IATA Digital Cargo Webinars

ONE Record Hackathon

1 October 2020

This session will start shortly
IATA Digital Cargo Webinars

ONE Record Hackathon

1 October 2020
Your hosts today

Arnaud Lambert
ONE Record
Engagement
Manager, IATA
Thank you to all our sponsors!
Competition law guidelines

Do not discuss:

- Any element of prices, including fares or service charges
- Commissions
- Allocations of customers or markets
- Marketing plans, commercial terms or any other strategic decision
- Group boycotts
- Your relations with agents, airlines, solution providers, or other third parties
- Any other issue aimed at influencing the independent business decisions of competitors
How to participate during the meeting?

• You can only hear the presenters

• Your microphones are disabled

• Use the questions box to interact

• Simply enter your questions in the chat box on the right
This meeting is recorded for future use

The entire recording along with questions will be available shortly after this webinar finishes.

Simply click on the link in the invite for the live event to access it.

The presentations shown today will be available for download on our website:

www.iata.org/one-record
ONE Record: Hackathon

Part 1: Introduction to a Hackathon

Part 2: Hackathons – the shortest way to running solutions

Part 3: Hackathon Winners: Live DEMO

Part 4: Innovation with ONE Record

Q&A
Part 1

Introduction to a Hackathon

Arnaud Lambert
ONE Record Engagement Manager, IATA
IATA Cargo Hackathon
One Record
HACKATHON VIDEO LINK
Hackathon success

FUN & CREATIVITY
Global participation

33 unique nationalities – 176 participants
Hackathon Sponsor

Riege Software
APIs available
Challenges!

Challenge 1: Track & Trace

Challenge 2: Quote & Book
More Challenges!

Challenge 3: PayCargo Challenge

Challenge 4: Open Challenge
Cash Prizes!
6,000 USD

ONE Record Prize – 2,000 USD
The ONE Record prize is awarded to the solution that made the best use of the ONE Record API in terms of innovation and creativity.

Developer Prize – 2,000 USD
The Developer prize is awarded to the solution that made the best use of technology, showed exceptional coding skills and (mostly) bug-free.

PayCargo Prize – 2,000 USD
The PayCargo prize is awarded to the team that made the best solution for the financial challenge (no. 3).
The ONE Record Innovation Engine comprises a series of interaction with IATA for coaching/mentoring on their hackathon project in order to further enhance and develop the product.
Hackathon Jury Members

Koh Hwee Khim
Vice President IT
CCN Singapore

Thorsten Friedrich
Head of Global Sales Performance & Business Intelligence, Lufthansa Cargo

Dipti Desai
Founder & CEO
First&Main

Doug Schmidt
Chief Technology & Information Officer, PayCargo

Jonathan Parkinson
Senior Advisor IT
Air Canada Cargo

Christian Riege
Managing Director
Riege Software

Mary Stradling
Global Airfreight Operations & Compliance Support Manager
DHL Global Forwarding

Klaas Kurz
Connectivity Manager
DB Schenker
Hackathon Weekend in numbers

1 minute to pitch the initial idea

28 hours of coding

5 minutes of final presentation

8 jury members
Social media competition!

Use pics or videos

Be creative!
Workshops

• Cargo Basics Workshop
  – Learn about cargo for non-practitioners

• ONE Record API Workshop
  – Get quick answer to technical questions
More info on the results

onerecord.devpost.com
Part 2

Hackathons – the shortest way to running solutions

Christian Riege
Managing Director
Riege Software
Hackathons – the shortest way to running solutions

Christian Riege, SVP Software Development and Managing Director, Riege Software
Hackathons provide an open space for ANYONE interested in offering a solution to the topic.
Input from outsiders

▪ Participants with little or no touchpoints with the industry
▪ Inspiring counterparts to internal operational blindness
Daring instead of scaring

- No dependence on superiors
- No pressure from above
- No fear of reprisals
Levering out the preventers

- “This is not possible anyway.”
- “I do not believe in it.”
- “We have always done it this way.”
Large results in little time

- Reinforcement of projects that get no slot | time | budget in daily business
Getting to the point

- Short timelines demand focus
- Deadlines foster working discipline
Focus

- Concentration on ONE issue
- Presentation of ONE result
Risk

- Failing to hit the point
Opportunity

- Learnings for future engagements
Discipline

- No room for vague models of thought
- No space for sideshows
- No time to waste time
Invaluable insights

- New angles, new views, new perspectives
- Various solutions to compare, combine and choose from
- Redefinition of importance, rankings, priorities
Thank you!

