

# The Future of Air Cargo

— ULD has a role to play

LIAO, Zhi Yong, IATA Cargo



# Case for change





<1%

Global trade volumes

7/10

Customer satisfaction

Reputation

Premium price with  
low-cost service

3 days

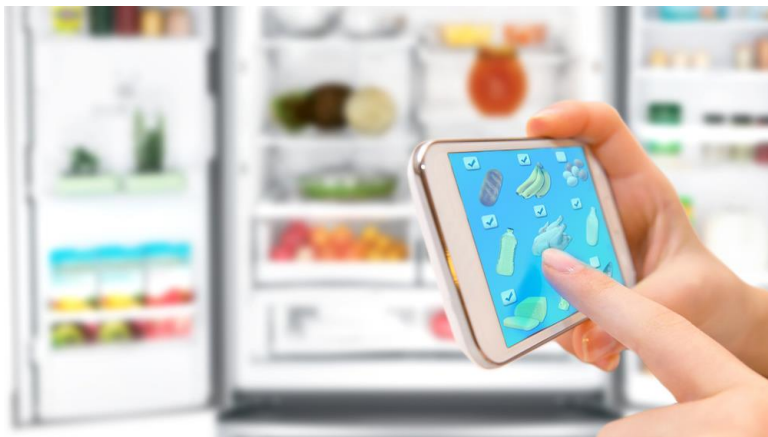
To get a quote!!!

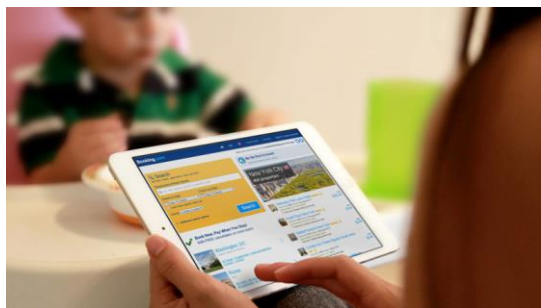
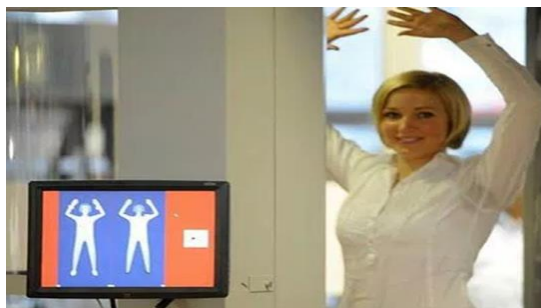
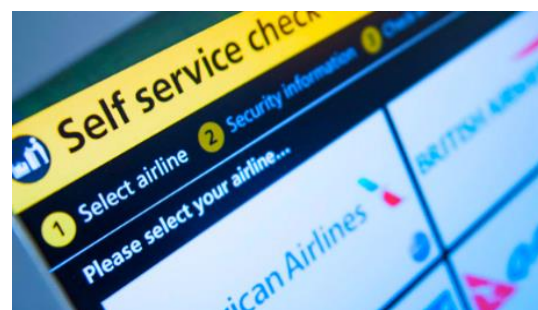
Too complex!

