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Startup funding in logistics: Focused investment in a growing industry

Funding for logistics startups almost doubled in 2021—here's where investors are focusing.

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Global attention seemed to shift toward logistics and supply chains during the COVID-19 pandemic. The sudden rise of e-commerce—which grew by over 25 percent—coupled with capacity constraints and congestion in both air and ocean transport highlighted the relevance of supply-chain resilience. There seems to be renewed focus on the role of logistics, and the desire for greater visibility across supply chains.

As a result, funding for logistics startups increased dramatically. McKinsey's report in May 2020, *Startup funding in logistics: New money for an old industry?*, examined funding trends in the transport and logistics sector. Since then, funding for logistics startups almost doubled in 2021 compared to 2020, but also shifted to different logistics subsectors. This article explores these recent changes and provides an update to the 2020 report.

New analysis is based on a sample of more than 500 startups, accounting for more than $80 billion in funding. Funding was analyzed over time, by industry, by region, and according to COVID-19 impact.

Funding for logistics startups reached a new peak in 2021

At the height of the pandemic, the vulnerability of logistics and supply chains was keenly felt across the world. Traditionally, logistics was considered by many to be an allegedly commoditized function—companies were often unwilling to invest in their own logistics assets, rather outsourcing the function and trying to minimize the share of transportation and warehousing costs in their income statements.[1]

However, as soon as consumers saw empty supermarket shelves, or, in the case of the UK, closed gas stations, the importance of the logistics industry was drawn to the world's attention. And businesses increasingly re-evaluated their perception of logistics. According to a survey of managers from global companies in 18 countries, 83 percent of respondents said they had become more aware of the risks associated with transport blockades, production shutdowns, or raw material shortages than before the pandemic.[2]

This shift in awareness resulted in an inflow of capital to the sector at an unprecedented level in 2021. However, the number of funding rounds for logistics startups remained relatively stable—growing only slightly compared to 2020—suggesting that funding rounds are becoming larger on average, according to our analysis.

Investors in the logistics industry have become more aware of the challenges, and the corresponding opportunities for growth, and are investing in new ventures with larger funding rounds (Exhibit 1).

For instance, startups that collected the most venture capitalist (VC) funding within one round include Indonesian-based J&T Express at $2.5 billion, and the Asian startup Lalamove that received $1.5 billion in January 2021. A supply-chain visibility startup in the United States, Project44, received funding of $202 million, valuing the company at $1.2 billion while Flexport collected $935 million in February 2022.

There may still be further room for logistics startups and incumbents to expand on e-commerce as a growth driver. In a survey investigating the effects of COVID-19 on direct-to-consumer brands in the US and Europe, 39 percent of brands stated that they now prioritize investments in fulfillment, delivery, and other logistics-related activities over other more traditionally important areas, such as brand strength.[3]

Investors' focus has shifted even more towards e-commerce logistics, delivery, and supply-chain visibility

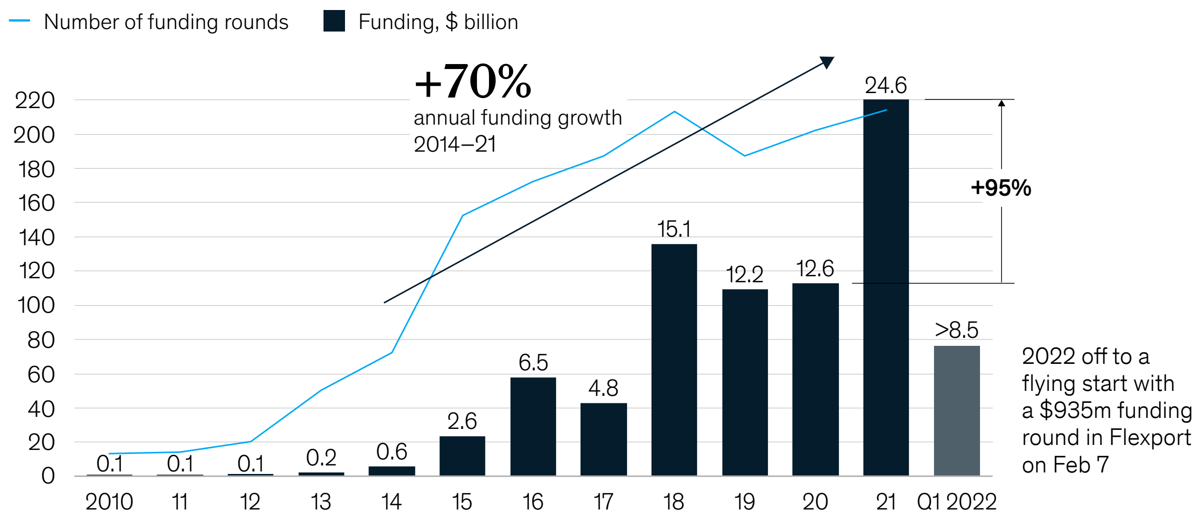
The COVID-19 pandemic accelerated e-commerce, with over 25 percent year-on-year growth in 2020, and another 11 percent increase in 2021.[4] This contributed to greater investor interest in logistics operations, particularly in the largely

