



American Airlines

vs



DELTA

Airlines Comparative Study

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UX Team Members

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Business / Research Questions

How easy is it to select the least expensive round-trip flights and identify the correct price on two comparable airline websites?

Are the upgrade options and/or additional flight options adversely affecting users from completing the return portion of the round-trip while maintaining the same price point as the departure?

American Airlines – Flight Search

The screenshot shows the American Airlines website's flight search page. The browser's address bar displays <http://www.aa.com/homePage.do>. The navigation menu includes "Plan Travel", "Travel Information", "AAAdvantage", and the "oneworld" logo. A large banner features a woman in a white dress and hat on a beach, with the text "Our best savings offer yet" and "Save up to \$550 when you buy miles »". Below the banner is a navigation bar with "Log In", "Join AAAdvantage »", "Find Flights", "My Trips / Check-In", and "Flight Status". The "Find Flights" section is active, showing options for "ROUND-TRIP", "ONE-WAY", and "ROUND-TRIP + HOTEL", with a "Redeem Miles" checkbox. The search criteria are: Origin: DFW, Destination: ATL, Departure: 09/08/2014, Arrival: 09/12/2014, and 1 Traveler. A "Search" button and a "Refine your search »" link are also present.

Log In Join AAAdvantage »

AAAdvantage Number or Email
Need your AAAdvantage Number?

Password
Need a new password?
 Remember me

Find Flights My Trips / Check-In Flight Status

ROUND-TRIP
ONE-WAY
ROUND-TRIP + HOTEL
 Redeem Miles

DFW ATL 1 Traveler

09/08/2014 09/12/2014 Search

Baggage & optional service fees Refine your search »

<http://www.aa.com/homePage.do#>

American Airlines – Select Flight

After selecting the departure flight, a large upsell screen displays

The screenshot shows a web browser window displaying the American Airlines flight selection page. The browser's address bar shows the URL <https://www.aa.com/reservation/revenue>. The page features a flight selection table and several upsell options.

| Flights | Departure | Arrival | Choice | Choice Essential | Choice Plus | First |
|---------|-----------------|-----------------|---|--|--|---|
| 276 | 04:30 pm DFW | 07:35 pm ATL | <input checked="" type="radio"/> \$270 1 Seat left | <input type="radio"/> \$328 1 Seat left | <input type="radio"/> \$430 1 Seat left | <input type="radio"/> \$777 3 Seats left |

CHOICE Selected! **\$270** Round-Trip / Per Person
Taxes and fees included

[View more](#) information on the new features included in our fares.

Choice Essential only + \$58 more Round-Trip / Per Person

- 1 Checked Bag Included
- Plus receive:
- Group 1 Boarding

Choice Plus only + \$160 more Round-Trip / Per Person

- \$432 Round-Trip Value**
- No Change Fee (\$200; valid for American Airlines operated flights)
- 1 Checked Bag (\$50 round-trip)
- Group 1 Boarding (\$18)
- 50% AAdvantage Bonus Miles (Price varies based on flight)
- Same-Day Flight Change (\$150)
- Same-Day Standby (only available to select customers)
- Premium Beverages (\$14)

First only + \$507 more Round-Trip / Per Person

- Upgrade to a Premium Cabin**
- Confirmed Seat in First Class
- 3 Checked Bags
- PriorityAAccess
- 50% AAdvantage Bonus Miles
- Same-Day Flight Change (subject to flight availability)
- Same-Day Standby (domestic travel only)
- Additional Inflight amenities

Choose a bundle above, or your Return flight below. [Change Flights](#)

Shopping Cart

DFW to ATL
Monday September 08, 2014

Round-Trip Price:

Traveler 1 x \$270 **\$270**

Your Round-Trip Price: **\$270 USD**

Baggage and Optional Service Charges.

EARN 30,000 BONUS MILES,
up to \$100 in statement credits,
and get 10% of your redeemed miles back!