UberCargo, Amazon, new Silk-Road, Posts... **stronger competition**







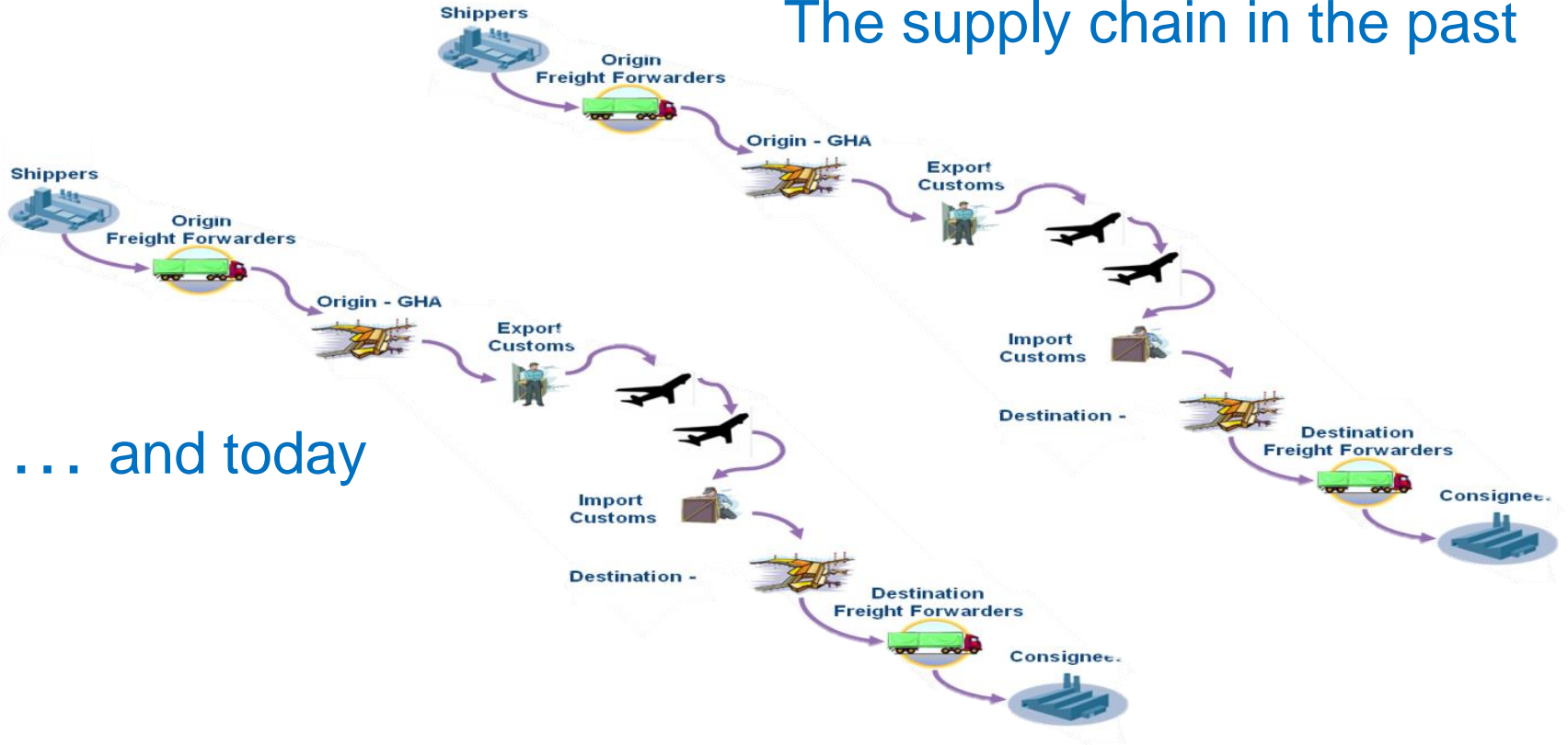


# Air travel is transforming



## What is air logistics doing?

# The supply chain in the past







## IATA calls for continued transformation at the 10th World Cargo Symposium

Posted By: stattimes on: March 15, 2016 In: Aviation, Breaking News, main banner

[Print](#) [Email](#)

Mar 15, 2016: At the opening of the 10th annual World Cargo Symposium (WCS) held in Berlin from March 15-17, the International Air Transport Association (IATA) called for continued transformation in the air cargo industry with a focus on raising the quality of its offering.



Sign up for free daily emails



QUICKER SLICKER AIR CARGO NEEDED TO DEMONSTRATE GREATER VALUE SAYS GSF

[Home](#) [Content](#) [Mode](#) [Verticals](#) [People & Training](#) [Events](#)

Amazon air freight plan a wake-up call: improve standards or customers will become competitors



Air Cargo must transform itself into a **lean, adaptive and innovative** industry centered around increasingly sophisticated customer demands



