Time to Expand Appointment Systems

AAPA Marine Terminal Management Training
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Where Can You Go Without an Appointment?

- Doctor?
- Auto Mechanic?
- Restaurant (a good one)?
- Salon?

Why Should a Marine Terminal be Different?
- High Demand
- High Cost
- Customized Service
- Service Expectations
Review of LA / LB 2014 / 15 – The Perfect Storm

A Brief Case Study…
Review of LA / LB 2014 – The Perfect Storm

- Evolving Carrier Alliances
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- Chassis Shortages
- Bigger Ships
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- Protracted Labor Talks
- Peak Season
- Driver Shortages
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- Protracted Labor Talks
- Peak Season
- Driver Shortages
- And Throw in a Fire…
Continuing Industry Concern

• “The Top Concern of International Cargo Shippers and Maritime Officials in the United States Remains Slow Freight Movement Through Container Ports.”

• “Perhaps the Single Greatest Anachronism... is a Drayage Model Based on Random Arrival of Shuttle Trucks at Container Yards Looking to Pick up a Specific Import Box.”

- American Shipper, August 2015
Stakeholders

- Terminals
- Truckers
- Carriers
- Cargo Owners
- Distribution Centers
- Port Authorities
- Government
- Public
Solutions

- Off Dock Transit Yards
- Free Flow / Peel Off
- Automation
  - All Require Tight Coordination, Extra Cost
  - All Benefit from Appointment System

- Appointment Systems
Free Flow and Transit Yards

- Homogenous Containers are Stacked Together
- Drivers Arrive, Get First Container off the Free Flow Stack
- Then Get Delivery Instruction, or Move to Off-Dock Yard for Later Delivery (POLA)
- High Performance. No Digging. Top Handler Productivity Many Times Over RTG
- High Segregation Cost or Complex Vessel Block Stow
- Most Adaptable to Large and Sophisticated Players
- Minimum Number of Containers Required (varies)
Automation

- Way of the Future
- Reduced Yard Cost
- Consistent Production
- Potential 7 x 24
- Supports Extra Gates
- Steep Barriers to Entry, $$ and Technology

Maasvlakte II, Rotterdam

*In order to make terminal-to-truck interchange as efficient as possible, APM enforces two requirements upon truckers. They must file their documentation [electronically], and all truckers must make an appointment.*

JOC, May 2, 2015
Appointment Systems

- Provide Predictability
- Match Scarce Resources with Aggregate Demand
- Known Commodity: Relatively Easy to Implement
- Fewer Stakeholders to Coordinate (for individual terminals)
- Requires Better Planning of Truckers and Terminals
- Balance of Power Concerns
- Shared SLAs, Carrots and Sticks

Appointment Systems Need to Provide Predictable Demand for Terminals and Predictable Supply for Truckers.
Renewed Interest in Appointment Systems

- New York
- Virginia
- LA / LB
- Oakland
- New Orleans
- Rotterdam
- Vancouver
- Manila

New Orleans can offer a lesson in truck appointment systems

“If we didn’t have an appointment system, everybody would show up whenever they felt like, and you’d have huge lines.”

The new appointment system in New Orleans was rolled out after months of consultation with motor carrier dispatchers and drivers.”

- JOC, 6/7/15
More Challenges…Collaboration is Key

- **Oakland**
  - 8/20: Oakland Plans PierPass-like program to fund Saturday gates, “Oakpass”.
  - 9/3: Oakpass set aside by FMC, pending further information.

- **Los Angeles**
  - 8/27: PierPass Announces Plan for Coordinated Initiative for Appointments at 10 of 13 Member Terminals.
  - 8/28: FMC Chairman Mario Cordero applauded efforts to fight gate congestion…but wants terminals to amend their agreement with the FMC

- **Manila**
  - International Container Terminal (MICT) has soft launched a vehicle appointment system…“as a proactive alternative to counterproductive truck bans”.  - *Ihsmaritime360, 9/4/15*
And Continuing Differences of Opinion

- Many truckers say the complexity of operating trucks on congested roadways and in the complex port environment makes it almost impossible to keep to the appointed times. - JOC, 4/28/15

- Harbor Truckers opinions are negative because of difficulties incurred in keeping to the windows due to because of the difficulties incurred due to congestion, weather or roadway traffic. - JOC, 5/2/15

- Advocates of appointments say the unregulated flow of trucks creates unpredictable demand and poor utilization of terminal equipment. Truckers say they worry that appointments will penalize them for delays beyond their control, and say that terminals should lengthen gate hours and take other steps to reduce turn times before requiring appointments. - JOC, 8/28/15
Port-wide Appointment Systems

- **Utilized Across the Board**
  - All Terminals Must Participate
  - Similar Business Rules, but Allow for Individual Operating Practices
  - Require Advance Notice

- **Easy for Truckers**
  - Single Access Point to Access all Terminals for Available Containers and Appointments (Single System not Needed)
  - Minimize Coordination Complexity