AAdvantage **ci**

***Learn More**

Delta Airlines – Flight Search

The screenshot shows the Delta Airlines website's flight search interface. At the top, the Delta logo is on the left, and navigation links for 'ENGLISH', 'SUPPORT', 'COMMENT/COMPLAINT?', and 'TEXT ONLY' are on the right. A search bar is located in the top right corner. Below the logo, there is a login section with fields for 'SkyMiles#, Email or Username' and 'Password or PIN', and a 'GO' button. A notification banner states: 'Our bag fees have changed. For updates, see baggage and services fees.' The main navigation bar includes 'MY TRIPS', 'BOOK A TRIP' (highlighted in red), 'FLIGHT STATUS', 'CHECK IN', and 'VACATIONS'. The 'BOOK A TRIP' section has sub-tabs for 'FLIGHT', 'HOTEL', and 'CAR'. The flight search form includes 'Recent Searches', trip type options ('Round Trip', 'One Way', 'Multi-City'), origin ('DFW') and destination ('ATL') fields, departure ('9/8/2014') and arrival ('9/12/2014') dates, passenger count (1), and checkboxes for 'My dates are flexible' and 'Redeem Miles'. A 'FIND FLIGHTS' button and an 'Advanced Search' link are at the bottom of the form. On the right, a large image of a passenger using an in-flight entertainment screen is overlaid with the text: 'ENTERTAINMENT IS ON US. INTRODUCING FREE ENTERTAINMENT ON 3,700+ DAILY FLIGHTS.' Below this are two promotional boxes: 'REST EASY. Enjoy 180° recline in every flat-bed seat.' and 'LIMITED-TIME OFFER. Earn 50,000 bonus miles and a \$50 statement credit.' The browser's address bar shows 'http://www.delta.com/' and the taskbar at the bottom displays various application icons.

Study Specifics

**Within-subject,
Counter-balanced,
Remote Unmoderated
Study**



**Testing Dates:
August 20 - 21**



Average Task Time



**AA
3.2 min**

**Delta
2.5 min**

Participant Demographics

Gender



27%



73%



Age

18 to 34



33%

35 to 54



32%

55+



35%

Frequent Flyers

77%

Preferred Status

26%

Recruitment

- Participants were recruited using a panel vendor, OP4G
- Participants were screened for whether they had purchased an airline ticket online in the past.
 - Have you purchased an airline ticket online before?
 - **Yes** – continued with study
 - **No** - disqualified