# 2015 Global Shippers' Survey



# IATA 2015 global shippers survey

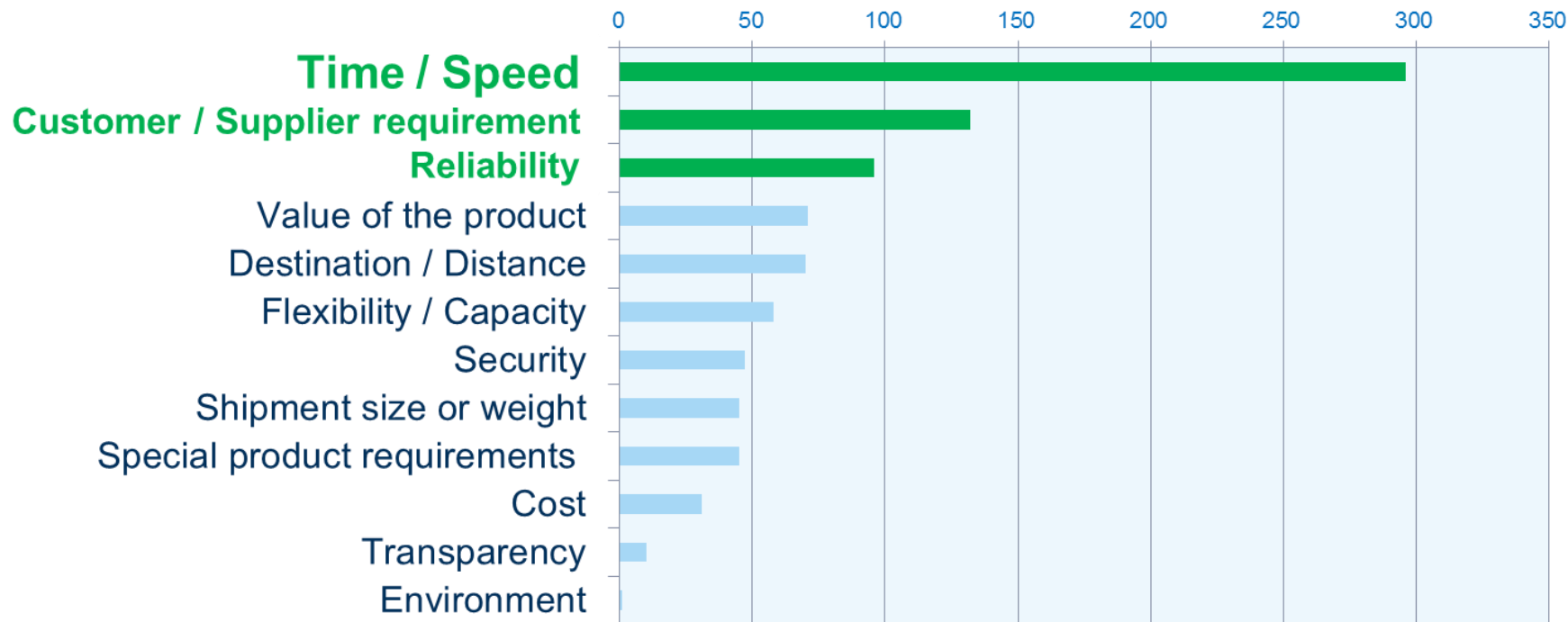
- ❑ Short online questionnaire
- ❑ 336 answers received in 6 weeks
- ❑ Part of IATA's overall **transformation strategy**
- ❑ Good feedback for airlines

➔ We know because we asked!





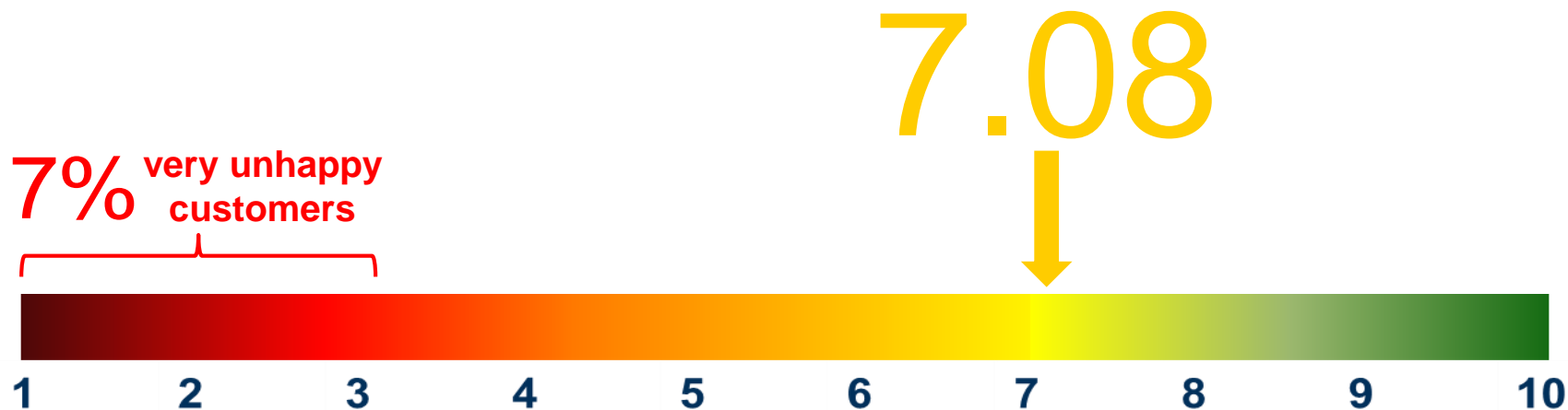
# Why do customers choose air?



