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Why air cargo must continue to experiment, embrace new tools, tech

Because the industry leaders need to take on new challenges of pushing forward globalisation, investing in a soft market and being sustainable with scarce and expensive resources.



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The World Bank on March 27, 2023, announced that the global economy's speed limit — the maximum long-term rate at which it can grow without sparking inflation — is set to slump to a three-decade low by 2030 while releasing the report "Falling Long-Term Growth Prospects: Trends, Expectations, and Policies".

The report reads, "Nearly all the economic forces that powered progress and prosperity over the last three decades are fading. As a result, between 2022 and 2030 average global potential GDP growth is expected to decline by roughly a third from the rate that prevailed in the first decade of this century—to 2.2 percent a year."

"A lost decade could be in the making for the global economy," said Indermit Gill, the World Bank's chief economist and senior vice president for development economics.

As economic headwinds linger, air cargo volumes for the first 9 weeks of the year on the Northeast Asia (incl. mainland China) to Europe corridor, one of the major air freight trades, fell 23 percent year on year, according to Xeneta Air Freight Update.

"This is a decline of 18 percent for the same period four years ago, hinting at a shrinking air cargo market compared to world GDP growth (+5.5 percent)," it reads.

That's no good news but is there a way out? In the World Bank's words, an ambitious policy push is needed to boost productivity and the labour supply, ramp up investment and trade, and harness the potential of the services sector. In other words, the World needs to think out of the box and innovate.



"We are witnessing parallel pressures of a soft airfreight market and the increasing demands of e-commerce for improved facilities and visibility." Wilson Kwong, Hactl

As an industry with time sensitivity, global reach, regulatory stubbornness, technical proficiency and a high level of flexibility, global air cargo is rich in creative people and has a high innovation culture. For example, during the outbreak of the Covid-19 pandemic, the industry was quick in responding to the challenges by moving PPE kits and medical supplies, recalling retired aircraft from the dessert, converting passenger aircraft into cargo-only flights, operating chartered flights and above all maintaining high level of coordination with stakeholders.

While the world economy and air cargo industry are facing a new challenge in terms of macroeconomic factors, air cargo professionals, as usual, have been thinking out of the box.

Nothing short of magicThe drop in demand for air cargo in the last six to nine months has taken people in the industry by surprise according to George Edmunds, general manager of cargo commercial at Cathay Pacific Airways. He thinks that the most innovative way to respond to the current macroeconomic challenges is by understanding the data.

For example, Edmunds reports that Cathay Cargo has moved its data sources to the cloud. "This allows us to access data much more clearly and then use business insight techniques, such as Qlix Sense, to produce dashboards, and understand the data much more quickly. Therefore, we're able to respond immediately," he said.

He also noted that they are seeing a significant increase in the amount of relevant and recent data available in the industry. "A few years ago, most airfreight carriers accessed similar forms of data but in a difficult-to-decipher format. By assessing data manually it took a lot of time to respond," he added.

The data and the ability to respond quickly are particularly important when there is a rise or fall in demand. At the moment it is about the fall in demand while previously it was about a rise in demand. This allows the airlines to modify their routes, frequencies, network and capacity utilisation at the commercial level.





"In the past, the air freight industry has been slow to innovate. As a result, the speed with which it needs to innovate now is more intense." George Edmunds, Cathay Cargo

The reaction can not only be applied to general cargo but also to specialised cargo and products. For example, Edmunds reports that Cathay Cargo is relaunching its mail product to make it more digital, allow post offices to have greater visibility, make bookings and track shipments so that they can play a role in the growing ecommerce segment.

"Mail has been something which suffered through the pandemic in terms of being able to access capacity. Post offices can play a crucial role in the growing e-commerce sector if they have better visibility. And this is what Cathay Mail is doing," he said.

On the same line, Judah Levine, research lead at the freight booking and payments platform Freightos thinks that air carriers – and their forwarder and shipper customers – showed resilience in shifting available capacity to where it was needed, activating and converting more freighter capacity, and modifying schedules and crews to comply with Covid-19 restrictions in different countries.

"The outbreak of war in Ukraine and airspace restrictions that followed were also met with creativity in terms of re-routing. Now, as macroeconomic factors are moving in the other direction and demand falls as capacity rebounds, carriers likewise are working to match capacity with demand in terms of schedule adjustments and other steps," he said.

One key way Levine observed carriers and forwarders adjust and adapt to the extreme volatility during the pandemic was by accelerating the pace of integrating technology into air logistics. "WebCargo's cargo booking platform, for example, saw the number of airlines choosing to make their capacity and rates accessible on the platform spike early in the pandemic from less than ten to now more than 30 this year," he said.