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Part 3

Hackathon Winners: Live DEMO
Presenters

- Fred Opong-Agyare
- Alexey Mykhaylov
- Brook Lins

Dev Team

- Oleksander Tarasiuk
- Alexey Ptashniy
- Nikolay
Cargo Planning

- Requires accuracy
- Coordination with various departments
- Communication with multiple parties
- Time sensitive
Challenges

- Operational constraints
- Weather
- Maintaining communication
- Track incoming freight
<table>
<thead>
<tr>
<th>Flight Cancellations</th>
<th>Current Flight Delays</th>
<th>Weather warnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>18</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bookings not yet arrived</th>
<th>Unresolved issues</th>
<th>Flown as planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>2</td>
<td>54</td>
</tr>
</tbody>
</table>

**Solution: Air J.A.R.V.I.S**

- Centralizes information
- Communicates with all parties
- Analyzes bookings
- Uses AI to help you plan cargo
Interface Demonstration
Presenter: Brook Lins
System overview using AI

Presenter: Alexey Mykhaylov
AI and Machine Learning in AIR J.A.R.V.I.S

- Forecasting
- Segmentation
- Prioritization
- Optimization
Better understanding of the data – opportunity for automation

Saves time and allows workers to focus on higher-priority tasks and initiatives
Thank you!
ONE Record
Hackathon 2020

ONE Track
The French Team

October 1st 2020

Bilel CHAKROUN
Alexis COUVREUR
Alexandre HILTCHER
Florian MAUNIER
Thomas MOREAU
Benjamin ROZENBERG
The French Team

Bilel CHAKROUN
Digital Cargo

Alexis COUVREUR
Full-stack Dev & DevOps

Alexandre HILTCHER
Full-stack Dev & DevOps

Florian MAUNIER
Full-stack Dev & DevOps, Tech lead

Thomas MOREAU
Software Architect

Benjamin ROZENBERG
Cargo Operations
Targeted Challenge

Challenge # 1 - Track & Trace

Main issue :
Nowadays, there is no possibility for a customer to track & trace precisely a single piece unit, from origin factory to its final destination, using a single tool.

Having a global view of a whole shipment in realtime is almost impossible. Tracking becomes important especially when it comes to monitored cargo like pharmaceuticals or animals.

Our Solution :
ONE Track is the most accurate and complete end-to-end tracking solution, including realtime and history of all relevant tracking information depending on the nature of goods.
All data are provided by all participants via API connected to ONE Record servers
Business features and technical challenges

- Use ONE Record Data Model and APIs with as relevant data as possible
- Have distributed data, stored on multiple ONE Record servers
- Enrich ONE Record data with data from other APIs like Open Route, Flight Radar, Open Weather
- Build and monitor temperature records that is mandatory for pharmaceuticals transportation
- Display real-time and history tracking data by getting real-time data updates of ULD metrics
Business features and technical challenges

- Monitor metrics and have real-time alerts when special handling instructions are not respected
- "Stay informed" by subscribing to ONE shipment and getting updates and alerts
- Have different views with most accurate data depending on the actor of the supply chain (Shipper, Forwarder, Airline, Consignee)
- Build a user-friendly solution to visualize, track and troubleshoot everything that happens during freight transportation
Technical Architecture

ULDs

Latitude
Longitude
Temperature
Hygrometry

Simulation
(Need to enrich ONE
Record Data Model)

1R server #1
(Shippers &
Consignees)

1R server #2
(Forwarders, ...)

1R server #3
(Airlines)

ONE Track
Server
ONE Record Client

ONE Track
Web browser

OpenRoute

Flight Radar

OpenWeather

ULD
ULD
ULDs

Sanofi
Ter Heerdt
Lotus poultry
CVS Pharma

Bolloré
DB Schenker

Air France
KLM
Lufthansa

API
API
API

Latitude
Longitude
Temperature
Hygrometry

Simulation
(Need to enrich ONE
Record Data Model)
Use cases

1. Covid-19 Vaccines

Sanofi Lab wants to make sure that its vaccines for customer CVS Pharmacy in NY, USA, are kept at the right temperature all along the journey from their factory in Normandy till the warehouse at destination.

This is critical as per CDC request below for example:
(source: https://www.cdc.gov/vaccines/hcp/admin/storage/downloads/A-vax-temp-best-practices-fridge-C.pdf)
2. Live chicks

Ter Heerdt N.V. is sending one day old chicks to his customer Lotus Poultry near Cairo, Egypt.

- Chicks are very sensitive to temperature variations
  Temperature must remain between 15 to 25 °C and they must be protected from sunlight, rain and snow. This needs to be monitored closely.

- They must fly as booked.
  They can only survive 24h to 36h maximum after hatching, without food and water
Demo Time

ONE Track
One Shipment, One Truth

https://onerecord.fr

Open with chrome

Only Desktop version available

For the demo, http calls are not secured, beware of enterprise VPN
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Part 4

Innovation with ONE Record

Doug Schmidt
Chief Technology & Information Officer, PayCargo
You think it’s about the Payments (and it is).

But it’s also about the Data.
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Q&A
Thank You

More info

www.iata.org/digital-cargo