

# Executive Management Conference for Latin America and the Caribbean

## AAPA Executive Program

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# Presentation

PIANC

Port Productivity

Working Together

# PIANC – Maritime Commission

- Core business of MarCom

Identify areas in the seagoing marine navigation sector needing evaluation and technical recommendations and establish working group to address.

# PIANC – Maritime Commission

## Changes in the Shipping Industry

The most spectacular change is the growth of the world transport of containers and with that the increase of ship dimensions.

This leads to larger cranes, deeper quay structures and wider channels and basins. Furthermore, it is the business attitude of the major shipping companies, which leads to greater "dynamism" in their choice of ports of call, affecting the competition between ports and terminal operators.

- Floatation is, always & forever, the best way to move stuff on this planet

- Ships have never stopped growing & changing

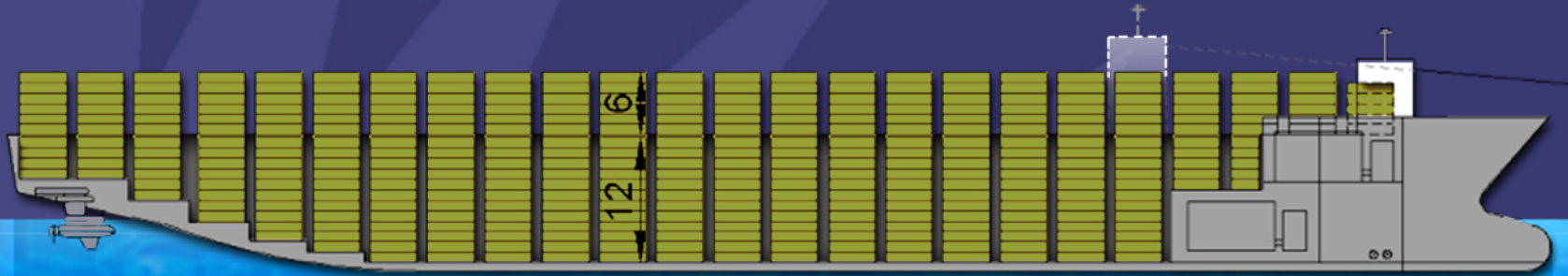
- We will continue to build *better* ships

- If bigger is better, then ships will grow

- Ports and terminals will adapt to serve them

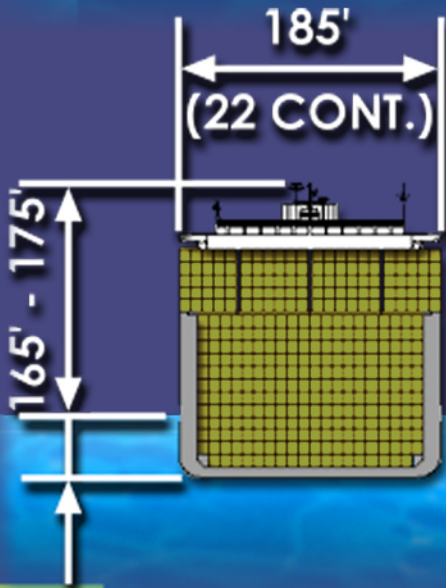


# “Most Likely” 10,000-12,000 TEU Vessel Suezmax / “New Panamax”



## “Suez / New Panamax” 10,000-12,000 TEU

- Multiple Diesel-Electric Azimuthing Pod Drives
- 1300 feet long overall
- 185 foot beam (20-22 containers)
- 50 foot draft
- 165-185 foot airdraft
- Optimum hull design
- High maneuverability



# What is your Goal?

What is your goal to increased productivity?

- Volume
- Accuracy
- Reliability
- Speed/Service
- Lowest cost
- Marketability
- Flexibility



