Success Through Customer Service

Agenda

- Thinking about performance measurement for ports and how the AAPA’s Port Customer Service Initiatives of 2012 and 2014 fit in a bigger picture of serving port customers and users
- The development of the AAPA metrics and reports—understanding different customer and user groups for making strategic investments in infrastructure and marketing
- Interpreting results
- The future possibilities
- My question for you: Are you ready to invest in better decision-making?
- My suggestion: It is better for ports to invest in benchmarking information as a group than to invest alone. Why?
What Is It That You Want to Do?


The AAPA’s Port Customer Service Initiative Vision

- An independent third-party assessment of customers and users to enhance your ability to improve port service delivery.
- An individualized report to each port that provides “best practice” scores and the port’s scores to provide context to user “importance” and that enables benchmarking for assessing resource allocation.
- The first study was done in 2012 and we repeated it in 2014.
Making Strategic Improvements that Pay Off!

1. Identify your port’s customers’ and users’ criteria for assessing service quality (They all also see satisfaction as correlated with customer service—effectiveness of service delivery).
2. Evaluate the port’s performance on both the criteria you control and what you influence.
3. Determine what needs to be fixed based on those items of importance to the customer and determinant in their assessment of your port’s service quality performance.
4. Via information-sharing, coalition-building, and identifying financial support and sources, you should be able to help your tenants and suppliers to change services under their control.
5. You have the ability to differentiate the port and take control of the narrative about what you do well.

Identifying the Right Service Metrics by User Type

Phase 1: Evaluate via focus groups over 80 metrics (2007)

- Canadian Port Users
  - 3 Cdn & 2 US Ports
- U.S. East Coast Port Users
  - 5 US Ports
- U.S. West Coast Port Users
  - 5 US Ports

Phase 2A: Same Instrument:
- 2 publications in 2011—Maritime Policy & Management and Transportation Research Record plus
- 1 publication in 2014 in Maritime Policy & Management

Phase 2B: Reduced and Modified Instrument for 2012
- AAPA survey
### Phase 3: Service Metrics in 2012 Survey

<table>
<thead>
<tr>
<th>User Group</th>
<th>Criteria for Determining Service Quality Performance Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping line</td>
<td>19 specific service criteria plus two cost criteria</td>
</tr>
<tr>
<td>Cargo owners &amp; agents</td>
<td>11 specific service criteria plus two cost criteria</td>
</tr>
<tr>
<td>Supply chain partners</td>
<td>15 specific service criteria</td>
</tr>
</tbody>
</table>

*Criteria were “plug and play” based on previous research for this initiative.*

### Illustrative Metrics 2012

<table>
<thead>
<tr>
<th>Cargo Interest Examples (5 of 10)</th>
<th>Shipping Line Examples (5 of 18)</th>
<th>Supply Chain Partner Examples (5 of 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of adequate, on-time information</td>
<td>Provision of adequate, on-time information</td>
<td>Provision of adequate, on-time information</td>
</tr>
<tr>
<td>Terminal operator responsiveness to special requests</td>
<td>Incidence of cargo damage</td>
<td>Accessibility to port premises for pick-up &amp; delivery (gate congestion)</td>
</tr>
<tr>
<td>Availability of direct service to destination</td>
<td>Timely vessel turnaround</td>
<td>Efficiency of documentary processes</td>
</tr>
<tr>
<td>Incidence of cargo damage</td>
<td>Connectivity/operability to rail/truck or warehousing</td>
<td>Ocean carrier schedule reliability/integrity</td>
</tr>
<tr>
<td>Choice of truck/rail/warehousing</td>
<td>Terminal operator responsiveness to special requests</td>
<td>Speed of stevedore’s cargo loading/unloading</td>
</tr>
</tbody>
</table>
How It Works (1)

**Platform:** LimeSurvey hosted on its own web address on a secure Dalhousie server (not subject to the U.S. Patriot Act)

**What do we measure?**
- The overall performance rating of each port by their users on effectiveness of service delivery (7 point scale)
- Importance of each service criteria to the specific user group (7 point scale)
- The performance of up to three ports used by that user rated on those service criteria (7 point scale)

**Other data collected?**
- Type of user
- Usage data
- Open-ended concerns
- Company demographics

How It Works (2)

**What do we get as outputs?**
- The determinants of the effectiveness of service delivery score for each particular port (using NPE—normalized pairwise estimation) **SCORE INFLUENCERS**
- A gap analysis (importance minus performance) for each user **SERVICE GAPS**
- Direction to each port on their particular ratings and results, including their relative score in comparison with the other ports in the survey. **BENCHMARK**
- Open-ended comments and demographics of the survey participants **INDIVIDUAL FEEDBACK**
What We Do With the Data Collected?