Metrics

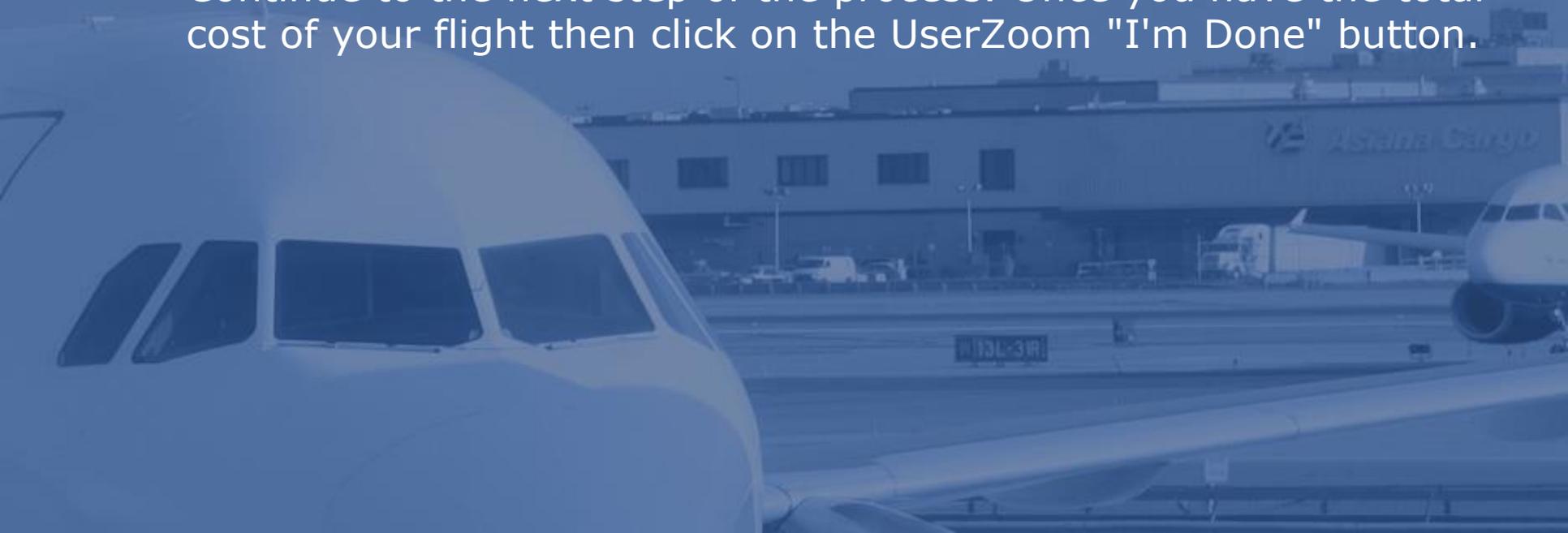


- Completion Rate
- Time on Task
- SUPR-Q



Task Scenario

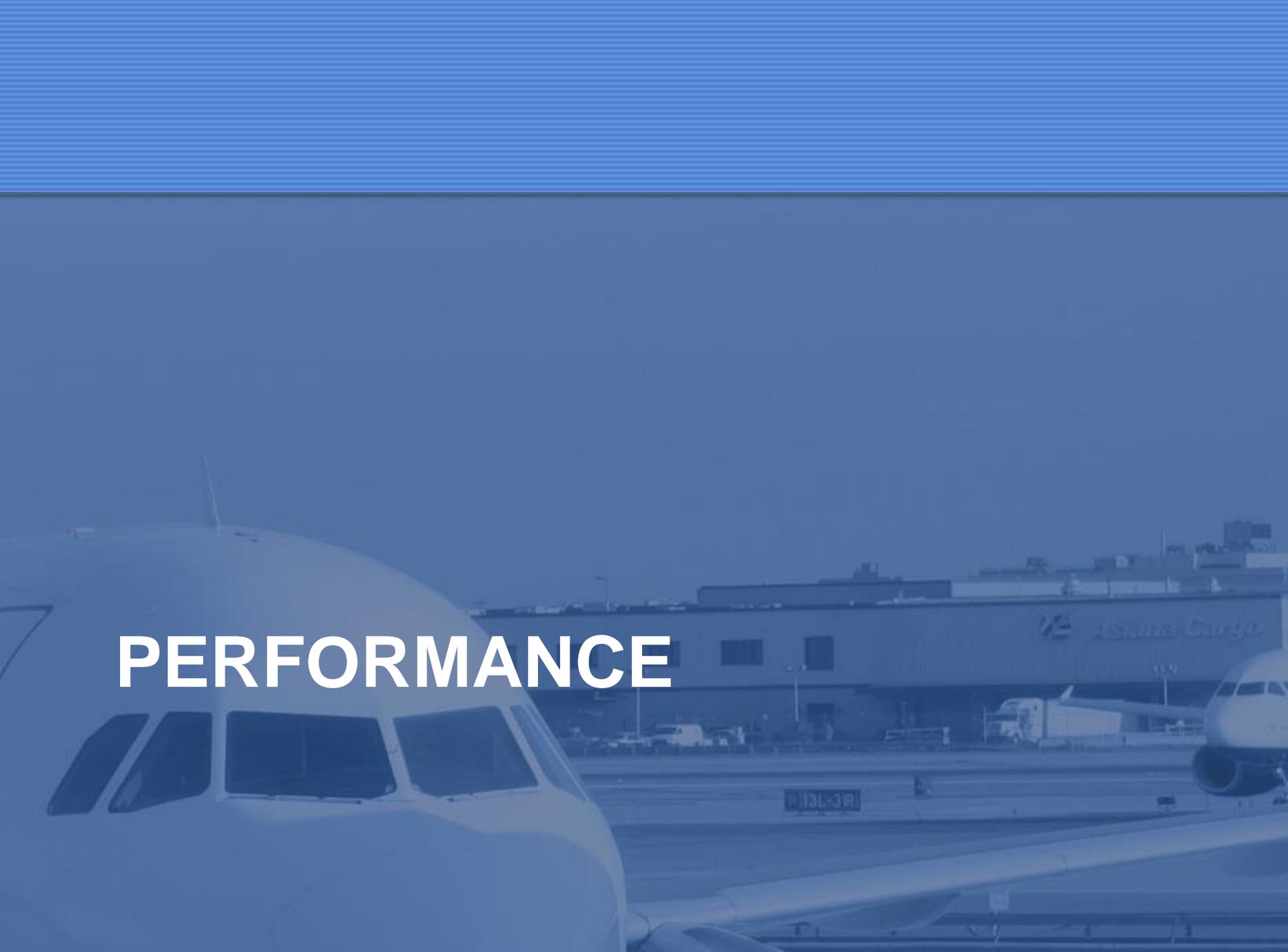
- Book a round trip flight on American Airlines
 - For one person
 - Depart on September 8 and return on September 12, 2014
 - Starting at Dallas DFW airport flying to Atlanta ATL airport
 - Choose the least expensive ticket
 - Continue to the next step of the process. Once you have the total cost of your flight then click on the UserZoom "I'm Done" button.