# Three Elements of Container Yard (CY) Capacity

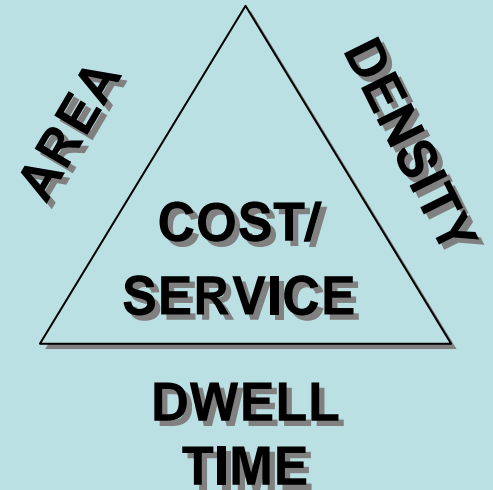
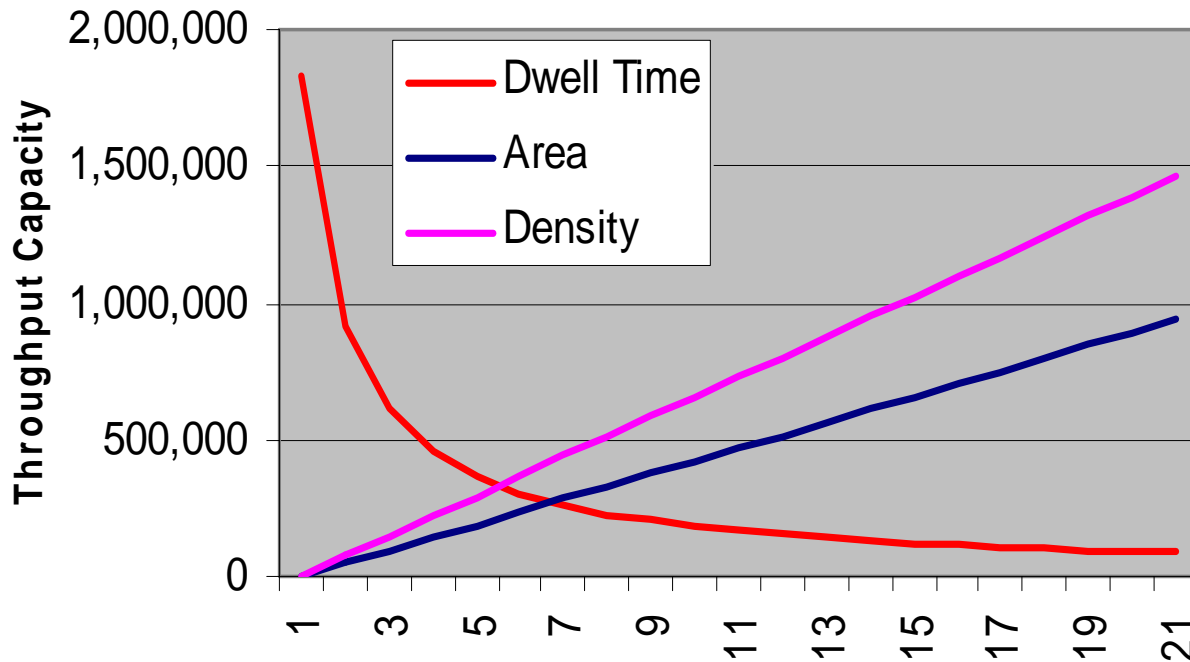
- Area
- Density
- Dwell time





# Terminal Capacity

AREA / DENSITY / DWELL



**High Dwell Time is Devastating to Capacity!**

# Increased Productivity

Reduced Dwell Time is Important, but not the only consideration

- Capacity may meet demand
- May not reduce costs
- May not be what the customer wants

# What are we trying to achieve?

- Lower Operating Costs?
- Increased Capacity?
- Happier Customers?
- Increased Competitiveness?
- Most Advanced Technology?

# Productivity Benchmarks

- TEUs per hectare per year
- TEUs per m of berth
- Moves per crane
- Box Dwell Time
- Crane Transfer Rates
  - Working Rate
  - Moves per shift
  - Moves per year
  - Operating hours
- Gate Moves

# Gate Moves

- Transactions per hour per lane
- Transactions per hour per clerk
- Cost per transaction
- Truck Turn-Time

# Solutions – Japanese Ports

- EDI installed
- Negotiations with labor unions
- Extension of customs' hours
- Improved logistics functions
- Developed M&R system
- Established one-stop procedures integrating land and marine operations



# Challenges

Infrastructure

Role in Intermodal System

Training for the Future

# Working Together

PIANC

U.S. Section, PIANC

U.S. Army Corps of Engineers

# Conclusions

- Challenges not insurmountable
- Reasonable application of technologies
- Reasonable cooperation of labor
- Resources that are available to you, such as PIANC

# Acknowledgements

- PIANC ([www.pianc-aipcn.org](http://www.pianc-aipcn.org))
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