Average score for the 316 customers using air

What are the 3 main advantages of using air cargo over other modes of transport?

# How satisfied are airfreight customers?



*Average score for the 316 customers using air*

*How satisfied are you with the air cargo services that you have used in the last 12 months? (1 = not satisfied at all -- 10 = extremely satisfied)*

# What's **wrong** with air cargo?

*Air cargo represents less than 0.5% of our shipments but around 2% of time and effort spent – **Too complex!***

*It's a pain to pick up and drop off cargo – **Painful experience!***

*Long lead times compared to cost – **Value proposition is weak!***

*Replies to inquiries for simple things like rates can take days! & Poor websites to handle transactions on my own – **Poor customer service, very old-fashion!***

*To much repetitive data entry for necessary documentation – **Inefficient processes!***

*Cargo not flying as booked – **Lack of transparency!***

*[Time & temperature sensitive] product not handled very well in airports – **Lack of quality!***

*When something goes wrong it takes time to get information – **Lack of visibility & real-time information!***

# Simplifying the Business (StB) Cargo Program

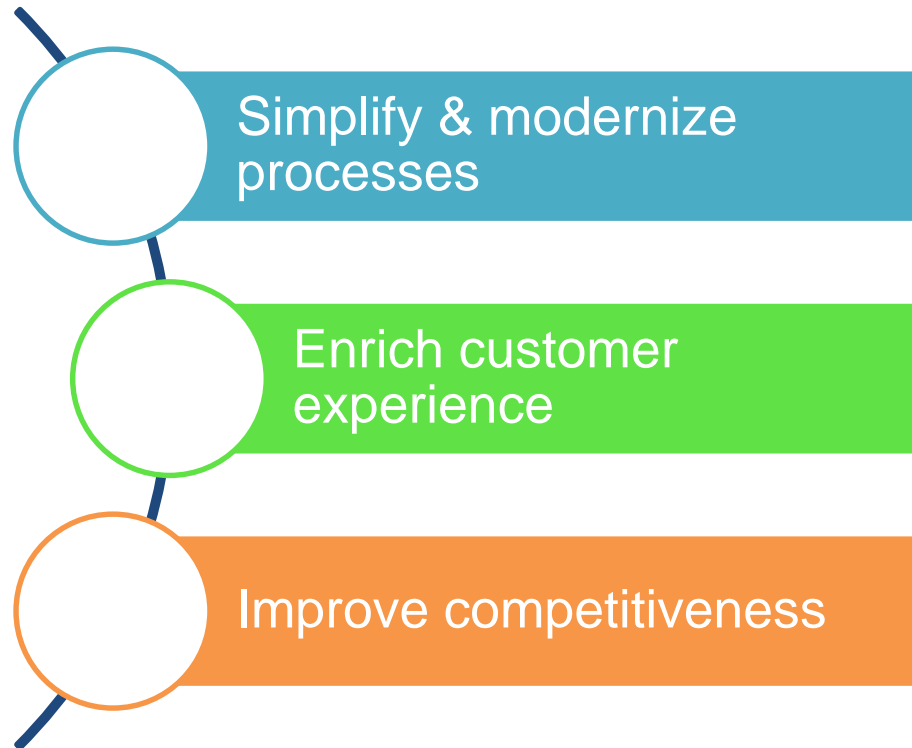
*former Air Cargo Transformation Program*