In March 2023, the ground handling and cargo handling company Menzies Aviation announced selecting Wipro following a rigorous tender process for a new warehouse management system.

About the new system, Robert Fordree, EVP Cargo, Menzies Aviation told The STAT Trade Times, "The solution is far more user-friendly and aligned with apps that we are all familiar with in our everyday lives. It is cloud-based and will have the capability to share data with customers and associated stakeholders."

"It will also support the introduction of new technologies that we have started to roll out including a robotic inventory process, paperless flight files, smart cabinets for our handheld scanning devices and a dimension checking and cargo acceptance process, that will eventually lead to an automated build plan for our teams to better support their workflows," he added.



"Our challenge now is to get through the downturn while still investing in technology, equipment, people and facilities." Robert Fordree, Menzies Aviation

Thomas Mack, global head of air freight, DHL Global Forwarding also noted that while supply chain diversification increases complexity and digitisation helps to manage more complex supply chains flexibly and efficiently.

Mack gave an example of their digital customer platform myDHLi which reduces complexity. "It offers fully transparent management of freight rates, offers, transport modes, carbon emissions, and all other relevant shipment data. The highly intuitive user interface makes it easy to use and ensures that customers have all relevant information at their fingertips," he said.

Neel Jones Shah, EVP of air strategy & carrier development, Flexport, pointed out that Flexport has prioritized direct integrations with its partners and customers since it was founded. One example he gave is their direct integration with MSC to leverage its Track & Trace API, as well as with providers like Convoy to provide customers with live GPS tracking.

"In the past few years, there's been a massive shift in philosophy around data sharing. Carriers, forwarders and consignees alike either didn't prioritize integrations via API (or even EDI) or refused to do so due to competition. The tide has changed on that. Customers are demanding visibility into where their cargo is, and many forwarders and carriers have come to see the benefits of data sharing in terms of collaboration, saved time and minimised costs," he said.

As we consider the industry as a collective, it is not just the digital tools that run the show. There are also people across the spectrum and across levels who take decisions day in and day out to move the industry. And it is the decisions of the people in the leadership positions that make the most impact.

Steven Verhasselt, founder, FB Cargo Strategy thinks that the air cargo industry has been working miracles over the last 2 years and attributes the success of the industry to leadership's flexibility and quick decision-making.

"The logistics industry is a service industry, a barometer of the global economy, and is seriously impacted by factors that are out of the hands of the industry or its leaders. We can manage the impact, and prepare for the next part of the cycle that will come," he said.

Wilson Kwong, chief executive, Hong Kong Air Cargo Terminals (Hactl), also believes the air cargo industry and its leadership's response to the pandemic were exceptional in every way.

"From its determination to overcome all obstacles to keep vital supply chains running, to the adaptation of combination carriers to an all-cargo model for a protracted period, and how businesses have introduced new levels of resilience that will make any future large-scale crisis much less disruptive to supply chains," he said.

"Today's actions will ensure we generate global economic prosperity through authentic environmental, social and governance leadership."

Trevor Caswell, Edmonton International Airport

Among other challenges, the lack of transparency in the supply chain has remained a clear challenge for shippers and customers and innovative solutions to provide accessibility and visibility were being introduced to the supply chain.

For example, Trevor Caswell, manager, demand & product development (Cargo), Edmonton International Airport (YEG), mentioned ColdChase, which provides holistic cold chain solutions to global supply chains by monitoring packages, shipments, and warehouses with smart, accurate ColdChase sensors, as a breakthrough in logistical innovation is a real-time tracking system.

"Partners in the supply chain can observe end-to-end, real-time tracking and monitoring solutions themselves, giving full visibility throughout the shipping process. They have access to data in real-time while products are in transit," he said.

Looking into the future, he observed that service providers need to adapt to how customers, both large organizations and small businesses, request access and share data while still ensuring it is protected throughout the process.

"The industry's hesitation in adopting technology like ColdChase is that some partners in the supply chain may not want to give complete visibility and share real-time data in case the temperature or integrity of the product is compromised at some point while in transit," he noted.

Thus, there are still areas where the global air cargo industry must respond and take ownership of what they are supposed to deliver. While the air cargo industry innovated a lot during the last few years, it's not done. Far from it. There are new challenges gripping the industry that starts from the macroeconomic factors to the need for tech interventions.

"The challenges seem greater than ever before. But, ever since it has been the role of logistics to manage complexity." **Thomas Mack, DHL Global Forwarding**

New reasons to be open and experimentTrade growth is forecasted to slow in 2023, mainly due to slower global economic growth. Nevertheless, logistics is the facilitator of global trade and it should continue to support economies and companies as best as it can with services and solutions.