Key Takeaways

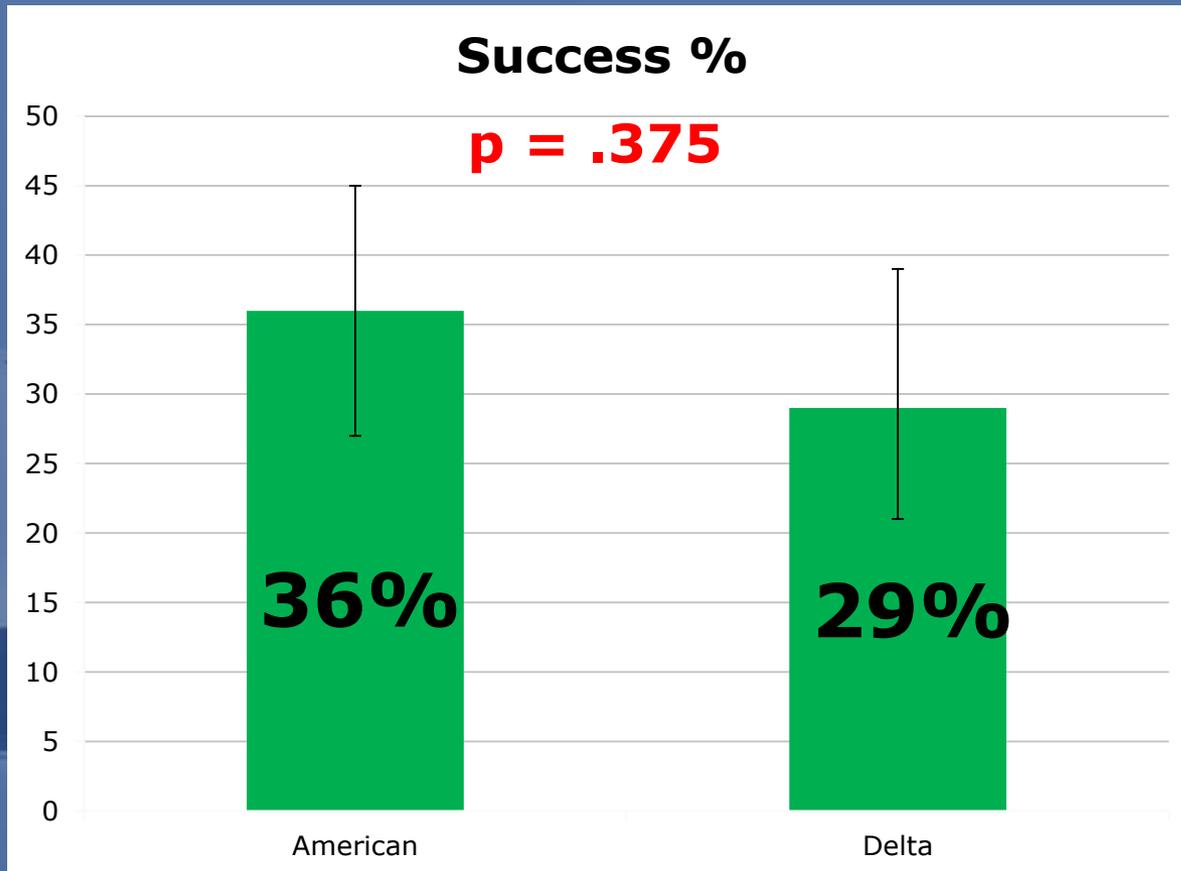
- Delta Airlines time on task was more efficient (significant shorter time) and participants rated them higher for usability (not significant)
- However, slightly more participants perceived that they had completed the task successfully on the Delta website.
 - Disaster rates on Delta were 37% vs. 32% on American.
- Both sites showed that half of the people who failed were highly confident (rated confidence 7 on a scale of 1 to 7).

PERFORMANCE

A blue-tinted photograph of an airport tarmac. In the foreground, the nose and cockpit windows of a white airplane are visible. In the background, a large hangar with the 'Asiana Cargo' logo is prominent. The sky is clear and blue. The word 'PERFORMANCE' is overlaid in white, bold, sans-serif capital letters on the left side of the image.