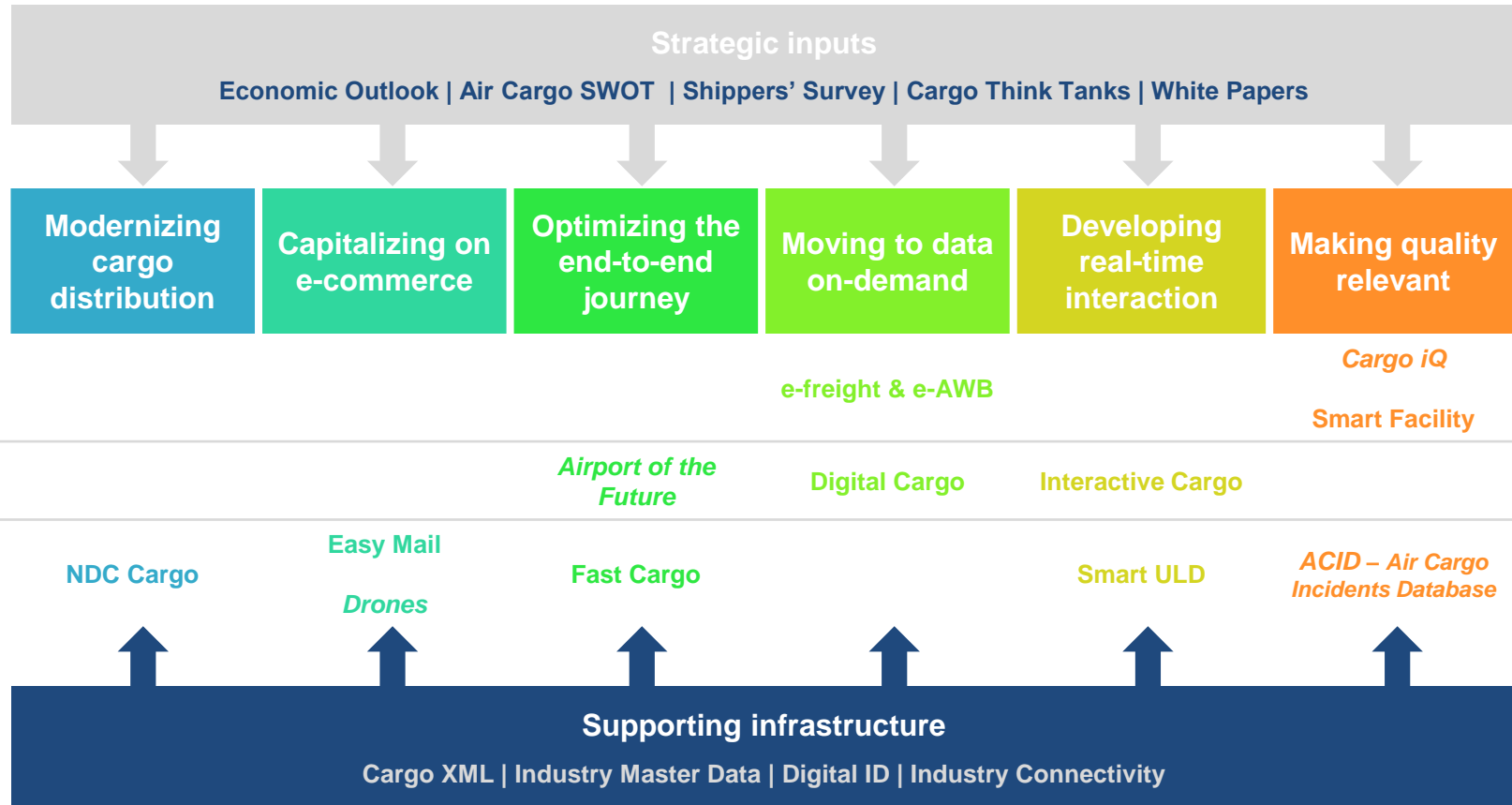
# StB Cargo: let's do something about it!