The challenges seem greater than ever before. But, for Mack, ever since it has been the role of logistics to manage complexity. "We are indeed living in a vuca-world. It seems like the new reality is fragmentation and diversification in different markets, with inflation and scarcity of energy leading to higher energy costs. And the fragmentation into different markets is further exacerbated by sanctions and export controls," he said.

Despite a challenging macroeconomic environment, Mack believes there are three key aspects we should continue to focus on globalization, digitalization and sustainability. "Globalization is contributing to rising prosperity. A recent study by economist James Feyrer showed that a 10 percent increase in trade raises a country's per capita income by more than 5 percent. And despite all the doom and gloom the latest results of our DHL Global Connectedness Index clearly show that the volume of world trade in goods reached 10 percent above its pre-pandemic level," he said.

Kwong pointed out the parallel pressures of a soft global airfreight market, combined with the increasing demands of e-commerce supply chains for improved facilities and greater visibility.

"We are witnessing a constant move towards a digital industry and greater investment. Airlines are steadily moving towards digital bookings via third-party platforms, while handling becomes ever more sophisticated, better-resourced and digitally reliant," he said.

On reflection, Fordree also thinks that the challenge is to get through the downturn while still investing in technology, equipment, people and facilities so we don't face the same volume-related challenges in the future. "We are readying ourselves for the next upturn and will be more prepared than ever," he said.

"My advice for everyone working in supply chain right now is to take advantage of this time to plan for the future." **Neel Jones Shah, Flexport**

Edmunds opines that, in the past, the air freight industry and its leadership have been slow to innovate.

"As a result, the speed with which it needs to innovate now is more intense. Because there are so many different technologies out there that are in regular use in other industries that are relevant to air cargo, and unless you embrace them, you're going to be left behind," he said.

According to him, the air cargo leadership must be ready to embrace innovation, experiment with technology and foster collaboration to bring in new technologies available in other industries. "You just have to be open to innovation and willing to experiment, even if it is not successful. That means you learn and then you can embrace the technologies which are relevant to the industry," he said.

Shah's advice for everyone working in the supply chain right now – whether they're a forwarder or a consignee is to take advantage of this time to plan for the future.

"We spent almost three years in a constant state of crisis, which blew freight budgets, forced importers to hoard inventory that ate away their working capital and pushed many to their limit. Today's lower freight volumes have softened the market and provided an opportunity for teams to analyze their data and effectively forecast demand, plus engage in thoughtful RFP discussions that are about value-added services versus scraping for available capacity," he said.

Meanwhile, Verhasselt points out sustainability as an important challenge for the air cargo industry to innovate. He thinks we are at a starting point of a sustainability drive but the resources are scarce and expensive.

"As the market is currently not in the best shape, expensive solutions need to be offset. I believe we can make a huge difference by focusing on sustainability through efficiency. If we can build our networks more efficiently, we save flying time (and fuel burn)," he said.

Rather than having to comply with outdated rules and regulations concerning bilateral traffic rights agreements, open skies for freighters are a more sustainable solution, according to Verhasselt.

"The same goes for other parts of the logistics chain. Polling of assets, shared warehousing, optimizing trucking and increasing their payload, is a short-term low-budget option. We all trust the technology to come up with

electrical or hydrogen-driven planes, trains and trucks, but while we are getting there, let's use our existing assets most efficiently and sustainably," he added.

"The will is there, but the resources to drive sustainability are still scarcely available, and more expensive. As the market is currently not in the best shape, expensive solutions need to be offset." **Steven**Verhasselt, FB Cargo Strategy

Caswell opines that the air cargo and freight forwarding industries are essential in balancing economic growth, environmental care and social well-being. In other words, it is important to avoid the lost decade in making that World Bank mentioned.

"Today's actions will ensure we generate global economic prosperity through authentic environmental, social and governance leadership. No business can do this in isolation, and true change happens in partnership with others," he said.

The industry's ability to quickly respond, adapt, display creativity and implement innovation is not only beneficial to the economic ecosystem that surrounds it but also to the entire global economy and humanity at large.

The global air cargo industry must open itself to new changes and experiment with new tools because the industry has a role to play in pushing forward globalisation that can contribute to rising prosperity, because it should be investing in technology, equipment and people even through the downturn, because it has been slow to innovate in the past, because they should take advantage of this time to plan for the future, because the resources to drive sustainability are scarce and expensive and above all air cargo is important to avoid a lost decade that World Bank predicted.

This was originally published in the April 2023 issue of The STAT Trade Times. **Tags:**

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