2023 is the Year of Empowering Terminal Operators to Do More

As 2023 begins, [REDACTED] seeks to continue providing terminal operators with the industry-best value from our products. Looking back at 2022, we learned valuable lessons about our customers, products, and emerging trends. This blog captures some of our accomplishments and how we'll onboard what we've learned throughout 2023 and beyond.

What [REDACTED] Accomplished in 2022

In 2022, the [REDACTED] team accomplished several milestones. Let's dive into our biggest accomplishments in helping terminal operators streamline their operations.

A Transformed Product Strategy

Over the years, [REDACTED]' products have always required customized integration to meet our customers' unique needs. But in 2022, we re-evaluated our product strategy to better understand how we can deliver products that are more accessible and ready to run "out of the box."

With the right standardized solution featuring extensive integration capabilities and configurations, APIs handle much of the custom implementation work instead of connectors built from scratch. This significantly reduces implementation time and cost for our customers, helping them achieve a better, faster return on their investment (ROI).

Updated Product Strategy and Plan

We updated our product strategy with numerous <u>design-thinking</u> sessions among our product team. These sessions' results now guide our vision for [REDACTED]' solutions and help ensure it and our goals align with customers' unique needs.

And as the product team strategically planned out the product portfolio, we shared that internal vision and strategy with customers to get their feedback. The team further optimized our product roadmaps accordingly to ensure they align with stakeholders' expectations.

[REDACTED]' overarching goal is to constantly set the industry standard for terminal operating systems (TOS) relied on by global to local operations for marine and rail. This requires that our team understands industry trends, customer expectations, and current product demands.

Our product strategy in 2022 focused on four main areas.

#1 – Standardizing Product Offerings

To set the industry benchmark, our product team must identify, stabilize, and sustain the core solutions we deliver to customers via standardization. Doing so helps guarantee ROI and instills their trust in the quality and reliability of our offerings.

However, it also enables us to determine the solution's essential functionality and integration capabilities to streamline their management and support. Our clients can now handle implementation, configuration, ongoing management, and support tasks without the extensive hardcoding or scripting that adds costs and lengthens turnaround times.

For any unique environments, applications, or integration needs, we also identified an extensibility framework that helps any terminal operation customize our solution for seamless integration.

These improvements come packaged with an enhanced, uniform UX for a cohesive look across both desktop and mobile customers.

#2 - Reducing Business Friction

We must provide excellent product quality, deployability, and customer service to meet clients' needs. And that effort involves removing barriers that might compromise collaboration – both internally and externally.

With the transition from custom implementations to standardized products, we optimized these processes and reduced the customer burden involved with making enhancements or facilitating support. This effort substantially decreases turnaround time on product estimates and statements of work from months to weeks.

As collaboration increases internally and product standardization unfolds, we can support customers much faster, streamline product releases and updates, and minimize potential disruptions to business operations.

#3- Developing a Better Data Platform

Enhancing the value of a data platform for terminals means moving away from a point-to-point integration for product communication. Instead, creating a more comprehensive data strategy streamlines data flow between products and standardizes the communication between terminals and external parties.

Our team continues working hard to develop a robust set of APIs that facilitate seamless integrations across IT environments and leverage predictive analytics, immediately improving our customers' capabilities. And with the recent emphasis on the Marine Transportation Data Initiative, these integration capabilities prove more valuable than ever before.

#4 - Creating a Cohesive Framework

Forthcoming innovation in the terminal operations industry depends on how well vendors develop integrable products that sync data. Rather than working in silos, products must function holistically as a suite.

By developing a portfolio of applications and no code capabilities, customers can access data in new and innovative ways for their various use cases. For example, anyone can now configure dashboard analytics for themselves. These applications help customers with limited coding experience to develop software tools themselves – and without adding additional custom project work.

Implementing a product strategy focused on these four main areas enables [REDACTED] to develop best-in-class products that meet customers' needs.

Reviewed Product Roadmaps

This past year we also applied what we learned when updating our product strategy and vision to keep our customers better informed with product roadmaps. We worked collaboratively with our clients and sought extensive feedback to understand their expectations for our products — now and in the near future. Engaging customers in these conversations helps our team gain awareness of the challenges faced across the industry and how we must improve our solutions to address them with longevity in mind.

Developing product roadmaps contributes to:

- An improved release cadence
- Higher product quality
- Smoother product upgrades
- Customer value creation

At [REDACTED], our product roadmaps now consist of:

- A list of quarterly, semi-annual, or annual accomplishments
- Current projects and ideas in development
- Proposed near-term projects (within the next six months)
- Potential long-term projects (beyond a six-month period)

Roadmaps enable all the key stakeholders involved in product development to stay on track, preserve essential functionality, and provide the maximum possible ROI to customers.

Improved Support Process

By improving the collaboration between the product engineering and customer success teams, the team at [REDACTED] supports customers more effectively. Product standardization

complements this effort by enabling us to provide more uniform support processes with faster turnarounds and self-help resources.

Notably, the product engineering and customer success teams built a new, rich, and directly accessible customer knowledge base. This repository comprises over 1,000 articles, helping customers find and tackle their basic-level support needs and substantially reduce support-related impacts and downtime.

Transitioned Product and Engineering Teams

Fostering more agile development across product and engineering teams, we transitioned our product development process to the <u>Scrum methodology</u>. Scrum involves continuous experimentation and feedback, enabling teams to provide greater collaborative value at much greater speeds.

