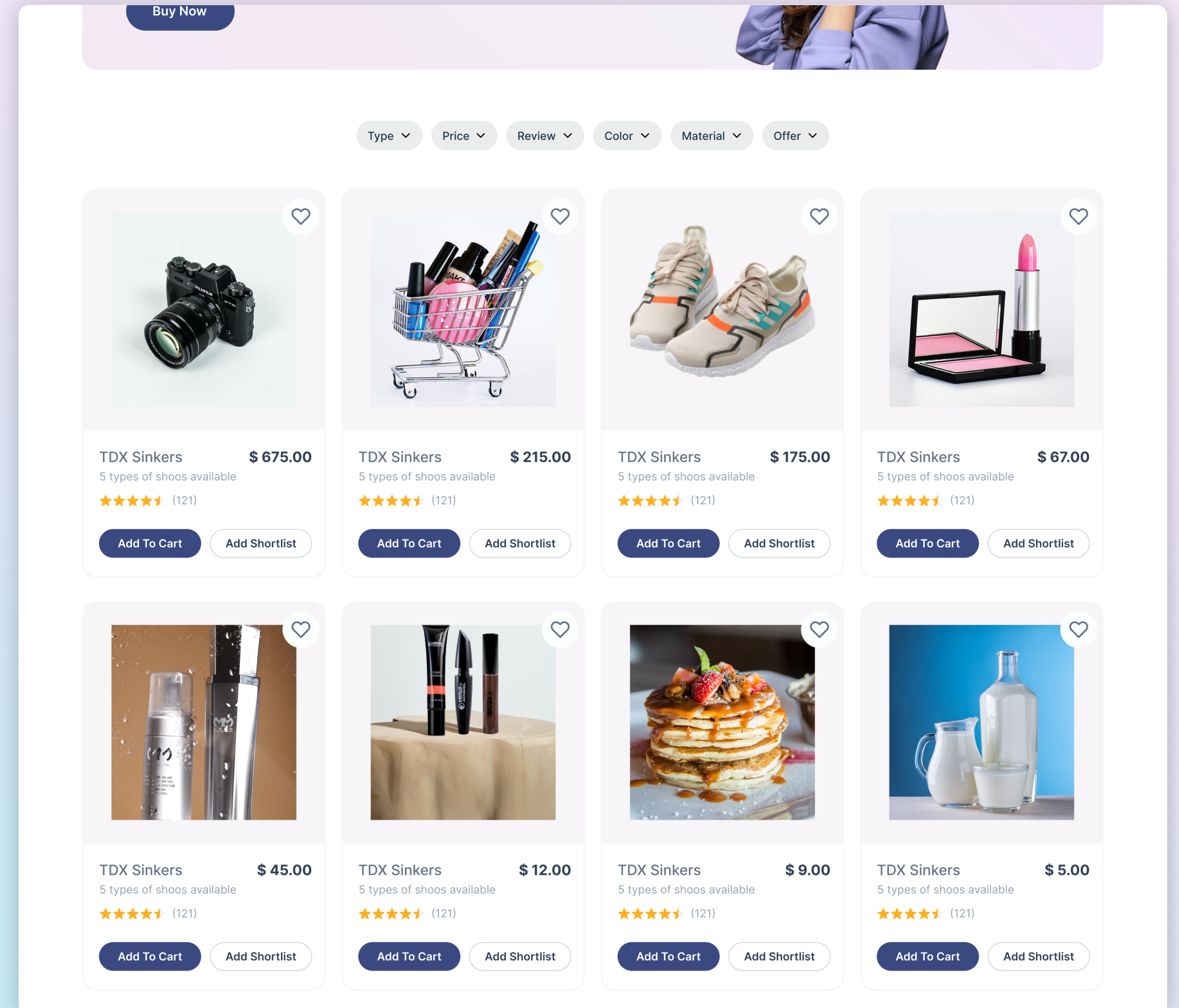


New Search Algorithm

DATES Sep 24, 2023 - Sep 28, 2023

OWNER J Josh Hanson

DECISION B Price conscious algo



B Price conscious algo

Executive Summary

Hypothesis

By adding price to the search algorithm, we will increase average purchase value per order by 5% while not negatively impacting purchase conversion in key markets.

Key Takeaways

We observed a statistically significant increase in our primary metric of average purchase value per order of $7.71\% \pm 1\%$. This greatly exceeded our hypothesis. We also see statistically significant increase in our conversion metrics across all core metrics. As such, we recommend rolling out the variant immediately.

Decision

ROLLED OUT VARIANT: **B** Price conscious algo

Links



Figma Mocks



search-experiments



Product Requirements Doc



Jira Issue: EP-12333

Experiment Variations

B Price conscious algo

treatment_1

Variant shows rankings with the new algorithm with a heavier weight on price of the product

This screenshot shows a product page with a grid of 8 items. The items are sorted by price in ascending order, reflecting the 'Price conscious algo'. The items and their prices are:

- Shoes: \$5.00
- Pancakes: \$9.00
- Skincare: \$12.00
- Shoes: \$175.00
- Camera: \$675.00
- Shopping cart: \$215.00
- Shoes: \$175.00
- Makeup: \$67.00

The page includes a 'Buy Now' button at the top, a navigation bar with filters (Type, Price, Review, Color, Material, Offer), and each item card features a heart icon, a 5-star rating, and 'Add To Cart' and 'Add Shortlist' buttons.