[1] Gartner's Logistics Outsourcing Survey found that 42 percent of respondents are looking for providers that can design, build, run, and measure logistics functions. See "Logistics outsourcing trends in 2020," Gartner, December 12, 2019.
[2] Therese Meitinger, "Survey: Corona crisis shook 40 percent of supply chains," Logistik Heute, January 22, 2021.
[3] "DTC brands—Response to Covid," Totem Media, June 2021.
[4] Euromonitor; McKinsey analysis, see Tom Bartman, Scott McConnell, Florian Neuhaus, and Isabell Scheringer, "Unlocking the omnichannel opportunity in contract logistics," McKinsey, March 12, 2021.

Exhibit 1

Funding in logistics startups has increased dramatically – and almost doubled from 2020 to 2021.

Total funding and number of funding rounds, 2010–2021



Source: CB Insights; Crunchbase, Pitchbook, company websites

untapped potential of emerging markets. While this development was already visible years before the pandemic, McKinsey's 2020 report and the recent findings suggest that investor interest in logistics companies continues to grow.[5]

Certain types of logistics startups now seem to be attracting more funding than others. Analysis shows that various kinds of last-mile delivery businesses, visibility and intelligence providers, and road-freight marketplaces have received large inflows of funding (Exhibit 2).

On-demand (immediate) delivery for groceries, among other products, has emerged as an investor favorite, resulting in massive flows of venture funding into the category. In addition to increased interest in immediate last-mile delivery, investors have also shifted focus to a second category of delivery startups such as J&T Express in Southeast Asia and Delhivery in India. These businesses could help fill the gaps that global express incumbents have been unable or unwilling to address, in particular in emerging economies, by building their own parcel networks for domestic delivery—and increasingly, for cross-border deliveries. These ventures are categorized as new last-mile networks. For example, Delhivery has already built up a warehousing and trans-shipment capacity of 1.15 million square meters and delivers over 285 million parcels a year, covering 88 percent of Indian addresses.[6]

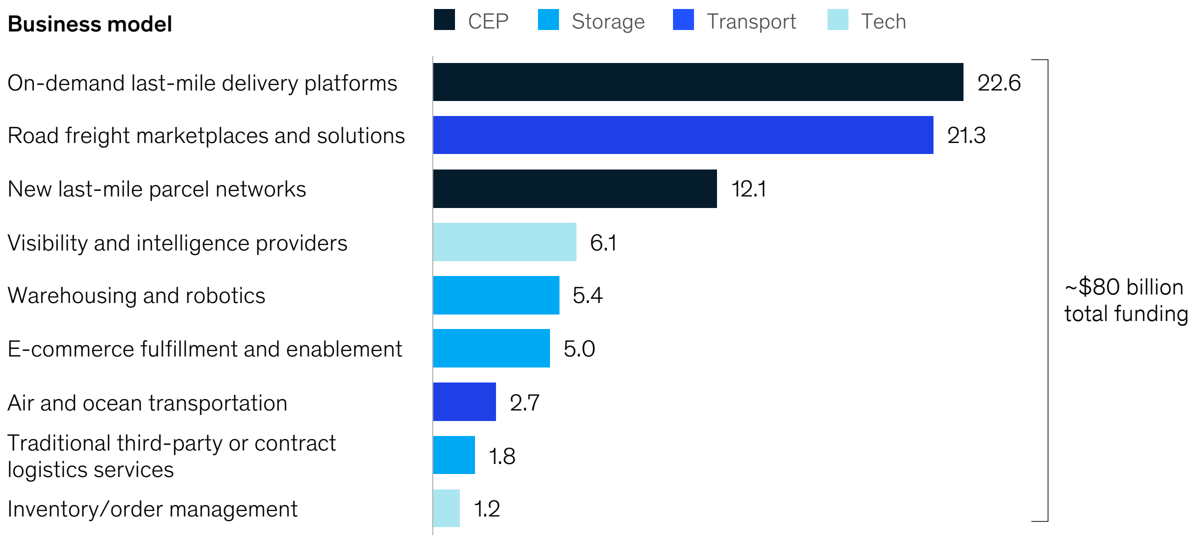
The topic of supply-chain visibility gained global attention during the past two years due to ongoing disruption. Funding for startups that address visibility almost tripled in 2021 compared to 2020. Supply-chain and transport visibility has become a