Task Completion (McNemar Exact Test)

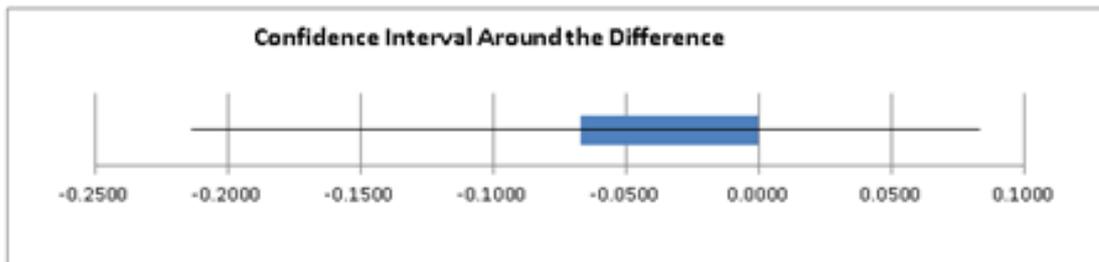
Task completion was defined as correctly selecting the least expensive flight and correctly reporting the cost.



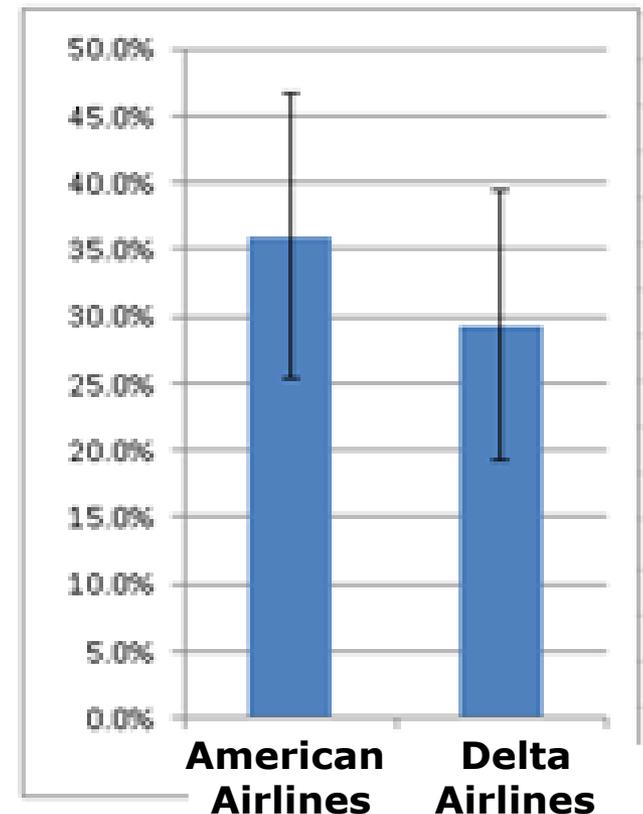
Task Completion (2 Proportion Test)

Alternative test for Task Completion comparing proportions (between-subject) instead of coded responses (within-subject)

- Similar but slightly more conservative results



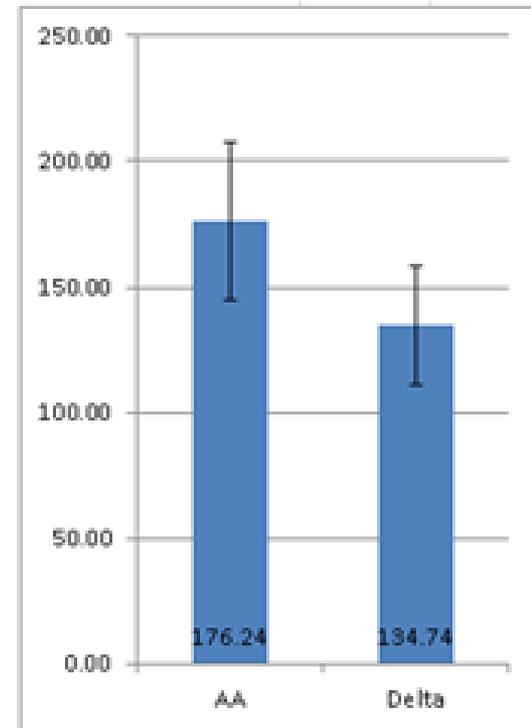
$$p = .38563$$



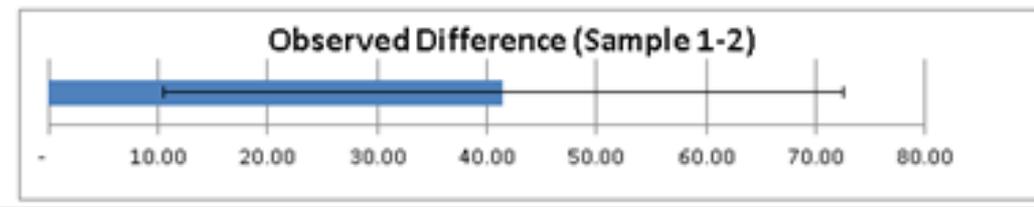
Time on Task (Paired-t Test)

| Results | | | |
|--------------------------|--|--|-------------|
| Average Difference | | | 41.50 |
| Confidence Interval Low | | | 10.50 |
| Confidence Interval High | | | 72.50 |
| Margin of Error | | | 31.0 |
| p-value | | | 0.010243355 |
| Power | | | 0.764036459 |