With the Scrum approach to product development and collaboration, teams can accomplish tasks in small phases, incorporating appropriate practices at each phase to optimize desired outcomes. Using "sprints" during which teams solve problems or improve functionality, managers can easily track the progress. At [REDACTED], we leveraged two-week sprints to support agile product development that involved customers throughout the development cycle.

For instance, our response to the <u>Ocean Shipping Reform Act of 2022</u> (OSRA) readily demonstrated this improvement. With the help of the Scrum approach, we successfully adjusted our products for OSRA compliance and incorporated the regulations within 30 days. Implementing Scrum also increased trust, transparency, and collaboration across our teams and with customers.

Terminal Trends in 2023

In 2023, the terminal shipping industry will hone in on various opportunities, especially those related to data management and analytics. Overall, there is great interest in returning to the product development fundamentals, such as improving product quality, stability, and ease of deployment.

With that in mind, let's review some key trends we anticipate in 2023.

Greater Data Transparency

With terminals' operational volume and complexity continually increasing, software solutions must provide improved data transparency. Adaptable, real-time decision-making hinges on visibility into all operations down to granular levels.

Cloud Migration

Terminal operators relying on hybrid environments – with products functioning both on-prem and in the Cloud – must understand the best methods for managing them and meeting migration timelines. Choosing whether or not to migrate a given application, database, or other IT resource remains a top priority.

The primary consideration still involves an evaluation between improved access, scalability, and ongoing costs against migration costs. However, responsibility for simplifying the decisions falls on software providers and their compatibility with all major cloud providers.

Machine Learning and Advanced Analytics

For terminals to expand or optimize their operations, they must navigate resource limitations. This means terminal operators must do more with the same space but at lower costs.

Streamlining operations despite these constraints requires data-based insights that result in excellent customer service, reduced equipment maintenance, and properly allocated personnel. Machine learning tools enable users to access vast amounts of data, provide rules for data aggregation or standardization, and build advanced models that guide these decisions.

New and Emerging Markets

In the terminal operations industry, new technologies are consistently transforming shipping operations. For instance, inland rail terminals leverage cloud-based offerings to enhance novel technologies, such as automatic gate-in and gate-out through geo-fenced yards or mobile applications for terminal operation with minimal staffing. These trends are becoming popular for their dramatic cost reduction and high product ROI.

Potential Initiatives for Terminal Operators in 2023

Looking forward to 2023, what initiatives should terminal operators consider pursuing? Based on the trends discussed above, it makes sense for terminals to focus their investments on data management and security initiatives.

Leveraging Big Data

You can think of data as the new oil: with large amounts of it available, you have to find ways to extract its maximum possible value. In the terminal operations industry, a tremendous amount of data is available to analyze, but there are limited ways to bridge data across terminal networks.

Data analytics presents a relatively unexplored opportunity for marine and rail terminals to take control of their data and extract actionable insights from it. Looking broadly, terminal operators

can significantly optimize their global terminal operations just by leveraging data to guide decision-making. Whether it's the data collected at terminal entry points or during loading and offloading, each dataset can point to gaps or strengths in your terminal operations.

Strengthening Terminal Security

As more terminals digitize their operations, especially via cloud-based applications, security threats pose greater risks. Staying ahead of these threats requires the prompt deployment of security updates or system hardening.

It is critical for essential terminal software to remain up-to-date with security and regulatory updates to prevent disruptions in terminal operations. Across the terminal, teams must understand the need to document security maintenance and governance processes. Failure to do so could result in entire systems shutting down, which slows down or completely halts terminal operations.

Standardized products will enable us to deploy updates and patches with increased speed and much less impact on terminal operations.

What to Expect from [REDACTED] in 2023

At [REDACTED], we realize that customers need to access products easily and quickly. In 2023, we intend to focus on improving product quality, accessibility, and adoption speed. So, what are some of the initiatives you can expect from us in 2023, and how will our teams achieve them?

Web Application Development

Developing an extensible framework for customers means we can create web browser-based apps that eliminate the need for downloadable ones. Web applications are easy to learn or navigate and can provide the same information when accessed on a tablet, laptop, or cell phone. Unlike downloadable apps, web applications are much easier and faster to customize.

Customer Feedback

As we develop and release products, we plan to hear from customers about which tools work or don't. Incorporating their voices at each step of product development means we deliver less-complex products, reduce the average customer's learning curve, and help customers visualize the data they need.

Easy-to-Use Terminal Operating Systems

We also plan to provide plug-and-play terminal operating systems (TOS) for smaller core marine and rail terminals. These solutions enable next-generation traffic control with cloud-first architecture and built-in microservices to support multiple terminals.

Beyond supporting inland terminals, these TOS applications can help customers save more, especially when coupled with [REDACTED] for rail. Our expertise and scale at [REDACTED] provide best-in-class solutions to customers at a compelling price point. As terminals scale with our TOS tech, gradually implementing more of our suite becomes seamless.

Al/Machine Learning & Data Solutions

Our team also plans to build Al/machine learning tools that can provide recommendations to users, who can then choose to accept these models for data governance. As customers leverage these models to process large datasets and extract meaningful insights, they identify critical insights for their terminal operations.

Partner with [REDACTED] in 2023

As 2023 progresses, it's time to reset from recent supply chain and shipping tumultuousness by establishing a new base and returning to the fundamentals of terminal operations. Investing in easy-to-use software that provides terminal operators greater data access and capabilities will transform their operations at terminals, even with resource constraints.

To learn more about how [REDACTED] can transform your terminal operations, check out our products.