

## CASE STUDY



### CHALLENGES

- Reduce truck turn time
- Improve efficiency of invoicing process
- Boost operational productivity at the berth

### SOLUTION

- Navis N4 Terminal Operating System

### RESULTS AT A GLANCE

- Truck turn time reduced by almost 80%
- Average time to process an invoice reduced by 80%
- Average moves per hour at berth increased by over 50%
- Volume has increased by almost 40% at terminal in Pilar

## Key Trade Hub Optimizes Operations to Support Surge in Country's Imports and Exports

### CUSTOMER PROFILE

- Caacupe-mi operates two terminals in Paraguay strategically situated on Paraguay River in Asuncion and Pilar
- Average TEU of 110,000
- Terminals support over 50% of country's imports and exports

### ABOUT CAACUPE-MI

Caacupe-mi owns a key family of terminals in Paraguay, with one facility located in Asuncion and another 330 kilometers away in Pilar, the southernmost tip of the country. Combined, both terminals span over 150 hectares and are currently responsible for 110,000 TEUs annually.

Caacupe-mi terminals are strategically situated on the Paraguay River, which connects the country with Brazil, Bolivia, Uruguay and Argentina, enabling Caacupe-mi to offer reliable port services 365 days a year, regardless of river draft restrictions. Caacupe-mi supports 53 percent of the nation's imports and exports and operating at peak efficiency is an absolute necessity. Caacupe-mi's two ports serve as key Paraguayan trade hubs that support the flow of vital goods, such as soybeans, molasses and sugar.

Beginning in 2013, the volume of containers and cargo flowing through both ports nearly doubled, a capacity that their terminal operating system CTS (TOS) could no longer support. Caacupe-mi sought a scalable TOS that could grow with them and support their efforts to optimize productivity, reduce operational costs, lower trucker wait times at the gate during peak periods, improve yard planning and reduce the number of container rehandles.

To address these issues, Caacupe-mi's leadership team looked to implement an automated, scalable TOS that could support their growth and provide a high level of customer service. Caacupe-mi was the first small sized port in Paraguay and in South America to select Navis N4, in order to achieve greater agility, efficiency and control in handling large cargo volumes. Caacupe-mi implemented N4 using a multi-facility license which allows them to streamline processes and gain better control of their daily operations.

Prior to using N4, truck-turn time took two hours or more. Within the first two months of using N4, that time was reduced to one hour or less. Currently, the average truck turn time has been reduced to just 25 minutes. Importers in particular see this as the most positive effect of Caacupe-Mi's service improvement.

Even more significant is the impact of N4 on Caacupe-mi's billing and collection process. According to Roderick Temperley, CEO of Caacupe-mi, "This is one feature of N4 that is most valuable to the terminal's operations. Before N4, the total time to process each invoice took approximately 25 minutes per customer. After N4 was implemented, the average time to process an invoice has been reduced to just 4-6 minutes per customer. This helps Caacupe-Mi collect payment faster and become more profitable."



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**“Due to Asuncion’s and Pilar’s success with N4, we are building a new port in Villeta. N4 has allowed us to streamline our systems and better our end-to-end operational process throughout the country. We are learning how important it is to have an open mind so that processes can continue to improve and long-term benefits can be achieved.”**

— RODERICK TEMPERLEY  
CEO of Caacupe-mi

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“While it is still too soon to quantify N4’s long term impact on the terminal’s revenue, huge gains in operational efficiency and improved productivity has undoubtedly been achieved. The TOS has allowed Caacupe-mi to maintain the same team and the same equipment and infrastructure, handling higher volumes, all the while sustaining and sometimes even decreasing labor hours,” notes Temperley.

Caacupe-mi has taken advantage of N4’s other valuable functions, including its ability to plan cargo movements. As a result, berth improvements have been achieved – elevating it to 20+ container moves per hour from 13-14 per hour, a benefit that directly benefits shippers. N4 has also provided Caacupe-mi with accurate measurements of cargo volume. From 2014 to 2015, volume has increased by almost 40% at the terminal in Pilar.

Having gone through go-lives at two terminals, Temperley credited proper training and guidance by Navis’ team as what set both sites up for success. Before going live at Asuncion, they held a rigorous training program and gave their employees ample time to learn the ins and outs of the solution, as well as fine tune the skills they needed to manage the day-to-day. This was a challenging process to manage because at the same time, their cargo volume was rapidly increasing, so they were juggling several moving parts all at once. “In terms of training our Pilar employees on N4, we applied a very particular process. We had a team of ‘super users’ from Asuncion lead the charge since they were very knowledgeable by that point. That team’s expertise helped Pilar understand and go live with the solution much faster than Asuncion initially had.”

With N4 fully operational at two sites, Temperley looks ahead at the opportunities, as well as the shift in mindset, that the TOS’s success has lead to. “We are very satisfied with Navis and the whole Cargotec family. Due to Asuncion’s and Pilar’s success with N4, we are building a new port in Villeta. Given the geography of Paraguay, we believe that by having multiple locations instead of one major port is most beneficial for trade and provides a unique solution for our customers, especially when considering river draft restrictions. N4 has allowed us to streamline our systems and better our end-to-end operational process throughout the country. We are learning how important it is to have an open mind so that processes can continue to improve and long-term benefits can be achieved.”



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Navis provides operational technologies that unlock greater performance and efficiency for our customers, the world’s leading terminal operators. The Navis N4 terminal operating system (TOS) represents more than 25 years of experience and innovation that enables terminals to optimize their operations and move cargo smarter, faster and more efficiently. As an industry leading technology, more than 250 container terminals worldwide have partnered with Navis to improve performance, reduce costs and minimize risk.