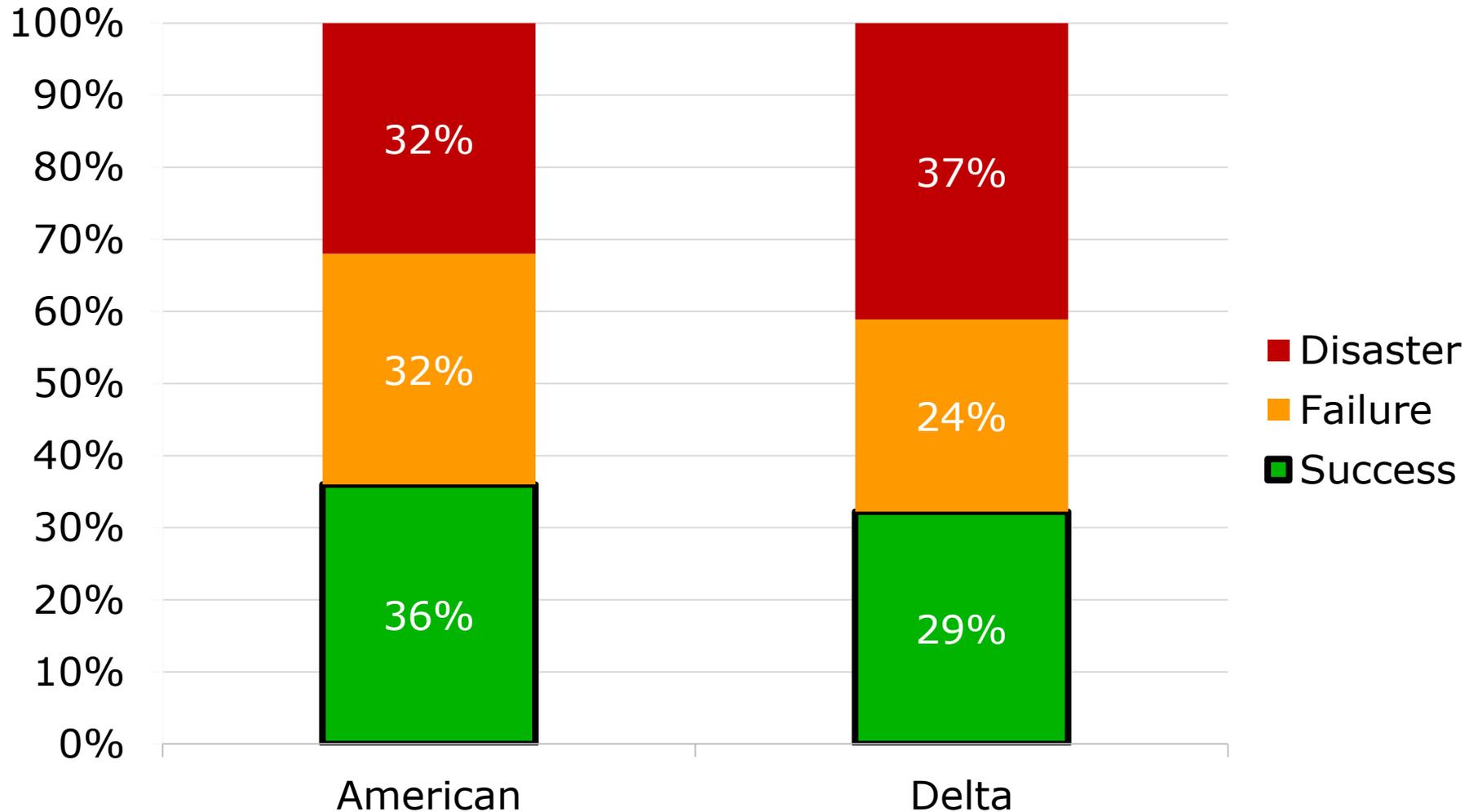
| Descriptive Statistics for each Group | | | |
|---------------------------------------|--------|-------|-------|
| | Mean | StDev | N |
| AA | 176.24 | 90.32 | 34.00 |
| Delta | 134.74 | 67.77 | 34.00 |



