



# TRANSFORMATION FROM CONVENTIONAL TO MODERN PORT

24 September 2021

# AGENDA



- **INTRODUCTION**
- **THE IDEAL TRANSFORMATION**
  - **CULTURE**
  - **INFRASTRUCTURE**
  - **ICT**
- **CHALLENGES - SOLVED & ONGOING**
- **CHALLENGES - MOVING FORWARD**
- **Q&A**

## INERTIA TOWARDS BECOMING A MODERN PORT

Started  
operations in  
1973

In between  
2<sup>nd</sup> / 3<sup>rd</sup> Port  
Generation

Aging facilities &  
equipment

Ingrained tacit  
knowledge

Land constraints  
for expansion

# THE IDEAL TRANSFORMATION TO MODERN PORT

## CULTURE

- 1<sup>st</sup> Class Workers Mindset
- Kaizen Mentality
- Safety Culture
- Environmental Friendly

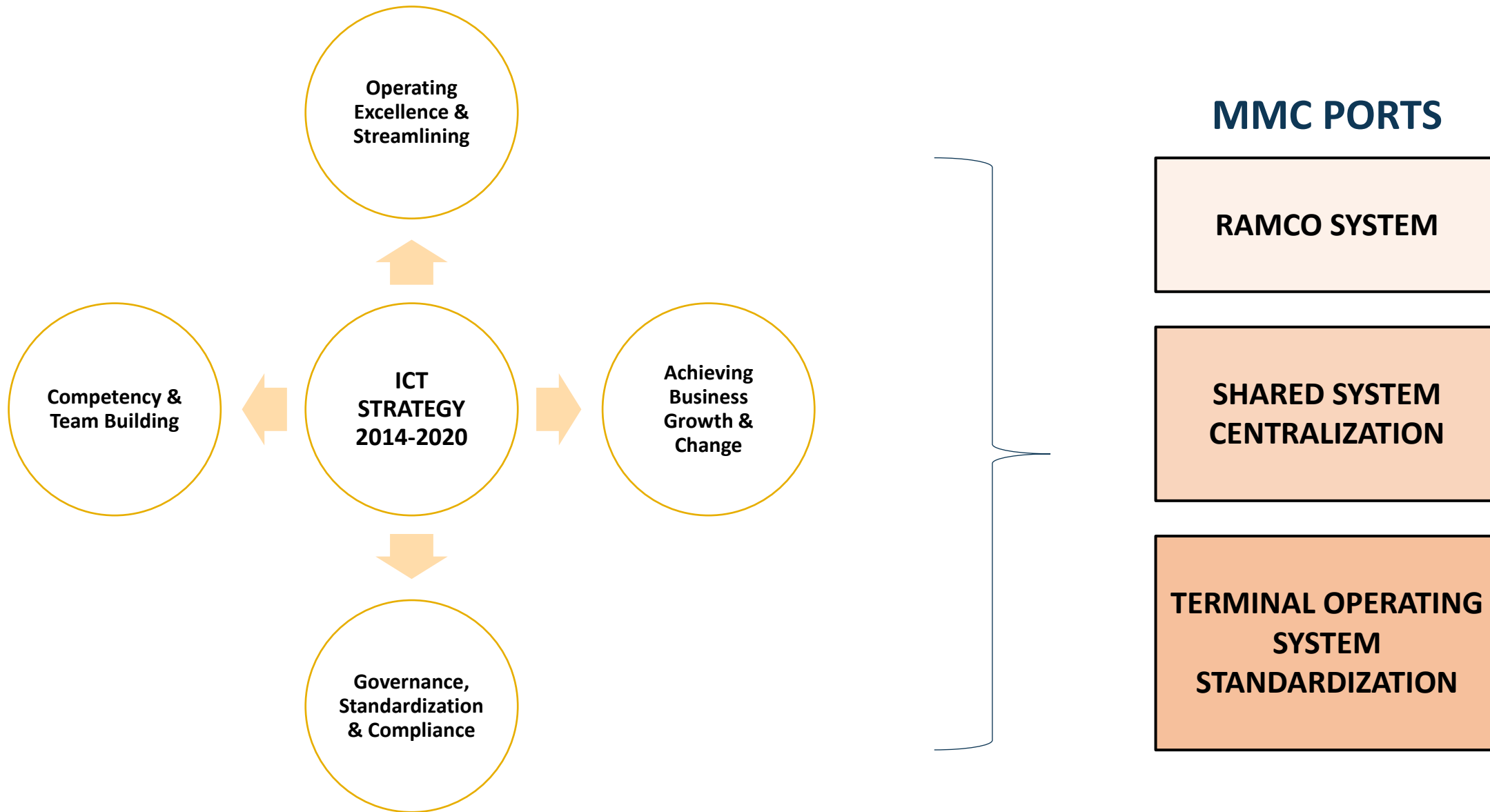
## INFRASTRUCTURE

- Modernizing Buildings
- Modernizing Equipment

## ICT

- JPB Integrated System
- ICT Strategy 2014-2020

# ICT STRATEGY 2014 - 2020



## PORT COMMUNITY SYSTEM

As a digital freight platform, a Port Community System can be an ad hoc entity built upon available opportunities and existing stakeholder relationships within a port community.

These specific applications can be part of the System:

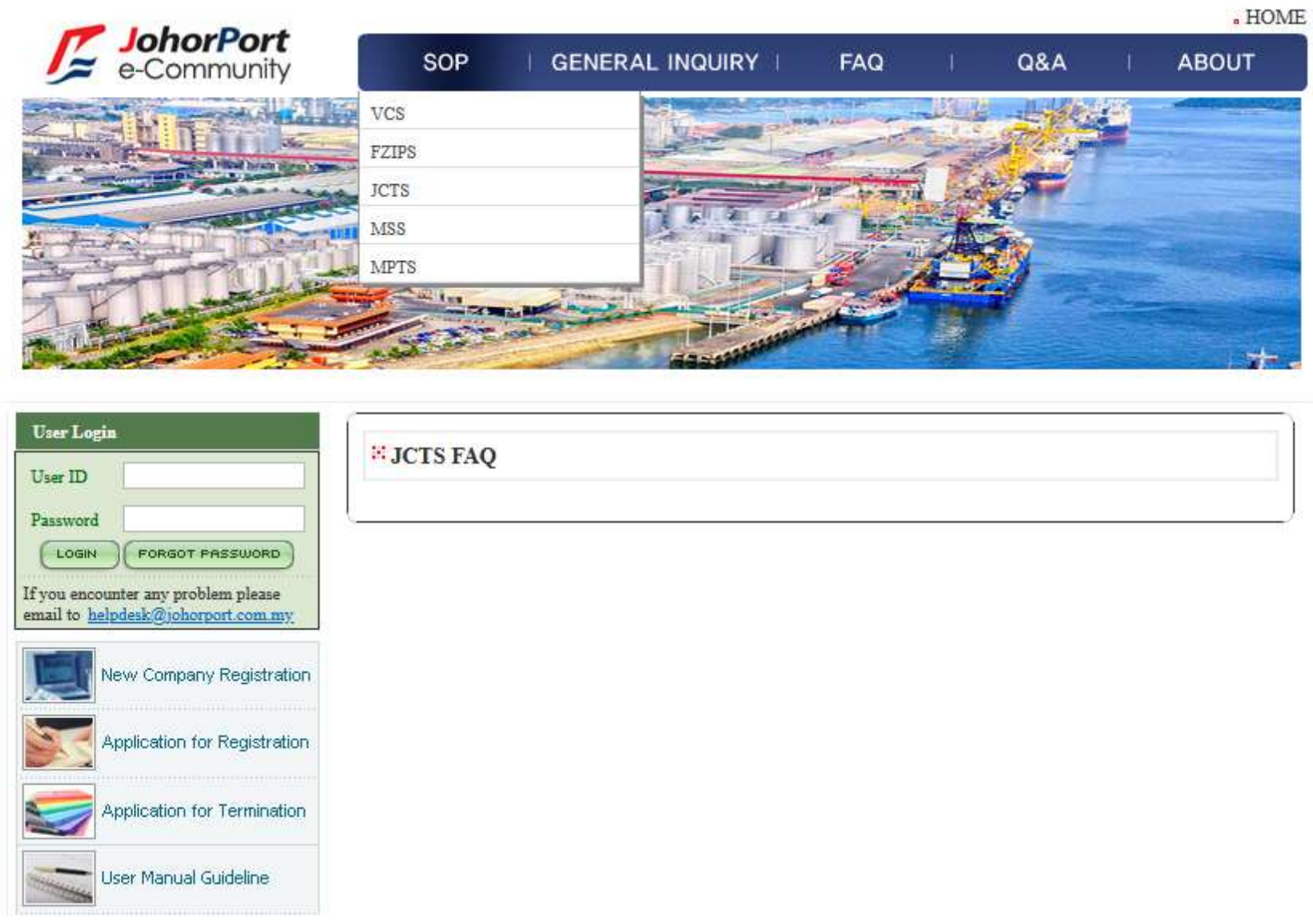
- Vessel Call Management
- Container Handling Management
- Gate Management
- Security and Control
- Tracking