- ❑ A program to strengthen industry value proposition
- ❑ And foster innovative thinking to build new growth engine for long-term sustainability



# The six goals of the program





*Cargo iQ is run by its dedicated interest group (former Cargo 2000)*

*Airport of the Future is led by APCS Airport*

*Drones and ACID, if confirmed, will be co-driven with SFO*

# Your ULD Vision Survey

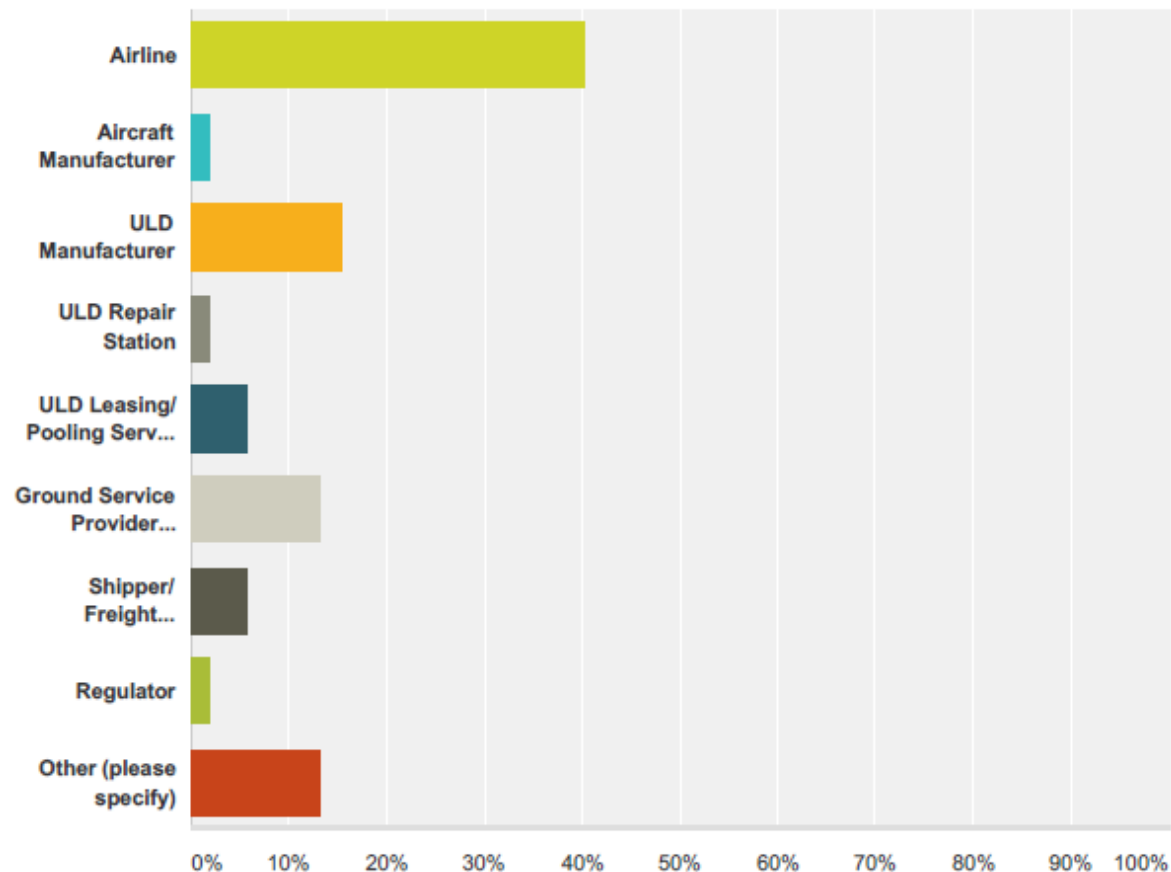
<https://twitter.com/IATA/status/768374934087368704>