[5] Thomas Netzer, Jan Krause, Ludwig Hausmann, Florian Bauer, and Tim Ecker, "The urban delivery bet: USD 5 billion in venture capital at risk?," McKinsey, May 2017.
[6] Delhivery Draft Red Herring Prospectus, November 1, 2021.

Exhibit 2

Startups were assigned to 9 business models challenging traditional industry segments.

Total funding 2010–2021, $ billion



Source: CB Insights; Crunchbase, company websites

priority, with companies realizing they need more flexible and agile supply chains that can be adapted quickly to external factors, such as the transport restrictions that occurred throughout the pandemic. Greater visibility is a key factor in enabling agility and improving communication between all stakeholders, allowing companies to better pinpoint exact arrival times. A McKinsey survey of senior supply-chain executives in the second quarter of 2021 showed that 77 percent of companies planned to prioritize investments in supply-chain visibility.[7] This finding is confirmed by a Kenco survey in which 90 percent of respondents reported that supply-chain visibility is a top priority.[8]

It is not surprising that leading visibility startups have experienced substantial increases in demand for their solutions, for example, FourKites reported triple-digit growth in shipment volume tracked through their platform, and a 50 percent growth in customers in 2021.[9] Similarly, Project44 achieved a 170 percent year-on-year bookings increase in 2021 and reached over $100 million in recurring revenue through its software-as-a-service (SaaS) business model.[10]

Road-freight marketplaces and solutions remain an area of interest for VC investors, where the market structure—characterized by a large number of fragmented providers, specifically trucking companies—increases the necessity for marketplaces. For instance, in the US the trucking market is estimated to generate almost $750 billion in revenue, and this large market is made up of roughly 1 million for-hire carriers.[11]

Overall, COVID-19 accelerated startup funding dynamics across courier, express and parcel

[7] Knut Alicke, Ed Bariball, and Vera Trautwein, "How COVID-19 is reshaping supply chains," McKinsey, November 23, 2021.
[8] "State of the supply chain: 2020 Innovation survey," Kenco, 2020.
[9] "FourKites closes a record-breaking 2021 at the forefront of supply chain visibility in Europe," Business Wire, December 2021.
[10] "project44 receives $420 million investment led by Thoma Bravo, TPG and Goldman Sachs valuing business at $2.2 billion pre-money," project44, January 11, 2022.
[11] American Trucking Associations (ATA) Economics and Industry data.

services, transport, fulfilment/storage, and technology. However, these capital inflows have benefited some more than others, as funding has been concentrated in specific subcategories (Exhibit 3).

Both startups and investors participating in funding have changing needs

Some logistics startups have scaled up and achieved profitability. Although profitability is not an immediate priority for startup investors, the businesses they invest in ultimately should show that it can be achieved sooner or later.

Various startups are beginning to show positive earnings. For example, US e-commerce fulfillment startup, ShipBob, which received funding of $331 million, generated its first profit in the fourth quarter of 2020.[12] Of course, even as some startups become profitable, they are still dependent on venture funding to keep up their growth trajectory.