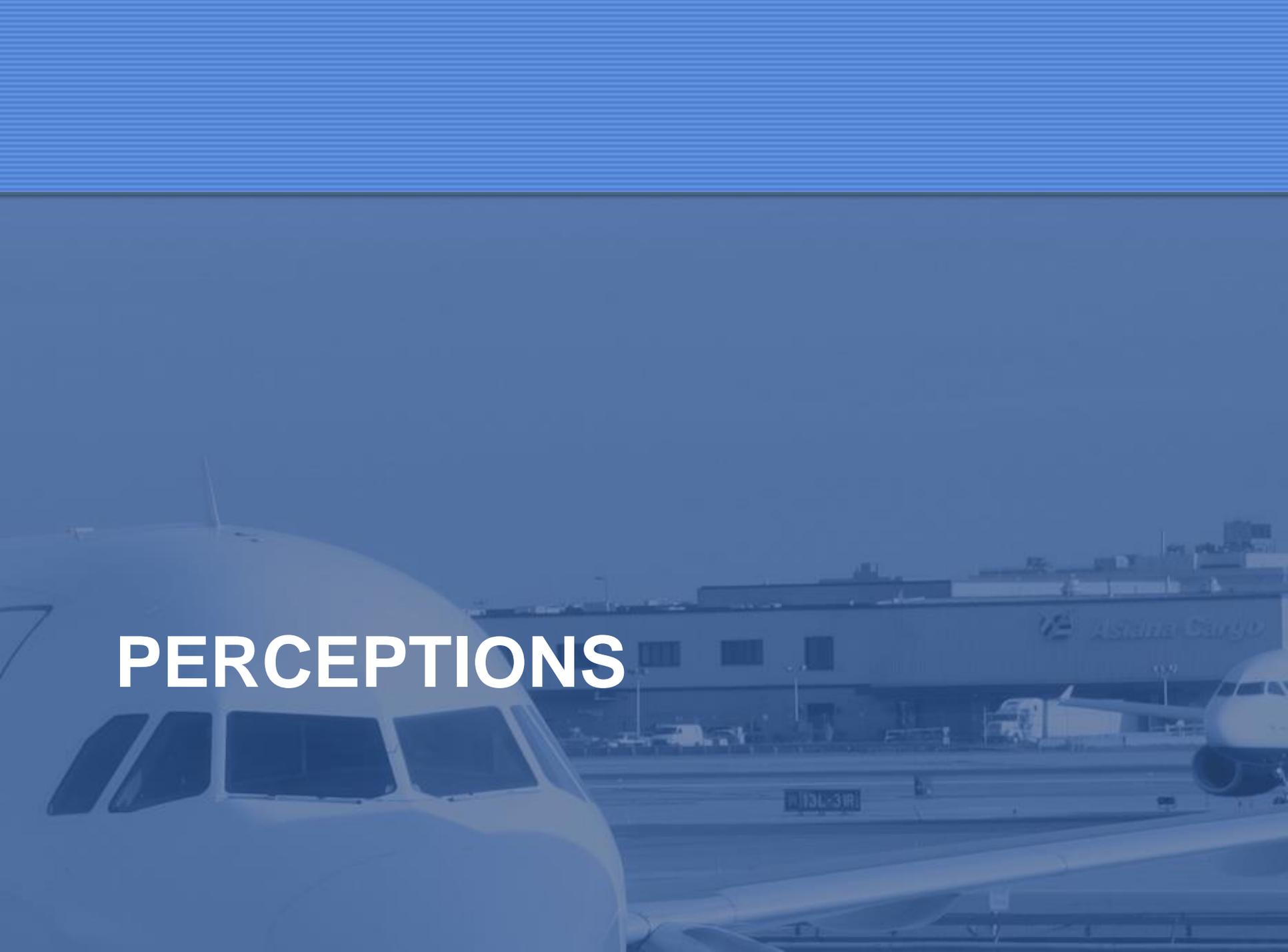
p = 0.010243355



Completion and Confidence

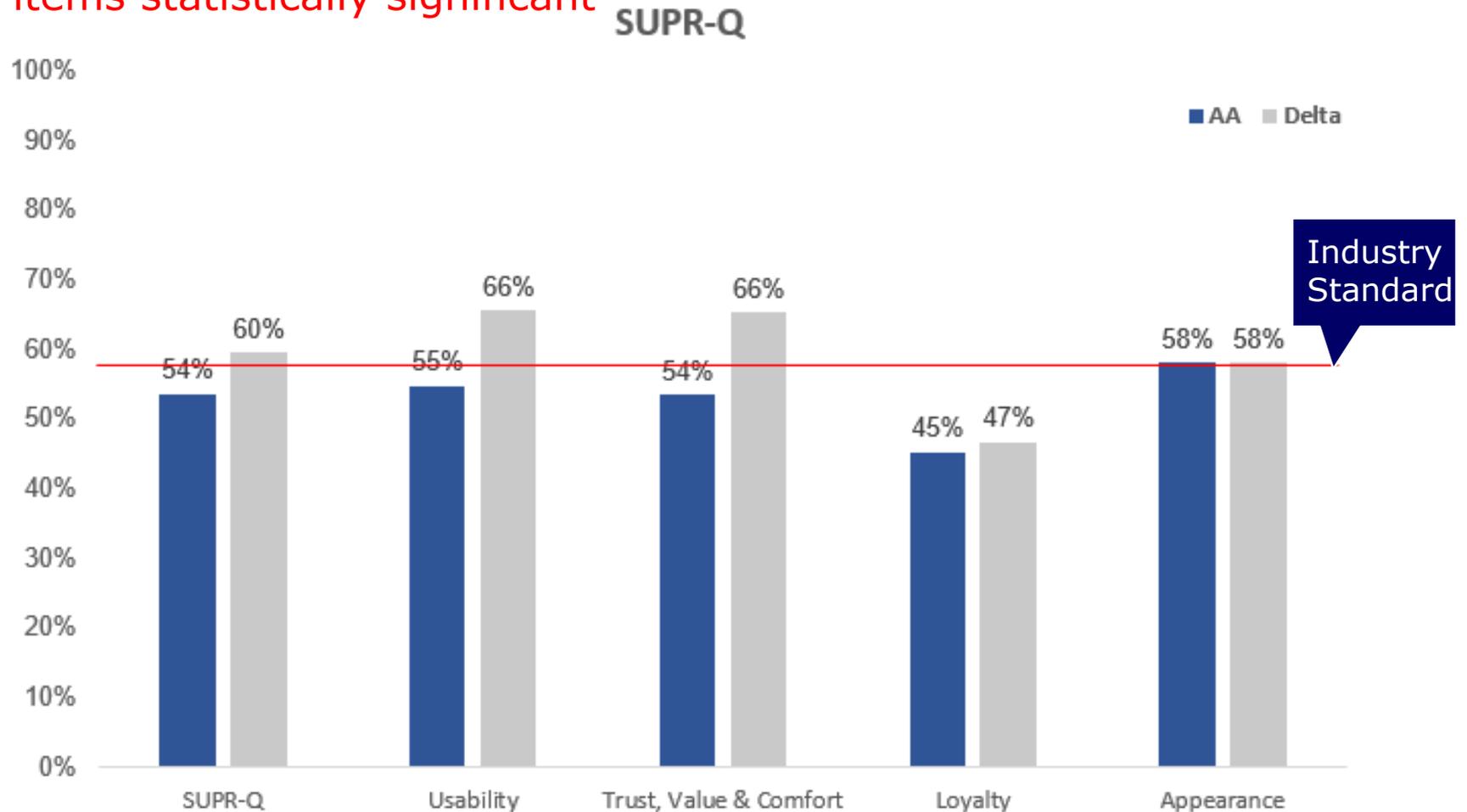


PERCEPTIONS

A blue-tinted photograph of an airport tarmac. In the foreground, the nose and cockpit windows of a white airplane are visible. In the background, a large hangar with the 'Asiana Cargo' logo is prominent. The sky is clear and blue.

Comparative SUPR-Q (Paired-t Test)

No items statistically significant



CONCLUSION

A blue-tinted photograph of an airport tarmac. In the foreground, the nose and cockpit windows of a white airplane are visible. In the background, a large hangar with the 'Asiana Cargo' logo is prominent. The sky is clear and blue.

What did we learn? Next steps?

Key Insights

- Statistically lower time on task on Delta
- Marginally higher usability rating
- Slightly higher disaster rates on Delta site

We might infer that the Delta 'Choose flights' page is more usable than the American Airlines page.

However, more participants on the Delta site reported the incorrect price - yet were confident they were correct. Do users think the efficiency of use means better usability and accuracy?

Previous data from eye tracking studies on the American Airlines 'Choose flights' page shows participants scan the page and have trouble finding the area of the page below the fold to choose a return flight.

Recommendation: test a new page redesign for the bundled/upsell module to help more users succeed at purchasing their desired flight on American.