Lack of carrier API progress belies market adaptation to other visibility options

Eric Johnson, Senior Technology Editor | Mar 13, 2025, 10:54 AM EDT

Visibility providers are having to meet the ever-expanding real-time ocean freight data needs of their forwarder and shipper customers without measurable progress from shipping lines in establishing application programming interfaces (APIs) to convey key milestones.

Instead, those vendors are having to cobble together data via web scraping, electronic data interchange (EDI) messages, CSV files and automatic ship identification (AIS) information to paint a predictive picture for those customers.

Whereas the industry might have expected shipping lines to have provided APIs to allow easy access to container milestones by now, the reality is that there is a large variance between the availability, completeness and quality of the APIs that do exist.

"The top 10 ocean carriers, they're moving a significant volume of containers," Akshay Dodeja, CEO of visibility provider Terminal49, said at the *Journal of Commerce*'s TPM25 conference in Long Beach last week. "And they're already investing a lot in their own infrastructure. We're talking about millions and millions of dollars of investment to maybe just break even on providing those APIs, so I can empathize with them. There are also maybe even negative incentives to develop APIs."

Dodeja said it might not even make sense for carriers to invest in APIs given the direction the software engineering world is headed.

"On the customer-facing side, we're way beyond APIs," he said. "We actually don't even encourage APIs, because we completely sync everything to their data warehouses, so the more sophisticated buyers that are using us are warehousing all their data into [data warehouse providers] Snowflake, BigQuery, or Google Cloud."

The move by shippers and forwarders to build data warehouses is focused on being able to test new software vendors easily but also to drive faster and more accurate reporting.

"That's not happening via API," Dodeja said. "Now, we just sync everything to a data warehouse every hour. Ultimately, programmatic data will make supply chains more efficient."

Carrier dilemma

Anand Medepalli, chief product officer at visibility provider Shippeo, said that ocean carriers are in a bit of a dilemma when it comes to investing in APIs to connect with the market. On one hand, in EDI there are existing and trusted standardized means for conveying container milestones. On the other hand, creating APIs would allow a carrier more control over who is accessing location and status data versus having third parties web scraping to get that data.

"[Scraping] is the pull mechanism that we use today," Medepalli said at TPM25. "If ocean carriers do have an API strategy, they have to give credentials and therefore can control access. They know who is coming

and why, they can even direct them to a certain area of the website so that the website is not getting heavy hits at the wrong time. Ocean carriers have got tons of good reasons to do this right, but they really need to get their heads together, come up with one standard that everybody can subscribe to, and then become reliable."

In the interim, users of milestone data are relying on aggregators in lieu of setting up feeds of their own.

"From a forwarder perspective, I'm never going to integrate directly with a carrier," Jamie Andrade, senior vice president of product management at SEKO Logistics, said at TPM25. "Ultimately, I don't care how [my visibility provider] gets the data. They can pull it off of a CSV or an Excel spreadsheet, but they need to give me an API."

There's also the issue of maintaining APIs.

"We don't have the resources to go do all of the individual carrier APIs, and then have to maintain all of that," she said. "That's why there's value in going through an integrator. But then if the carrier charges you, your prices go up, and yes, my price goes up."

Andrade also mentioned that many forwarders are essentially "double paying" for visibility data because their freight management systems also provide visibility that can't be turned off, but that's not always good enough for their needs.

Context needed

Medepalli said another reason that ocean carrier APIs haven't progressed as fast as the industry may have hoped is that visibility providers are able to add context to simple milestone information for their customers in ways that carriers don't.

"Visibility, for the sake of visibility, is not interesting," he said. "We just don't take someone's data and massage it and then throw it to them. We actually contextualize it. We integrate with other systems to make sure that this data makes sense."

Medepalli added that using other data shows that the API data from carriers often isn't of a high enough quality upon which to base a prediction.

"If an AIS position says that the vessel is there, does it correspond to what the carrier is saying?" he said. "Sometimes, it's the reverse problem. We actually correlate other data, like AIS data, to make sure that the data we are getting from the carrier API is actually a good quality."

Ultimately, Dodeja said he believes shipping lines will have to adapt to an environment where quality data is a given for customers. Larger shippers and forwarders have the internal teams to manage that data directly and small to midsize companies will use visibility aggregators.

"Not every customer solution [for carriers] is a massive financial opportunity," he said. "But some things just make a lot of sense because customers want it, and we now are moving towards more programmatic access to this data to integrate it into their workflows."

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