# CHALLENGES - SOLVED

AREAS	SITUATION	WAYS TO OVERCOME
<b>CULTURE</b>	Legacy Issues	Establishment of JP Skills Centre
	Port Wastages	Establishment of Lean Academy
	Succession Planning	HR Programs like AMDP, MDP, SDP, UNCTAD, Master Program etc.
	Job Enrichment	Certification Program, more job grades
<b>INFRASTRUCTURE</b>	Lack Of Land	Modern Warehouse - taller and higher capacity per square feet
	Equipment	Replacement of suitable Cranes, TT Note: JPB is a Multi-Purpose Port
<b>ICT</b>	Silo System	Integration of Port Community System
		MPTS - Multi Purpose Terminal System (BBT) JCTS - JPB Container Terminal System (JCT) VCS - Vessel Clearance System MMS - Marine Management System Finance / Billing System PTOS - Port Terminal Operating System (SPT)

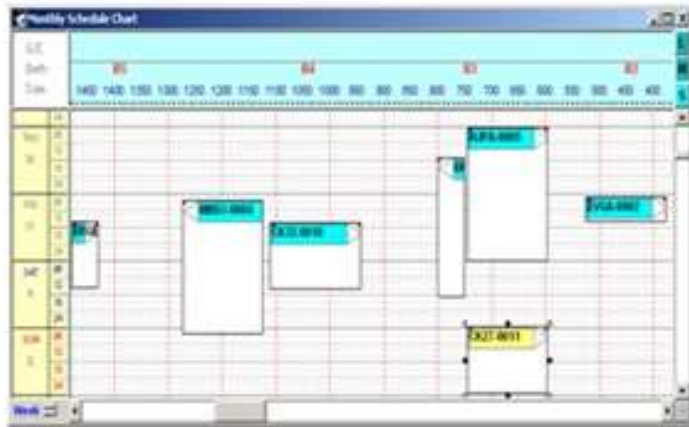
# EXAMPLE 1 : JPB e-Community



The screenshot shows the JohorPort e-Community website. At the top right is a 'HOME' link. Below it is a dark blue navigation bar with links for 'SOP', 'GENERAL INQUIRY', 'FAQ', 'Q&A', and 'ABOUT'. A dropdown menu is open under 'GENERAL INQUIRY', listing 'VCS', 'FZIPS', 'JCTS', 'MSS', and 'MPTS'. The background features an aerial view of a port with ships and industrial buildings. On the left side, there is a 'User Login' section with input fields for 'User ID' and 'Password', and buttons for 'LOGIN' and 'FORGOT PASSWORD'. Below the login section, there are links for 'New Company Registration', 'Application for Registration', 'Application for Termination', and 'User Manual Guideline'. On the right side, there is a search bar containing the text 'JCTS FAQ'.



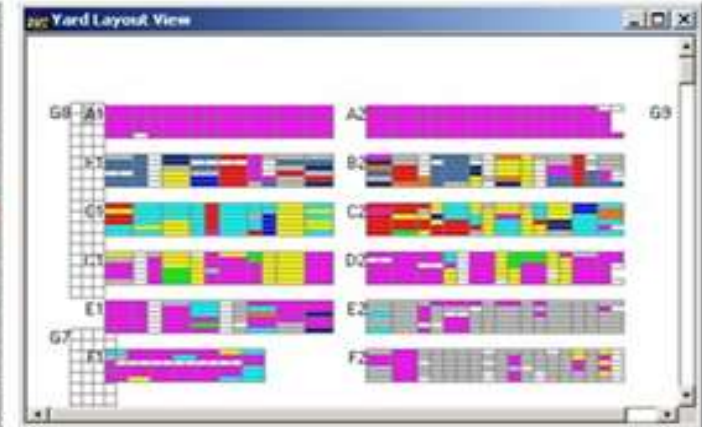
# EXAMPLE 2 : PTOS linked to PETRONAS ERP



