

# What's next for air freight industry technology

by Scott Sangster

The last few years in the air freight industry has seen initiatives such as e-freight and Cargo 2000 continue to make slow progress, while information and communication technologies and channels have been evolving rapidly throughout business and society.

In order to keep up, the air freight sector needs to ensure it is preparing for the next generation of messaging requirements, not the last generation, and with the expectations of e-consumers and retailers, for example, increasing in terms of information exchange and the transparency of transport services.

The air freight industry still seems wrought by challenges of the last generation messaging processes, technology and legacy systems. For a period of time there was reluctance in the industry to invest in improved technology – but that trend seems to be changing – the cost of systems are coming down and the significant efficiency benefits can pay for themselves as the economic environment approves. Most of the questions come down to this – how well prepared is the industry to deliver?

Before we even take a look at what information will be required in the future we need to review where we are at today and what is driving the industry to change and enhance our IT solutions. Some of the changes in the last several years have been driven by IATA with eFreight and Cargo 2000 but is this motivation enough for the industry? There is also a question by many if IATA and Cargo 2000 should dictate the terms to lead the way in terms of messaging or is that the job of the technology companies?

Both IATA and Cargo 2000 play a critical role in trying to establish procedures and messaging formats as well as helping to set the standard for the industry. Technology companies have a significant

amount of knowledge that can help set a realistic course for standards development and implementation for the air cargo and other industries. There has been some additional involvement from technology companies as the XML standards were developed and in my opinion, this needs to expand and continue. When it comes to development of new standard, programs and processes – as those are created it's the job of all parties involved to ensure that they are accessible and affordable for the entire industry in order to encourage adoption.

## After E-Freight – what's next?

E-freight's principals, potential from data collection and flexibility of dissemination of this data with new technologies is a great path forward for the industry. As long as the program remains flexible and inclusive of all participants from a technology and cost perspective it lays the foundation for the collaborative data management world that is on our doorstep.

We are moving into a world where the movement of the data is as important as the movement of the goods. Movement of data and goods are both critical to meet regulatory requirements, multi-party supply chains, increased visibility requirements and cost management for transportation and inventory purposes in the shipping community.

Once bidirectional translation and message version control between legacy Cargo Interchange Message Procedures (Cargo IMP) and the new Cargo-XML schema becomes widespread, the flexibility to provide enhanced data and additional information will allow for easier and more affordable methods of implementing data exchanges to meet the market's requirements.

## Technologies that Lie Ahead

There are a number of new technologies that are coming that will change the messaging paradigm:

- **Web-based communication protocols**
- **XML messaging**
- **Data management services**
- **Collaborative SaaS based applications that allow widespread access and data management in multi-party transactions**

In addition, the advances in technology with e-commerce, social networking and smartphones have created a more knowledgeable, flexible and mobile work force. The air cargo industry is going to have to leverage these new capabilities in order to succeed. The technology will still have to allow for centralized visibility to data and record keeping but with a mobile workforce at the other end.

It is in the industry's best interest to start to adopt these new technologies to simplify and improve the data management process.

### So how can the air freight industry use these advances?

- E-Commerce offering multiple delivery options to end consumers (B to C) as well as flexibility for on-line rate shopping and booking for direct cargo companies could be further expanded.
- Social media could be used to spread the word on policy changes, service interruptions and promotions.
- Smart phones will allow for more efficient information gathering and sharing as well as more efficient customer support.

### Learning from Others

Often times the best way to know where you are going is to look at others – what lessons have they had to learn the hard way?

One lesson taken from the ocean industry is that end-to-end visibility is usually managed better by the providers of ocean cargo movements today. Visibility into supply chains, forecasting and planning, inventory management, timely delivery planning has all become more important to all shippers today. The key to the shippers success is to have the right product, at the right time at the right price is sometimes shifting some products to slower but more visible and predictable supply chains.

Other transportation sectors have been better at integrating information between providers like ocean, rail and truck carriers to provide this better visibility between each other as well as to the end shippers and consignees.

### Looking Ahead – What will drive change?

As we look to the next five to ten years what we know for sure is that more detailed shipment information will be required to be

exchanged much earlier in the process. This will be driven by government regulations as cargo security expands across the globe. The expectation is that government bodies will realize that getting information from carriers and Forwarders will still not be enough to do complete security filing.

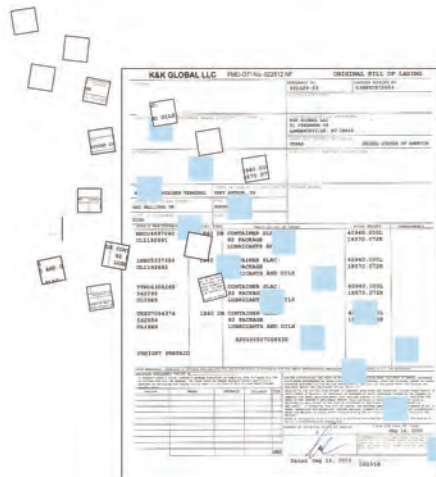
There will be a concerted effort to get more information from the shippers/ manufacturers. Filing will need to be done by multiple parties and some parties will only become aware that they need to file very late in the process.

Just imagine a scenario where a shipper is shipping to Mexico but the forwarder or carrier decides to route the goods through the US – the question is who will manage and report all possible scenarios for import, export and freight in transit to each regulatory agency. This will mean multi-party filing and information requests. It will cause a paradigm shift from traditional messaging to synchronous communication (If you have the correct clearance, you can query my system and get the information you need).

At the end of the day these requirements call for an industry wide obligation to have more collaborative multi-party business processes and the technology that supports it across air freight carriers and anyone participating in the air cargo ecosystem. With everyone embracing technologies and the process - the end result is will be a more efficient and profitable environment.



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