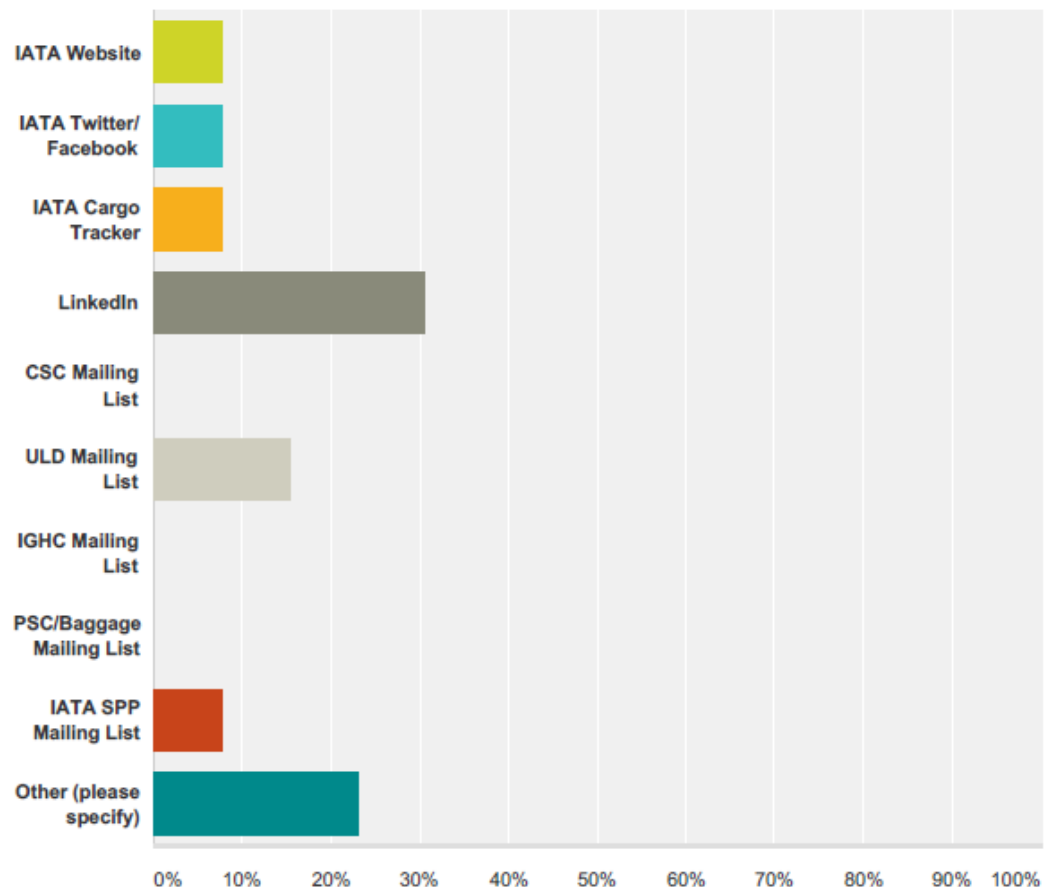
# Q1 What type of organization are you?

Answered: 52 Skipped: 0



## Q2 Where did you receive the Survey from?

Answered: 52 Skipped: 0



# Q3 What would you expect a ULD to be like in the future? - DESIGN

Importance Score(0-10)												
	0 - Least important	1	2	3	4	5	6	7	8	9	10 - Most important	Total
100% compatible with other modes of transport to facilitate intermodal transport	3.85% 2	3.85% 2	3.85% 2	7.69% 4	5.77% 3	21.15% 11	3.85% 2	7.69% 4	15.38% 8	9.62% 5	17.31% 9	52
Interchangeable contour for different aircraft types	3.85% 2	1.92% 1	5.77% 3	0.00% 0	1.92% 1	13.46% 7	5.77% 3	7.69% 4	26.92% 14	9.62% 5	23.08% 12	52
Lighter than current light-weight ULDs	7.69% 4	0.00% 0	5.77% 3	5.77% 3	1.92% 1	11.54% 6	5.77% 3	7.69% 4	25.00% 13	9.62% 5	19.23% 10	52
Collapsible	9.62% 5	1.92% 1	7.69% 4	3.85% 2	11.54% 6	17.31% 9	7.69% 4	19.23% 10	9.62% 5	1.92% 1	9.62% 5	52
Fire containment capability as standard	7.69% 4	1.92% 1	0.00% 0	5.77% 3	5.77% 3	7.69% 4	11.54% 6	9.62% 5	13.46% 7	11.54% 6	25.00% 13	52
Blast resistance capability as standard	9.62% 5	1.92% 1	3.85% 2	7.69% 4	5.77% 3	13.46% 7	15.38% 8	3.85% 2	11.54% 6	7.69% 4	19.23% 10	52