Evaluation Report Card by Cargo Interests for the Mystery Port on 9 of 10 Criteria

<table>
<thead>
<tr>
<th>Evaluative Criteria</th>
<th>I-P Gap</th>
<th>Performance Mean</th>
<th>Lowest</th>
<th>Highest</th>
<th>NPE</th>
<th>Relative Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Criterion A</td>
<td>0.16</td>
<td>5.16</td>
<td>4.21</td>
<td>6.09</td>
<td>0.289</td>
<td>51%</td>
</tr>
<tr>
<td>B Choice of rail/truck/warehousing companies</td>
<td>-0.40</td>
<td>5.96</td>
<td>5.25</td>
<td>6.12</td>
<td>0.211</td>
<td>82%</td>
</tr>
<tr>
<td>C Criterion C</td>
<td>0.21</td>
<td>5.63</td>
<td>4.50</td>
<td>5.89</td>
<td>0.283</td>
<td>81%</td>
</tr>
<tr>
<td>D Criterion D</td>
<td>0.24</td>
<td>5.80</td>
<td>5.19</td>
<td>6.11</td>
<td>0.259</td>
<td>66%</td>
</tr>
<tr>
<td>E Criterion E</td>
<td>0.32</td>
<td>5.37</td>
<td>4.55</td>
<td>6.1</td>
<td>0.305</td>
<td>50%</td>
</tr>
<tr>
<td>F Criterion F</td>
<td>0.15</td>
<td>5.77</td>
<td>5.38</td>
<td>6.33</td>
<td>0.211</td>
<td>41%</td>
</tr>
<tr>
<td>H Criterion H</td>
<td>-0.31</td>
<td>6.00</td>
<td>5.50</td>
<td>6.61</td>
<td>0.158</td>
<td>45%</td>
</tr>
<tr>
<td>I Provision of adequate, on-time information</td>
<td>0.96</td>
<td>5.50</td>
<td>5.00</td>
<td>6.08</td>
<td>0.250</td>
<td>46%</td>
</tr>
<tr>
<td>J Terminal operator responsiveness to special requests</td>
<td>0.75</td>
<td>5.19</td>
<td>4.44</td>
<td>5.5</td>
<td>0.304</td>
<td>49%</td>
</tr>
</tbody>
</table>
## Determinance I-P Gap Space for Cargo Interests for the Mystery Port

**Cargo Interests**

![Diagram showing determinance I-P gap space for cargo interests.

## Evaluation Scores by Container Shipping Lines for the Mystery Port (on 10 of 18 Criteria)

<table>
<thead>
<tr>
<th>Evaluative Criteria</th>
<th>I-P Gap</th>
<th>Mean</th>
<th>Lowest</th>
<th>Highest</th>
<th>NPE</th>
<th>Relative Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Criterion B</td>
<td>0.154</td>
<td>6.08</td>
<td>4.29</td>
<td>6.08</td>
<td>0.271</td>
<td>100.0%</td>
</tr>
<tr>
<td>D Criterion D</td>
<td>0.455</td>
<td>5.64</td>
<td>4.29</td>
<td>6.22</td>
<td>0.221</td>
<td>69.9%</td>
</tr>
<tr>
<td>E Criterion E</td>
<td>1.167</td>
<td>4.92</td>
<td>3.00</td>
<td>6.18</td>
<td>0.206</td>
<td>60.4%</td>
</tr>
<tr>
<td>F Incidence of cargo damage</td>
<td>0.385</td>
<td>5.23</td>
<td>5.22</td>
<td>5.80</td>
<td>0.187</td>
<td>1.7%</td>
</tr>
<tr>
<td>G Criterion G</td>
<td>1.385</td>
<td>5.15</td>
<td>4.29</td>
<td>5.80</td>
<td>0.253</td>
<td>57.0%</td>
</tr>
<tr>
<td>I Provision of adequate, on-time information</td>
<td>0.462</td>
<td>5.38</td>
<td>5.14</td>
<td>5.89</td>
<td>0.234</td>
<td>32.0%</td>
</tr>
<tr>
<td>K Quality of rail/truck/warehousing companies</td>
<td>-1.000</td>
<td>5.90</td>
<td>5.14</td>
<td>5.90</td>
<td>0.311</td>
<td>100.0%</td>
</tr>
<tr>
<td>N Criterion N</td>
<td>0.800</td>
<td>4.80</td>
<td>4.73</td>
<td>6.30</td>
<td>0.133</td>
<td>4.5%</td>
</tr>
<tr>
<td>P Timely vessel turnaround</td>
<td>1.000</td>
<td>5.50</td>
<td>4.64</td>
<td>6.11</td>
<td>0.218</td>
<td>58.5%</td>
</tr>
<tr>
<td>R Criterion R</td>
<td>1.231</td>
<td>5.00</td>
<td>4.83</td>
<td>6.08</td>
<td>0.231</td>
<td>13.6%</td>
</tr>
</tbody>
</table>
For oversize/weight cargo [Port of Mystery] has very good inland capability and vessel ro-ro service; however charter vessel availability/cost is a problem. Also port infrastructure is a limiting factor.