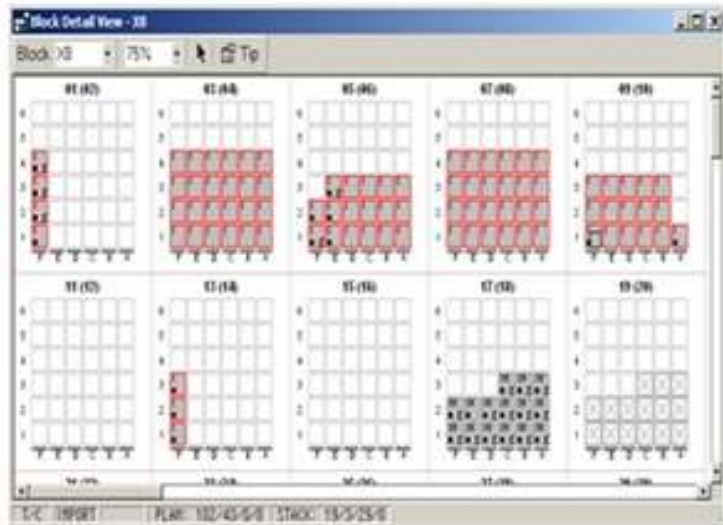
Berth Planning



Ship planning



Container Yard Layout



Container Block details view

Yard Stack Summary - List

CONTAINER	TPSZ	YBLK	YBAY	YBWA	YTYE	SBAY	SBWA	STIE	CLASS	POD	OPR	F/M	WGT	
1	HHM1234567	4310	Y2	08	F	1	04	04	04	EX	KHH	WHL	F	100
2	HHM2004510	4310	Y2	08	E	1	04	04	06	EX	KHH	WHL	F	100
3	HHM3005654	4310	Y2	08	D	1	04	04	08	EX	KHH	WHL	F	100
4	HHM3008554	4310	Y2	08	C	1	04	04	10	EX	KHH	WHL	F	100
5	HHM3008571	4310	YR	08	E	1	04	02	02	EX	KHH	WHL	F	100
6	HHM3218568	4310	Y2	08	E	2	04	02	04	EX	KHH	WHL	F	100
7	HHM3638521	4310	Y2	08	D	2	04	02	06	EX	KHH	WHL	F	100
8	HHM4005541	4310	Y2	08	C	2	04	02	08	EX	KHH	WHL	F	100
9	HHM5008075	4310	Y2	08	F	2	04	02	10	EX	KHH	WHL	F	100

Container List in CY

Plan Containers Summary

Summary Item: Vol/Voy | Vol/Voy: [All]

Size: [All] | Cargo Type: [All] | Mode: [All] | Container Type: [All] | Block: [All]

OPR: [All] | POD: [All] | F/M: [Full] [Empty]

Total Loading: 199 / 143 / 67 / 0 / 0 | Total Discharge: 36 / 25 / 44 / 0 / 0

USL	YEAR	SEQ.	LOCAL LOADINGS					T/S LOADINGS					
			20'	40'	HC	45'	48'	20'	40'	HC	45'		
WADU		0401	0	0	0	0	0	0	0	0	0	0	0
MBSE		0334	20	42	17	0	0	0	0	0	0	0	0
HJCO	2002	0363	20	15	2	0	0	0	0	0	0	0	0
HJRT		0364	20	10	10	0	0	0	0	0	0	0	0
HJRA		0336	60	27	13	0	0	0	0	0	0	0	0

Summary of container list

# CHALLENGES - MOVING FORWARD

**FULLY  
AUTOMATION /  
SEMI  
AUTOMATION**  
JPB CONTAINER  
TERMINAL?  
JPB BREAK &  
BREALBULK  
TERMINAL?

**IMPACT OF  
INTERNET OF  
THINGS (IOT)**

**THE GROWING  
SIZE OF VESSELS**

**NEW GENERATION  
OF PORT WORKERS**  
**GEN X**  
**GEN Y**  
**GEN MILINEUM**

**THE GROWING  
CUSTOMERS  
DEMAND**

**BECOMING  
A  
GREEN PORT**

**WHAT TO DO  
WITH THE  
BIG DATA?**

**THE 7 R's OF  
LOGISTICS IN THE  
PORT**

**OTHERS:**  
1) COMMUNITY READINESS  
2) DISCIPLINE  
3) SUSTAINABILITY  
4) WORK-FROM-HOME?

# Q&A

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