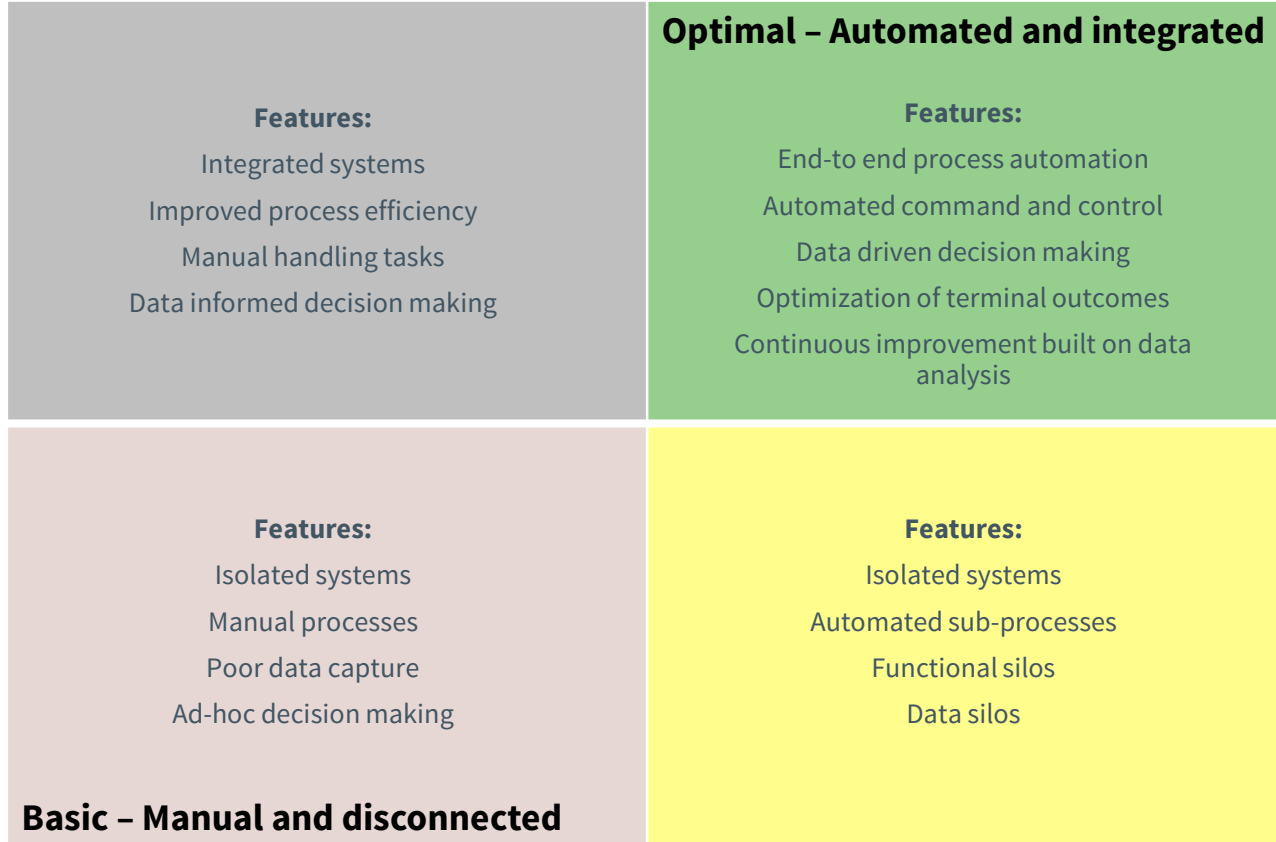
- **Information & Communication Technology**
Connect - Build systems to digitize and boost the flow of information
- **Digital Management**
Collect, Monitor and Analyze - Provide visualization, analytics and decision support applications for waterside, terminal, and landside operations
- **People and Equipment**
Execute, Act – Change processes through training and technology. New skills , applications, Remote ops, Automation



Smart Ports



↑
Digitization / Integration



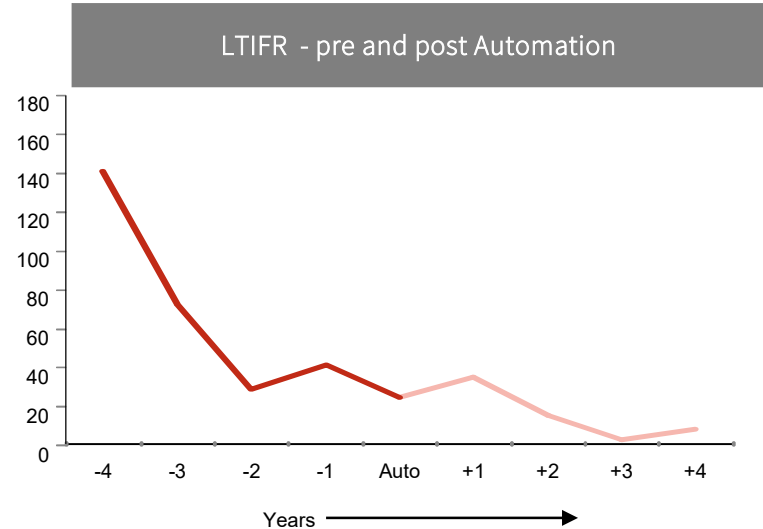
Automation / Robotization →



Smart Ports

Safety results - a clear message

- Automation has resulted in a remarkable improvement in safety
- These are world leading safety results
- This improvement has been consistent in both Brisbane and more recently in Sydney
- Functional Safety mindset – less about personal behaviour, more about engineered controls
- Terminal operator must drive the process