- **Fair**
  - Policies are the Levers to Positively Influence Behavior
Eagle Marine Services / GGS Appointment System

15 Years to Decide,  
6 Months to Execute
15 Years to Decide, 6 months to Execute

- Considered On and Off “forever”
- No Attractive OTS Systems
- No Real Drivers Until 2014
  - G6
  - Larger Ships
  - Chassis Divestiture
  - CY Operating Mode Change
  - No Time to Experiment: Flexibility is Key
- Stakeholders are the Biggest Challenge
  - But we Thought it was Just Truckers
Objectives

- **Mitigate Expected Service Challenges**
  - Meter Terminal Traffic, Relieve Congestion

- **Reliable and Consistent Service to Truckers**
  - Predict Demand on Terminal Resources
  - Assist in Yard Planning and Operations Management

- **Promote Rapid Adoption**
  - Configurable for Terminal Operator
  - Easy to Use for Trucker

- **Minimize Impact to Operating Processes and Labor**
  - Transparent to Normal Operating Practices (Gate, Trouble)
  - Abstracted from Terminal Management and Labor
System Considerations

• **Buy vs. Build?**
  – What are Others Doing?
  – User Interface – Time and Discipline
  – Control of Terminal Business Rules – Flexibility
  – Market Penetration: Notification, Training, Adoption
  – Ongoing Product Development and Support
  – End User Support

• **Terminal Operating System Interface – Time Line, Alternatives**

• **Gate Interfaces – Configuration, Control**

• **Process and Training**
### Buy vs. Build Decision: “YES”

<table>
<thead>
<tr>
<th>3rd Party Front-end (eModal)</th>
<th>EMS TOS (Gate Control)</th>
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<tbody>
<tr>
<td>Limited cost to EMS</td>
<td>Defines “Available” and sends to eModal (valid appointments)</td>
</tr>
<tr>
<td>Configurable Time Windows, Yard Blocks, Appointment Volumes, Availability Rules, ...</td>
<td>Dynamically configurable “Grace” Windows and Gate Control</td>
</tr>
<tr>
<td>Critical Mass Community</td>
<td>Appointments Visible in Terminal Operating System</td>
</tr>
<tr>
<td>EDI-based</td>
<td>No End User Interaction Required. Minimal Interaction Used (competitive tool).</td>
</tr>
<tr>
<td>Leverage Existing Container Availability EDI</td>
<td>Highly Flexible, Configurable</td>
</tr>
<tr>
<td>Near real-time appointment EDI to EMS</td>
<td>Rapid-fire changes if needed (i.e., reefer bypass)</td>
</tr>
<tr>
<td>Near real-time EDI to eModal on Gate Moves</td>
<td>Transition Parameters (Trans Type, Lanes, Companies)</td>
</tr>
<tr>
<td>“Notify Me” Feature</td>
<td></td>
</tr>
<tr>
<td>Well-segregated Process</td>
<td></td>
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<tr>
<td>End User Support Structure</td>
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Trucker Appointment Process

- EMS Sends Container Availability via EDI to eModal
  - As done today for availability

- Truck Companies Make Appointments on eModal Web Site
  - Log on with eModal ID
  - Inquire Container(s) of interest
  - Appointments can be made for Available containers only
    - If Unavailable, truck company emailed when available

- Trucker transacts with terminal as today

- If no appointment or not within time frame, trucker must leave terminal and set up a new appointment
Stakeholder Management

- **External**
  - Pilot Users (High-Touch)
  - Truck Companies and Truckers
  - Carrier Customers
  - Labor

- **Internal**
  - Terminal Management
  - Managers and Superintendents
  - Corporate Management
  - Carrier Sales / NetOps
  - Labor
Keys to Success

- Success is the Only Option
- Executive Support
- Architectural Decision – Front end / Back End
  - Speed / Control / Discipline / Process / Community Access
- Vendor Commitment (Advent)
  - Conversation to Implementation: 7 months
  - Experience, Productized View, Desire
- Timing – Bad Medicine to the Rescue
- The TEAM
Successes

What Was Proven

- Community Approach was Correct
- Rapidly Adopted as an Operating and Planning Tool
- Changing Stakeholder Behavior
- Terminal Still has it’s Secret Sauce

Opportunities Remain

- Room to Optimize, Tighten
- Need to add Empties / Exports
- Scope Should be Port Wide / Consider Externalities
Lessons Learned

• It is Absolutely Time for Appointments
  – Integral to Operations Planning, Port/Terminal Fluidity

• Community Approach was Correct

• System Must Have Slack – External Environment
  – How Much?

• Stakeholders do not Want to Change Behavior
  – Service is Paramount.

• Design for Flexibility
  – Tweak Rather Than Turn Off

• The Data Makes the Case
Terminal Appointment Systems Should be Considered a Competitive Necessity for Marine Terminal Operators and Port Authorities.