

Target Your “Sweet Spot” to Maximize Profitability

While much ink is consumed reviewing the operational impact of increases in marine terminal cargo volumes, very little has been written about the financial consequences, including its impact on terminal profitability.

Most marine container terminals in North America were designed and built for cargo volumes that have been or will be exceeded. As a result, their “sweet spot” for maximum efficiency and profitability has also been or will be exceeded. These terminals are faced with the paradox of increasing revenue with narrowing or negative profit margins for each additional container moved.

Case in point, one terminal operator’s sales force was offering volume discounts while their operations staff was drowning in the extra volume. Their financial systems and processes did not sound the alarm bells that should have closed the sales spigot, or at a minimum, stopped the discounting.

It calls to mind the old joke about losing money on the next container, but making it up in volume!

Background

The term used by economists to describe the sweet spot is maximum theoretical efficiency. At this point, the existing terminal facility and equipment are used at their best possible efficiency levels. Any additional volume inundates the facility, moving it beyond optimum efficiency levels.

As an enterprise moves beyond the point of maximum efficiency, it is forced to spend more money per container in order to maintain acceptable levels of customer service.

When it comes to revenue, most of us assume that “more is better.” However, with increased cargo through our nation’s ports over the next few years, many enterprises are learning that they are not prepared for the offsetting cost expansion.

Here is a case study from a company that had built its facility with an engineered maximum 600,000 container throughput capacity:

Metric	Sub-optimal Conditions	Optimal at the Sweet Spot	Beyond the Sweet Spot
Actual Volume (units)	350,000	425,000	565,000
Percentage of Capacity	58%	71%	94%
Labor Man-hours per Unit	2.9 man-hours	2.2 man-hours	3.1 man-hours
Pre-tax Earnings (in millions)	\$9.10	\$17.40	\$10.70

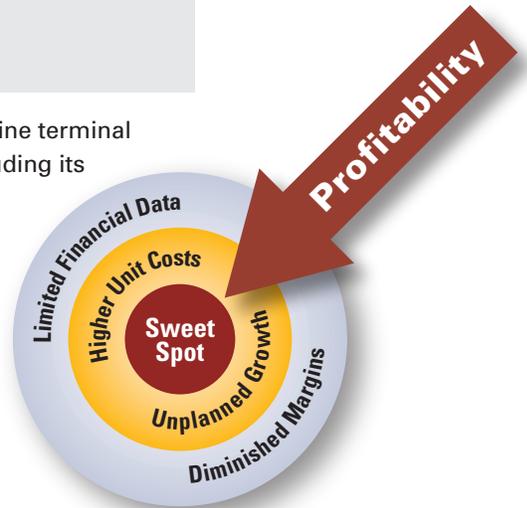
Note that this facility had a design maximum capacity of 600,000 containers per year, but its layout and equipment configuration reached the point of maximum efficiency at only 425,000 containers.

Note that the labor man-hours per unit of volume declined (as predicted in the economist’s model above) as they reached their optimum throughput volume of 425,000 containers, and profits increased accordingly.

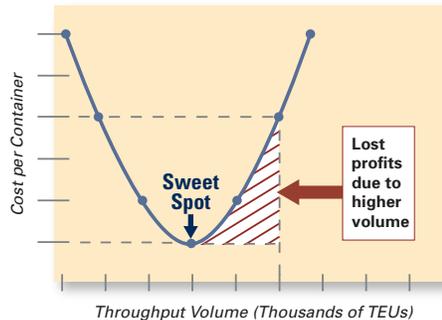
However, as volume exceeded 425,000 units, labor efficiency plummeted and earnings dropped with it. *They had passed their sweet spot.*

How did this happen?

Our experience as cost management experts has demonstrated that few companies have the business information systems that can anticipate the financial impact of cargo growth.



Author’s Note: The following material is written from the point of view of a marine terminal operator. However, the principles apply to many hourly labor enterprises in many industries.



Their financial information systems cannot anticipate the change in unit costs as a result of the increased volume. More important, these systems cannot model the steps necessary to ensure maximum productive efficiency during periods of change.

Traditional financial statements are limited to a historical perspective and cannot anticipate the future.

Company budgets and forecasts are based upon this historical model and fail to aid management in finding the sweet spot. As a result, they pay the penalty with sub-optimal profits.

Now What?

Reducing volume to return to the company's sweet spot is rarely practical and goes against the grain of most business people. A better solution is to:

1. Build a performance plan utilizing products such as our LABOR COMMAND solution, to determine a facility's maximum efficiency.
2. Create cost models and forecasts necessary to anticipate future volume, which can affect technology, configuration, equipment and labor strategies.
3. Monitor trends against plans and standards using a metrics dashboard, improving operational visibility.
4. Restore the sweet spot through capital investment and capital access strategies necessary to set the targets for growth and increased profitability.

For companies facing growth, the best situation is to anticipate the impact of growth and to have a plan for its arrival.

Our Experience

MetriTech has worked with companies in the transportation industry to: (1) build systems that identify profitability problems before they manifest themselves, (2) fix these structural problems before they occur, and (3) plan for capital investment.

Without a solution such as our LABOR COMMAND system terminal operations can be caught unaware of a revenue and cost squeeze. As a result, they can find themselves off their sweet spot with no plan for recovery.

Our Labor Cost Management (LCM) and Corporate Performance Management (CPM) tools provide management the ability to anticipate and quickly react to problems. It gives them the tools to monitor key performance indicators.

We have helped companies justify capital investments while our LABOR COMMAND solution quantifies the cost reductions realized from the investment and the improvement in profitability.

Companies should have reporting tools and processes in place to plan for large-scale fluctuations in volume. Many can restore profitability by recognizing when they have reached or exceeded their sweet spot and make the facility changes necessary to meet the volume challenge.

MetriTech has the professionals with the experience to help you hit your sweet spot.



65 Pine Avenue, Suite 373
Long Beach, CA 90802

1-800-915-0828
info@metritech.net
www.metritech.net