TABLEAU
CONFERENCE
British Airways: Our Tableau Journey from Corporate Outlier to Corporate Mainstream

Jamie Whitehorn
he/him/his
Senior Analytics Consultant
British Airways

#data19
“Where are we?”
“How did we get here?”
“Where do we want to go?”
“HAVE WE GOT A MAP?”
Agenda

Where we are now
Growing Tableau at BA
Some key technology enablers
Some things we learned along the way
The future …
Some fun facts about British Airways

- 270 Aircraft in Fleet
- 3,900 Pilots
- 145,000 Passengers per day
- 16,500 Cabin Crew
- 850 Flights Per day
- 45,000 Employees
And that gives you ...

a huge amount of

DATA
How do you visualise all this data?

That was the question confronting these people 5 years ago ...
A brief timeline …

1. 5 Tableau Enthusiasts
2. Isolated Islands
3. Tableau Server
4. Central Analytics
5. Certification Programme
6. Self Service
So where are we now …

270 Desktop Users

30 Tableau Sites

>4500 Server Users

1 Tableau Server
How we grow Tableau at BA

The Good, the Fun, and the Bureaucracy
# How we grew Tableau at BA

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How we grew Tableau at BA

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How we grew Tableau at BA

Finding other people
Tableau Community

Key Technology Enablers
Certifications Programme
Skills Champions

Hackathons

Ask Data

Templates
Building your community

• It takes time, effort and commitment

• Excellent talk at the October London TUG group from Phillipa Law and Charlotte Nickels on “Driving the Tableau Community at Lloyds Banking Group” [https://youtu.be/pULCSfGUEbl?t=3m](https://youtu.be/pULCSfGUEbl?t=3m)
Find out an interesting fact
Building your community

KEEP GOING
How we grew Tableau at BA

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Best Practices
What Tableau looks like at BA

Tableau At BA

- Find other people
- Tableau Community
- Makeover Monday Sessions
- Doctor Sessions
- Skill Share Presentations
- Hackathons
- Cross Company Calls
- Templates
- Key Technology Enablers
- In-house Education
- Certifications Programme
- Skills Champions
- Skill Bytes
- Governance
- Ask Data
- Best Practices
Skills Champions

• Champion Tableau within BA
• Show high degree of skill in Tableau
• Continuously self-develop skills in Tableau
• Develop in-house education and training plans
• Oversee internal ASK website (Analysts Sharing Knowledge)
• Answer ad-hoc questions from analysts
• Show leadership
• Keep up to date with industry direction & latest developments from Tableau
• Deliver education and presentations on Tableau
Skills Experts

- Show high degree of skill in Tableau
- Continuously self-develop skills in Tableau
- Help develop in-house education
- Answer ad-hoc questions from analysts
- Deliver education and presentations on Tableau
Certification Program
BA’s Tableau Certification program
Certification Program – The Aim

• Offer the opportunity to become certified

• To make it as easy as possible

• Reward people who want to learn
Certification Program – The Challenges

- Buying the vouchers
- Providing Education and Support
- Providing a place to take the exam
Certification Program – The Rewards

• Motivates people

• Shows people you value them

• Skills up the participants

(even if they don’t pass)
Things we discovered along the way
Things we’ve discovered along the way

The significance of Tuesdays

How to save 2 million pounds on water

How we saved 68,000 man-days
Tuesdays
Saving £2m in fuel costs
Saved >68,000 man days ≡ 300 “extra” employees
Two Key Enablers
Key Enabler: Row Level Security
We followed the model on Tableau and Behold!

by Bryant Howell

https://tableauandbehold.com/row-level-security/
Team/Colleague Activity Dashboard

Security paramount

Uses Row Level Security to:

• Only show data to managers
• Only shows their team members
• Updated automatically from Corporate Directory

Example data (not based on real people)
Row Level Security uses a dynamically calculated Data Source Filter based on User ID.

This means ONLY the data the person is entitled to see enters Tableau.

There is nothing a normal user can do, no changes they can make to the dashboards that will allow to see the excluded data.

Only a person who can edit the dashboard can remove the filter.

Works on both Live Connections and Extracts without change.
A user’s position in the organisational hierarchy can be defined by their unit hierarchy code.

If we link the data to this code we can define what data a person can see.
How it links together

Entitlements

• User ID
• Unit hierarchy code ABDBACF
• This is translated into the full structure
  • Super-Directorate
  • Directorate
  • Sub-Directorate
  • Department
  • etc

Data

• Data
• Unit hierarchy code ABDBACF
• This is translated into the full structure
  • Super-Directorate
  • Directorate
  • Sub-Directorate
  • Department
  • etc

[tableau_username] = USERNAME()
AND ([Super_Directorate] = [Super_Directorate (custom SQL query1)] OR ISNULL([Super_Directorate (custom SQL query1)]))
AND ([Directorate] = [Directorate (custom SQL query1)] OR ISNULL([Directorate (custom SQL query1)]))
Etc ....
ICW Access and RLS Access

ICW Access

• Works at the table level
• Can mask columns
• Works on Live Connections Only

Row Level Security

• Works at the row level
• Works on Live Connections OR Extracts

Example data (not based on real people)
Key Enabler: Hierarchies
We need dashboards that can show our users the business in a way that reflects the hierarchical structure.

Managers want to see details on their immediate reports.

We couldn’t do this in a single dashboard in 2018.3, but …
The Future ...
Please Sir, I want some more …

The business wants …

• more data,
• more analysis,
• and more insight

We are a limited resource

How do we reconcile these?
By working smarter

Empowering the business to be able to find their own answers

• **Tools**
  • Ask Data
  • Thoughtspot

• **Security**
  • The right people see the right data (RLS)
The Challenges

Your data **must** be clean

Your data sources **must** be certified and curated

The data **must** be presented in a way that allows your users to get meaningful answers to their questions

This takes effort & commitment

*We see this as key to our future, but it needs careful planning and implementation*
The Rewards

Empowers your users

Frees up your analysts

Increases productivity
4 Things We Wish We’d Done Earlier
4 Things we wish we’d done earlier

- **Templates:**
  - Common look and feel

- **Thought about our Sites:**
  - The Many or The One

- **Best Practices:**
  - e.g. when to use direct connections and when to use extracts

- **Started our community earlier:**
  - It is *never* too early – reach out find people
4 Things to Try
4 Things to Try

- Skill Champions
- Doctor Sessions
- Upskilling & Certifications
- Hackathons
A reminder - where we started …
Where we are now
Please complete the session survey in the mobile app

View ‘My Evaluations’ in the menu or find your session under ‘Schedule’
Thank You

Email: james.whitehorn@ba.com
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