Extremely important that port efficiency is at highest possible achievable level. Speed of turnaround times, cost effectiveness & inland distribution capabilities are critically important. Truckers seem less knowledgeable regarding the container pick up & delivery so takes more time to deal ex [Port of Mystery].

Excellent infrastructure and ocean connections but the inland clearances are a significant disability.

We are a specialized trucking company ... The [Port of Mystery] is not realistic with their hours of operation; they try to serve an industry that operates 24/7 with basically office hours. ... Some days our trucks spend in excess of 4 hours waiting to get into the port and load/unload.
With the Reports, Port Managers Can Improve Port Performance if...

- They know the importance/relevance of attributes
- They know user’s perceptions of port performance overall (e.g., effectiveness in service delivery) and by attribute (e.g., cargo handling)
- Therefore, they identify performance gaps
- They uncover the determinance of attributes for effectiveness in service delivery
- Have combined this information using a Determinance – IP Gap Analysis to identify where to concentrate service delivery improvement efforts (translation: where to allocate resources!!) or where they can market their superior performance to users (because they have a perceptible gap)
- We provide the information needed for investment, marketing and stakeholder discussion…

Our Commitments to Participating Ports

- We promised to not share each port’s contact list, to keep it confidential and inaccessible, and to not say to those we contact which port provided the contact information
- Each port providing a contact list received a report indicating the determinants of their score, identifying the attributes that most contribute to their particular overall scores by user type.
- Each port that provides a contact list of sufficient size to generate an adequate response rate would see their own score, and the best practice score on each attribute. Ports in 2012 and 2014 provided 550+ names; the more names the better.
- We did not name the ports in a published report. (Mystery Port, Port A, B… )
What We Found in 2012

- Port user groups rate a port’s effectiveness in service delivery differently, i.e., a port that is rated highly by the shipping lines may score poorly when rated by cargo owners or its own supply chain partners, or vice versa.
- No port excelled in serving all three user groups
- The pattern of performance gaps were different on the various criteria for each port.
- In all cases, the initiative identified criteria for targeted improvement for each user group—Cargo Interests, Shipping Lines, and Supply Chain Partners. Each port had a unique portfolio of factors to repair by investing for improvement, and many ports found a usable “market for awareness” opportunity.
- The report gave ports talking points for their discussions with suppliers.

What We Found in 2013’s Further Data Analysis

- Cargo Owners who book their own transport arrangements are a distinct sub-group from those who act as Agents for owners on five of 13 criteria.
- Cargo Agents are more influenced traditional CRM criteria like responsiveness and information provision while Cargo Owners are more influenced by perceptions of port security.
- The two Cargo segments are best evaluated separately where possible.
- We have learned enough to focus the Shipping Line criteria more tightly in future surveys.
- Supply Chain Partners are a forgotten user group for some ports; with their own unique set of needs, as partners they need to be part of the solution in developing port strategic investments.
Introducing ... SEAPORT

Service Effectiveness Assessment for PORT managers

... and it's translated so we can add ports in French and Spanish speaking countries
We used SEAPORT in 2014.

Service Delivery Effectiveness Performance Measures

<table>
<thead>
<tr>
<th>User Group</th>
<th>Statements in AAPA 2012 Initiative</th>
<th>Statements in SEAPORT 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping line</td>
<td>19 criteria</td>
<td>13 criteria</td>
</tr>
<tr>
<td>Cargo owners &amp; agents</td>
<td>11 criteria</td>
<td>8 criteria</td>
</tr>
<tr>
<td>Supply chain partners</td>
<td>15 criteria</td>
<td>8 criteria</td>
</tr>
</tbody>
</table>

Cargo owners and agents are 2 sub-groups; same criteria, different patterns of use
• Environmental changes can rapidly alter what is critical to your customers. This was true in for all user groups.
• The West Coast surge and labour challenges altered the determinance score of some criteria substantially, even for east coast ports.
• When customers are really unhappy, they use a broader response scale to relay their concerns, and fill in even more open text comments. (We did not cap the number of words and got an earful of constructive criticism and useful ideas.)
Conclusions

- Periodic assessment of the quality of service delivery in ports leads to better decision-making by ports on where to invest for improvement and what to market for awareness, and therefore success through customer service.

Questions?
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