Also, a large North American trucking startup expects to achieve a positive EBITDA for the first time this year. This may be attributed to the effects of the pandemic, and elevated rates, that are prompting truck drivers in the US to shift to self-employment. The growing group of owner-operators is becoming increasingly dependent on road-freight marketplaces, as these can supply shippers with much-needed capacity, while truckers rely on marketplaces for receiving orders.[13]

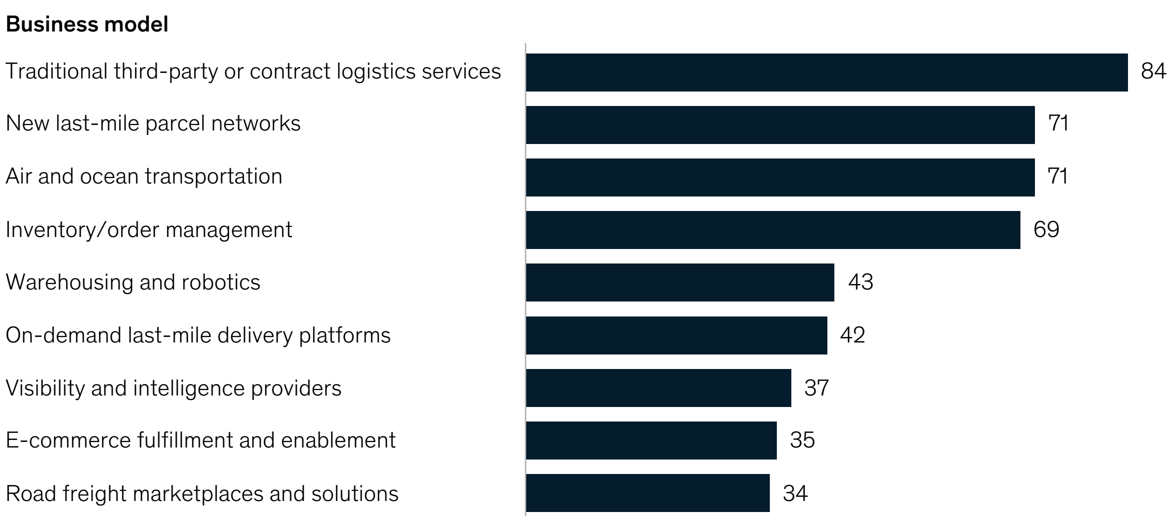
As anticipated two years ago in McKinsey's startup funding report, startups are beginning to resemble incumbent players in the industry. In freight

[12] Allison Prang and Robert Barba, "Logistics company ShipBob raises $200 million," *Wall Street Journal*, June 29, 2021.
[13] Ian Putzger, "Uber freight finally rolling toward a profit with the independent trucker surge," The Load Star, February 24, 2022.

Exhibit 3

A small group of startups in each subcategory has received substantially higher funding than peers.

Concentration of funding on shaping startups in their respective segment
% of funding of top 5 startups of total subcategory funding amount



Source: CB Insights; Crunchbase, company websites forwarding, for example, younger companies are increasingly complementing their purely digital business models with their own operational capabilities.[14] For instance, Flexport continues to charter its own air-freight capacity and recently announced additional services on the Asia-Europe lane, as well as an extended partnership with Atlas Air.[15]

With such rapid growth, startups may be able to better attract executives from leading logistics incumbents. For instance, the digital freight forwarder, Forto, recently hired a former CEVA Logistics C-level executive.[16] Furthermore, some startups focused on last-mile networks have built their own extensive infrastructures that resemble those of existing parcel services. For example, J&T Express plans to expand from its domestic market in Southeast Asia to markets in Mexico[17] and the Middle East. The company is currently establishing a network of sorting and distribution centers in Mexico. And the Swedish parcel-delivery startup, Budbee, has established its own distribution network and already serves 35 million customers in five European countries.[18]

Another emerging trend is that some startups are emulating incumbents by embarking on mergers and acquisitions. The M&A activity of all venture-backed supply-chain and logistics startups—beyond the dataset for this study—reached $2.7 billion in the US in 2021, a 68 percent increase from 2019. Globally, these deals reached $6 billion in 2021.[19]

There are several examples of well-funded startups pursuing the acquisition of other startups: Project44 acquired the German startup, Ocean Insights, in March 2021, followed by ClearMetal in May 2021. It also bought last-mile visibility platform, Convey, for $255 million in September of that year and recently announced plans to continue pursuing acquisitions in 2022.[20]

Similarly, the German trucking platform, sennder, acquired the European operations of its North American competitor in 2020, a deal valued at approximately $1 billion, just after its acquisition of Everoad.[21] In another example, the Indian startup Shiprocket acquired Glaucus, an inventory-management analytics startup, to add to its supply-chain-solutions portfolio.