# Q4 What would you expect a ULD to be like in the future? - Automation (including interaction with other equipment)

Importance Score(0-10)												
	0 - Least important	1	2	3	4	5	6	7	8	9	10 - Most important	Total
Facilitates automated ULD buildup	7.69% 4	0.00% 0	3.85% 2	1.92% 1	1.92% 1	11.54% 6	7.69% 4	17.31% 9	17.31% 9	7.69% 4	23.08% 12	52
Automated security screening of built up ULD	0.00% 0	0.00% 0	3.85% 2	0.00% 0	0.00% 0	9.62% 5	3.85% 2	13.46% 7	28.85% 15	7.69% 4	32.69% 17	52
Automated weighing and dimension measuring to determine if the ULD is built up within aircraft and	5.77% 3	0.00% 0	0.00% 0	0.00% 0	3.85% 2	3.85% 2	5.77% 3	13.46% 7	25.00% 13	11.54% 6	30.77% 16	52
Automated aircraft loading	7.69% 4	0.00% 0	5.77% 3	5.77% 3	3.85% 2	11.54% 6	13.46% 7	15.38% 8	5.77% 3	9.62% 5	21.15% 11	52
Automated inspection on serviceability condition	7.69% 4	1.92% 1	0.00% 0	3.85% 2	3.85% 2	15.38% 8	11.54% 6	11.54% 6	19.23% 10	9.62% 5	15.38% 8	52
Automated ULD repair	19.23% 10	3.85% 2	9.62% 5	3.85% 2	3.85% 2	19.23% 10	9.62% 5	3.85% 2	15.38% 8	1.92% 1	9.62% 5	52



## Q5 What would you expect a ULD to be like in the future? - Interaction

Importance Score(0-10)												
	0 - Least important	1	2	3	4	5	6	7	8	9	10 - Most important	Total
Self-identification and self-location for real time tracking and tracing of ULD	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1.92% 1	9.62% 5	3.85% 2	7.69% 4	11.54% 6	19.23% 10	46.15% 24	52
Self-identification and self-location for real time tracking and tracing of content (cargo, mail, baggage)	0.00% 0	0.00% 0	1.92% 1	0.00% 0	0.00% 0	7.69% 4	9.62% 5	3.85% 2	17.31% 9	19.23% 10	40.38% 21	52
Self-monitoring and self-recording external forces such as shock/ impact/ tamper with real time alert	1.92% 1	1.92% 1	3.85% 2	0.00% 0	7.69% 4	13.46% 7	5.77% 3	11.54% 6	30.77% 16	3.85% 2	19.23% 10	52

Self-monitoring and self-controlling of temperature with real time alert when temperature is outside the set range	0.00% 0	1.92% 1	1.92% 1	0.00% 0	1.92% 1	13.46% 7	7.69% 4	15.38% 8	17.31% 9	11.54% 6	28.85% 15	52
Self-maintenance of repair records with real time alert when it's time for repair	1.92% 1	3.85% 2	5.77% 3	7.69% 4	9.62% 5	15.38% 8	13.46% 7	11.54% 6	7.69% 4	5.77% 3	17.31% 9	52
Real time alert if the ULD is loaded on the wrong aircraft position	0.00% 0	0.00% 0	3.85% 2	1.92% 1	5.77% 3	7.69% 4	9.62% 5	9.62% 5	5.77% 3	13.46% 7	42.31% 22	52
Real time alert if the ULD is not correctly engaged with Cargo Loading System (e.g. locks not raised)	0.00% 0	0.00% 0	1.92% 1	0.00% 0	0.00% 0	9.62% 5	11.54% 6	9.62% 5	3.85% 2	15.38% 8	48.08% 25	52
Self-monitoring ULD inventory level with real time alert when inventory is too low or too high	1.92% 1	0.00% 0	3.85% 2	3.85% 2	3.85% 2	7.69% 4	11.54% 6	11.54% 6	11.54% 6	11.54% 6	32.69% 17	52

Thinking ahead,  
Driving innovation,  
Inspiring people...



...for a lean,  
adaptive &  
innovative  
Air Cargo  
industry





**Ready for take-off!**