Dashboards and KPIs for the Real World

AAPA Smart Ports
Oakland
March 2018

Dan Smith
The Tioga Group
Dashboard?

What THEY see...

... vs. what YOU see

Tioga
Our responsibilities no longer end at the terminal fence

- Our customers, their customers, and their customers' customers want information
  - They expect KPIs and data
  - Truckers and BCOs need to make plans and operating choices
- Our constituencies and regulators want information
  - Electeds and the public want to know how the port is doing
  - Planners need to understand trends
  - Communities want to know what is going on at the port
Who is looking over your shoulder?

- Marine terminal operators
- Ocean carriers
- Truckers
- BCOs
- Commissioners, board members, elected officials
- Regulators and environmental agencies
- The public

Please rate each of the following measures of container terminal efficiency/productivity. (Please assume you can get reliable information on each measure.)

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not Important</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall cost per container</td>
<td>16</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1.20</td>
</tr>
<tr>
<td>Overall transit time</td>
<td>17</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1.20</td>
</tr>
<tr>
<td>Reliability (% on schedule)</td>
<td>15</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1.25</td>
</tr>
<tr>
<td>Drayage (truck) turn time</td>
<td>14</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1.35</td>
</tr>
<tr>
<td>Average container dwell time</td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1.45</td>
</tr>
<tr>
<td>Container moves/crane Hour</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>2.25</td>
</tr>
<tr>
<td>Average vessel time in port (hours)</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2.35</td>
</tr>
<tr>
<td>Average man-hours per container</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2.80</td>
</tr>
<tr>
<td>TEU/acre</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>3.53</td>
</tr>
</tbody>
</table>
What’s relevant and valuable?

We can provide....

- Past performance – annual/YTD/monthly
- Recent performance – last week, yesterday
- Today’s outlook – expected activity
- **Current status**

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LAST YEAR’S RESULTS
LAST QUARTER’S RESULTS
LAST WEEK’S RESULTS
YESTERDAY’S RESULTS
TODAY’S OUTLOOK
REAL TIME SITUATION

ANALYSIS & PLANNING
OPERATING DECISIONS

Tioga
What belongs on a dashboard?

We start with a mixture of port and terminal data

- Public viewers are probably more interested in port-wide data and averages
- The industry tends to focus on terminal data as well as port averages
- The data we would like to provide are not always available or current
- Third-party and automatic or probe data add to the possibilities, but also the costs
When is a Performance Indicator “Key”?  

- When it signals a need to act  
- When it affects port management  
- When it affects an operational decision  
- When it affects cargo routing  
- When it affects investment decisions  
- When it reflects community and environmental concerns  
- When it shifts dialog from anecdotes to numbers
What will help them understand and work with the port?

• Employment, environment, and community – What have we done, how are we doing?

• News & alerts – Construction, events, changes
Search for: “BTS Port Performance 2017”
Key program takeaway – It is difficult and unreliable to compare ports
Port of Los Angeles KPIs

Key Performance Indicators

How are we doing?

- Conventional port statistics
- Regional and community impact
  - Employment
  - Tax revenue
  - Value of trade
- Talking points
Vancouver Dashboard

Port Dashboard

Port Dashboard provides real-time monitoring tools for port users and stakeholders, plus supply chain performance metrics, maps and weather data.

Real-time monitors

Several real-time monitoring programs are in place throughout the Port of Vancouver to help keep users informed and enable better planning.

Webcams

Real-time supply chain status through the Port of Vancouver eHub app.

GPS dashboard

Container truck GPS data, providing wait times at port terminals.

eHub app

Noise data and information about the port’s rail crossing status.

Supply chain performance

To plan accordingly.

REAL TIME SITUATION

RECENT PERFORMANCE
Oakland Trucker WebCams

NOTICE: We are currently updating our cameras diligently to improve your live and image feed.

Welcome to Oakland Trucker WebCams, an interactive tool for dispatchers which requires STEP DTR Application launch of the application.***

Dispatcher Video Streams

Please use your email address registered with the

Trucker Gate Images

Feel free to bookmark the Trucker Gate Image page.
Where do we go from here?

- Start with what you have, and the story you want to tell
- If you do not provide the numbers, somebody else will (and you won't like it)
- Port-wide statistics and webcams are easy, and satisfy most public sector needs
- Meaningful operational data and actionable KPIs are harder to define and provide
- Current data and outlook are much harder, but more valuable
- Involving stakeholders is also harder, but more valuable
- Keep it current and interesting

Challenge is moving from past performance to current situation, and from anecdotes to numbers