Private equity (PE) funds are also entering the arena and increasing the drive to fast and successful exits—through IPOs, for example. Analysis of the startup sample shows that PE funding increased by 167 percent between 2020 and 2021, far above the overall funding increase of 95 percent (Exhibit 4). As more VCs exit successfully, they leave space for larger funds to invest.[22]

Among the startups analyzed, there were 17 larger exits, six of which took place in 2021. These included two IPOs; the Embark trucks M&A; and buyouts such as BluJay which was bought by E2open for $1.7 billion.

The increasing number of IPOs supports the observation that more startups seem to be maturing. For example, in 2021, Full Truck Alliance (known as Manbang in China) announced its IPO; J&T Express announced an IPO and plans to be listed on the Stock Exchange of Hong Kong; Lalamove, announced pursuit of an IPO; there was speculation of an IPO of Ninja Van; and Delhivery and GoGoX both announced IPOs.[23] And in May 2022, Instacart filed with the Securities and Exchange commission to go public.

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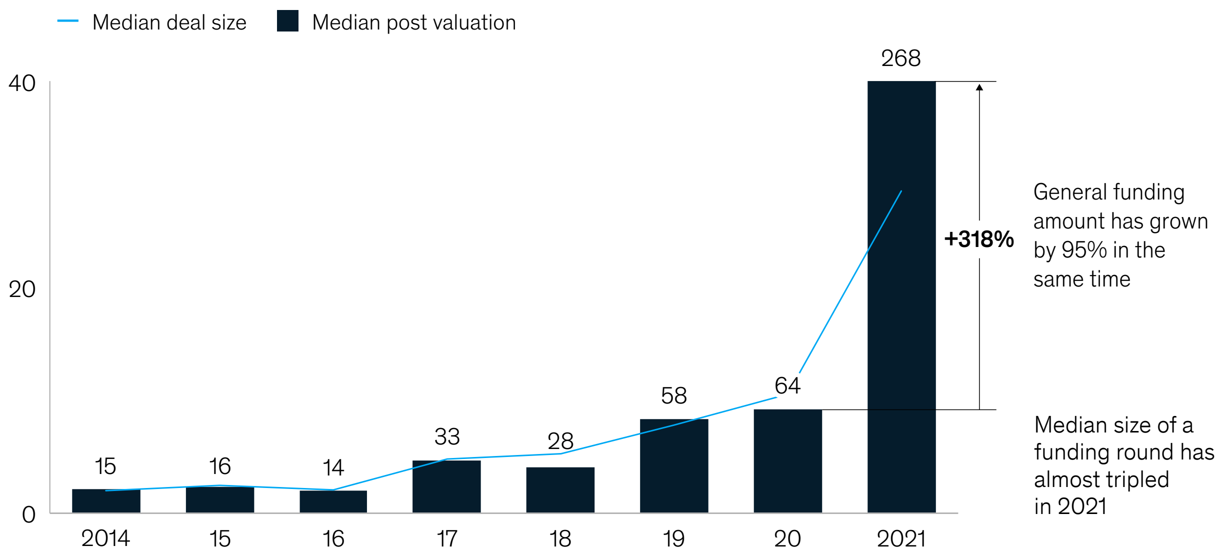
[14] "Shifting patterns in the digital freight forwarding landscape," Transport Intelligence, April 1, 2021.
[15] Damian Brett, "Flexport turns to air cargo charters as it faces a robust market," Air Cargo News, February 3, 2022.
[16] "Jochen Freese joins Forto as EVP of procurement and business development," The Load Star, January 13, 2022.
[17] Kenji Kawase, "Upstart logistics company J&T Express moves into Mexico," Nikkei Asia, February 24, 2022.
[18] See Budbee website, budbee.com
[19] Marc Vartabedian, "Logistics companies move to snatch up supply-chain tech startups," *Wall Street Journal*, February 22, 2022.
[20] *Ibid.*
[21] Based on a PitchBook estimate, see PitchBook.com.
[22] Marc Vartabedian, "Logistics companies move to snatch up supply-chain tech startups," *Wall Street Journal*, February 22, 2022.
[23] "China's 'Uber for trucks' could file for $30 billion U.S. IPO as early as this week," CNBC, May 11, 2021; "Indonesian courier startup J&T raises $2.5 billion ahead Hong Kong IPO-sources," Reuters, November 24, 2021; "Lalamove: Eyeing IPO but no specific schedule," Equal Ocean, October 25, 2021; "Alibaba-backed Ninja Van in no rush for IPO after raising $578 mln," Reuters, September 27, 2021; "SoftBank-backed Indian logistics startup Delhivery files for $1 billion IPO," Tech Crunch, November 2, 2021; "Logistics startup GogoX wins Hong Kong Exchange approval for IPO," Bloomberg, January 28, 2022.