Note: Frequency rates are calculated per 1,000,000 hours

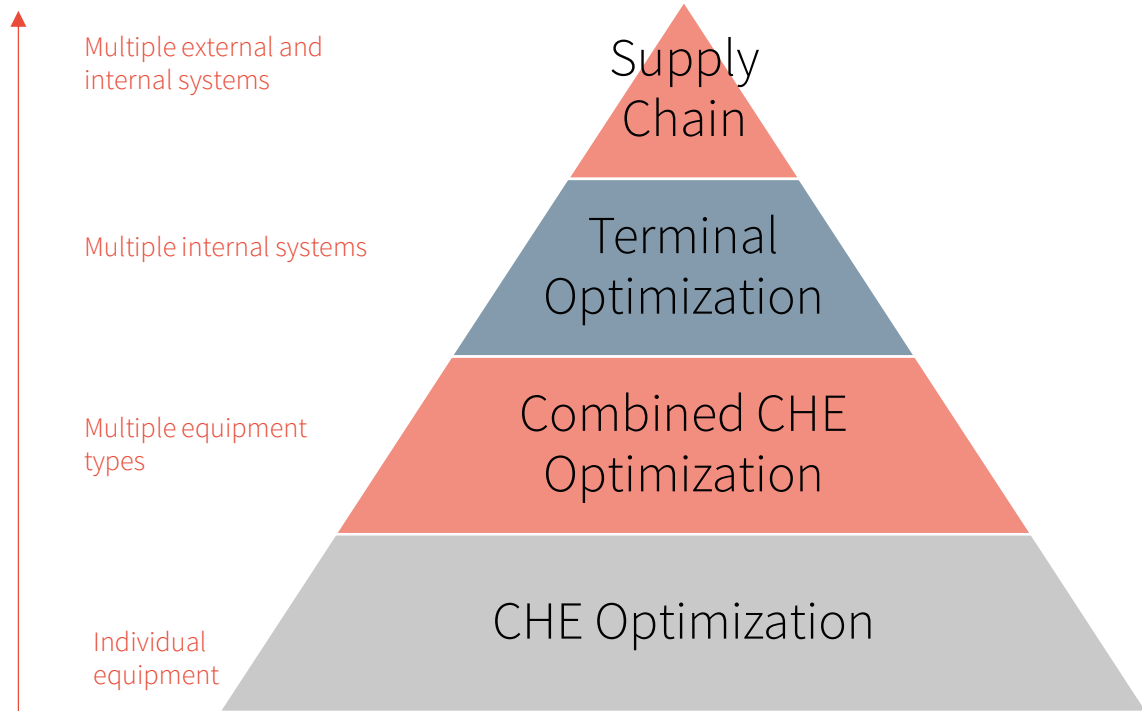


A large red and yellow industrial vehicle, possibly a crane or heavy-duty truck, is the central focus. A worker in a high-visibility yellow and black safety vest and a white hard hat stands to the left, interacting with the vehicle's components. The vehicle features large, heavy-duty tires with yellow hubcaps and a prominent red and yellow striped cylindrical section. The background is a clear blue sky.

BEYOND THE NEW BASELINE
CLIMBING THE MATURITY CURVE
FOCUS ON CUSTOMER EXPERIENCE

Supply Chain Challenge

- Bringing together all aspects through:





About Hatch

- Multidisciplinary engineering and management consultancy company
- 9000+ employees, 65 offices, six continents, 150 countries
- Principal sectors: Infrastructure, Mining & Metals, and Energy
- Extensive systems, process control, automation and production information management experience



HATCH

Our Manifesto

OUR VISION

We are passionately committed to the pursuit of a **better world** through **POSITIVE CHANGE**

OUR MISSION

TOGETHER we create unprecedented outcomes for our clients by **partnering with them** to develop **better ideas.**



Our **exceptional, diverse teams** combine vast engineering and business knowledge, applying them to the **world's toughest challenges.**



We build practical **SOLUTIONS** that are **SAFE, INNOVATIVE,** & sustainable.

OUR VALUES

We believe in exceptional ideas delivered with exceptional service.

DOING OUR  **homework**

INNOVATING all that we do

Engaging great people who make a **difference** 

Acting *like* **OWNERS** 



Encouraging a **flat, connected organization**

Achieving **NO**  harm

ENSURING **cost** effective, efficient **delivery**



Thinking globally; acting locally

Being unconditionally **HONEST** 

nurturing long-term relationships

Living our  commitments with *integrity*



Hatch Global operations

NORTH AMERICA

Canada
Baie-Comeau
Calgary
Edmonton
Fredericton
Halifax
Kitimat
Markham
Mississauga (GDC)
Montreal (GDC)
Niagara Falls
Port Elgin
Regina
Saguenay
Saint John
Saskatoon
Sorel-Tracy

St. John's
Sudbury
Sydney
Thunder Bay
Trail
Vancouver
Winnipeg

Pittsburgh
Salem
Salt Lake City
Scottsdale
Seattle
State College
Tampa

SOUTH AMERICA

Belo Horizonte
Calama
Santiago (GDC)
Medellin
Sao Luis
Lima

AFRICA/EUROPE/ME

Cape Town
Durban
East London
Johannesburg (GDC)
Port Elizabeth
Secunda
Moscow
St. Petersburg

Gaborone
London
Manchester
Dorking
Muscat
Jubail
Abu Dhabi
Delhi

AUSTRALIA/ASIA

Beijing
Shanghai
Shenyang
Jakarta
Newcastle
Adelaide
Brisbane (GDC)
Melbourne
Perth
Wollongong