Exhibit 4

Deal sizes and valuations in our sample have grown faster than the general funding volume over the last year.

Median post valuation and median deal size of VC funding rounds[1], 2014-2021



[1]Smaller sample with similar distribution analyzed (n=389).
Source: Pitchbook

Incumbents increasingly invest to match startup innovation

Shippers want the ability to book freight quickly and compare among different carriers, modes or port pairs. A Freightos Group survey of more than 100 logistics executives of large corporations found that almost half need two days or longer to book shipments, and 70 percent of respondents rely on spreadsheets for rate management. Moreover, 86 percent of these shippers rate the ability to compare different carriers and logistics service providers as important, but less than half indicated that they can easily do so.[24] With the digital capabilities that startups have brought to the market, incumbents are investing heavily to catch up and fulfill shippers' requirements for transparent, seamless digital booking. For example, almost all of the larger forwarders, as well as carriers of air and ocean freight, now offer shippers instant quotations and bookings, something that rarely existed in the market previously. Some of the largest container shipping companies are looking to expand pure container shipping into an end-to-end network business using their recent extraordinary profits and many incumbents are expanding their digital services.

Additionally, in road freight, incumbents are beginning to roll out in-house solutions, such as DHL's online freight exchange service Saloodo! that now has around 250,000 trucks connected to the platform in Europe.[25]

In another example, Swiss logistics company Kuehne + Nagel is setting up innovation centers to accelerate digital transformation, for instance through researching and deploying data analytics and the Internet of Things to manage supply chains more efficiently.

[24] "BCOs and the logistics procurement technology gap," Freightos Group, February 2022.
[25] "DHL's Saloodo! hits the road in the Middle East," Saloodo press release, May 1, 2019.

Outlook: Startups mature; incumbents digitize

It seems likely that more startups could grow into mature disruptors in their respective sectors. Many are forging a global presence similar to that of traditional players. Major competition with existing incumbents that offer a global end-to-end product is very unlikely in the short term, however, young companies are becoming increasingly competitive in specific areas and regions.

And while startups are maturing, incumbents are likely to increase their digital offerings in response.

But differences between the subsectors remain and may influence the long-term outlook for certain industries. Given the trends observed in startup funding as well as observations in the general market, it is likely that in large segments with a diverse customer base and growth originating from every individual account (e.g., freight forwarding or road freight brokerage) startups can further grow and scale without replacing incumbents, as this does not seem to be a winner-takes-all market.

However, platform business models (e.g., for comparison of rates, or supply-chain visibility) may experience strong economies of scale and reap benefits as more carriers and shippers connect to these platforms. It is likely that in these markets only a few winners will emerge.

Investors and startups can benefit from remaining aware of market trends, particularly as the startup environment is expected to become tougher in the coming years. For instance, although the driver shortage may continue, capacity and congestion are likely to return to pre-pandemic levels, and lower air and ocean rates are expected.[26] There is also likely to be slower growth in e-commerce.[27] These factors will impact investor appetite.

Nonetheless, inefficiencies still remain in the logistics industry which provide entry points for startups. For instance, automation across all subsectors is becoming increasingly important, and viable, and there is clear pressure for accelerated decarbonization. Whether in last-mile, warehousing, or general transport administration processes, startups will continue to be an important driver of innovation.

Ultimately, customers will benefit from the additional competition and innovation that startups bring to the industry. Overall, they provide better digital offerings and simplify many cumbersome processes around booking, tracking and auditing—thus driving the digitization of incumbents.

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[26] Drewry Container Forecaster, Quarter 1 2022.
[27] Based on data sourced from Passport, Euromonitor International's market research database.