A Control

control

Control shows rankings with the current search algorithm

This screenshot shows a product page with a grid of 8 items. The items are sorted by price in descending order, reflecting the 'Control' search algorithm. The items and their prices are:

- Shoes: \$675.00
- Shopping cart: \$215.00
- Shoes: \$175.00
- Makeup: \$67.00
- Pancakes: \$9.00
- Skincare: \$12.00
- Shoes: \$5.00
- Shopping cart: \$215.00

The page includes a 'Buy Now' button at the top, a navigation bar with filters (Type, Price, Review, Color, Material, Offer), and each item card features a heart icon, a 5-star rating, and 'Add To Cart' and 'Add Shortlist' buttons.

Primary and Guardrail Metrics

Our primary metric of average purchase value per order increased 7.71% ± 1%.
 Our guardrails of purchase conversion in key markets (US, Asia, Europe) were not negatively impacted.

B Price conscious algo



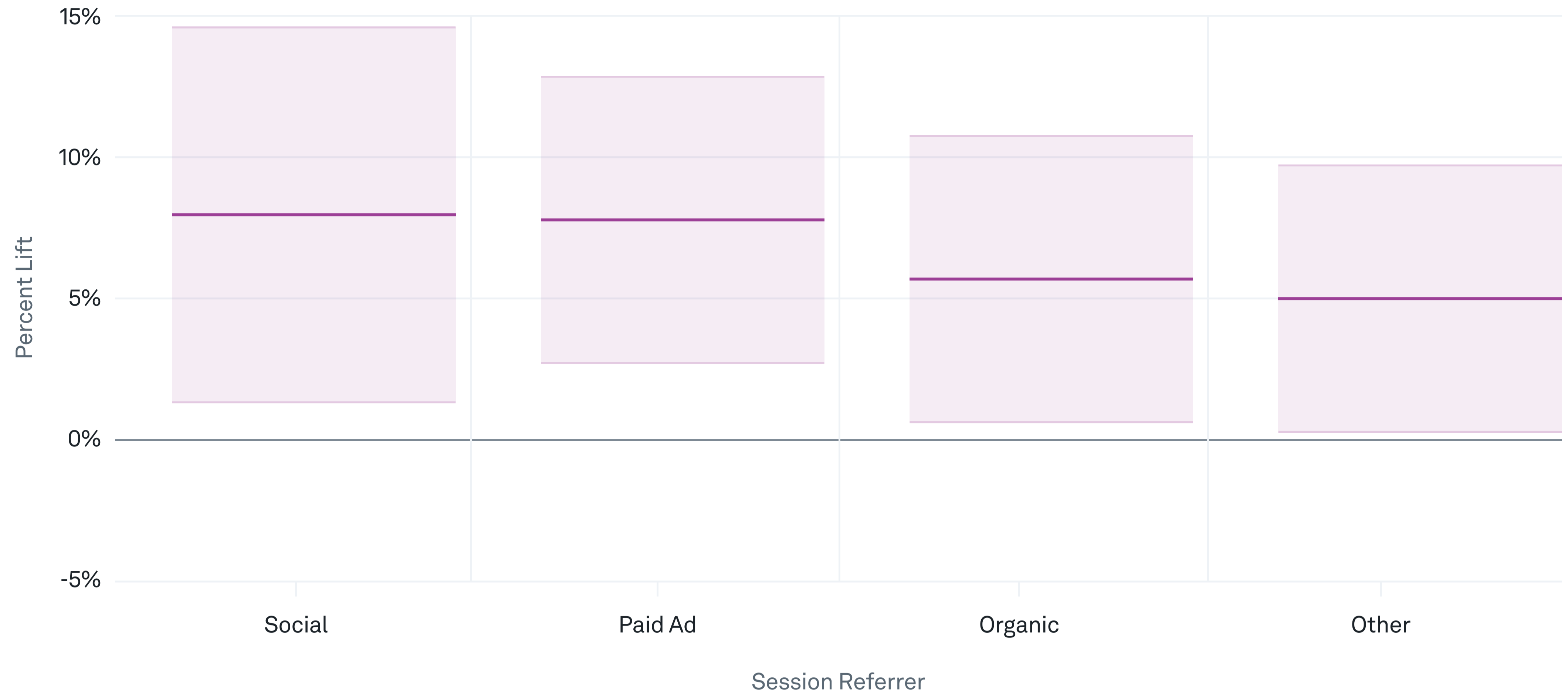
Metrics	A Control	B	Lift	-20%	-10%	0%	10%	20%
Average Purchase Value per Order Primary	15.01	16.17	7.71%					
Add-to-Cart -> Checkout Conversion	0.93	0.95	2.34%					
Purchase Conversion (United States)	0.035	0.039	10.79%					
Purchase Conversion (Asia)	0.070	0.078	10.87%					
Purchase Conversion (Europe)	0.068	0.078	14.69%					

Metric Deep-dive

Splitting average purchase by user type and session referrer shows increases across the board. We don't risk any drops across different user segments by rolling out this variant.

Average Purchase Value per Order by Session Referrer

(B) Price conscious algo vs. **(A)** Control

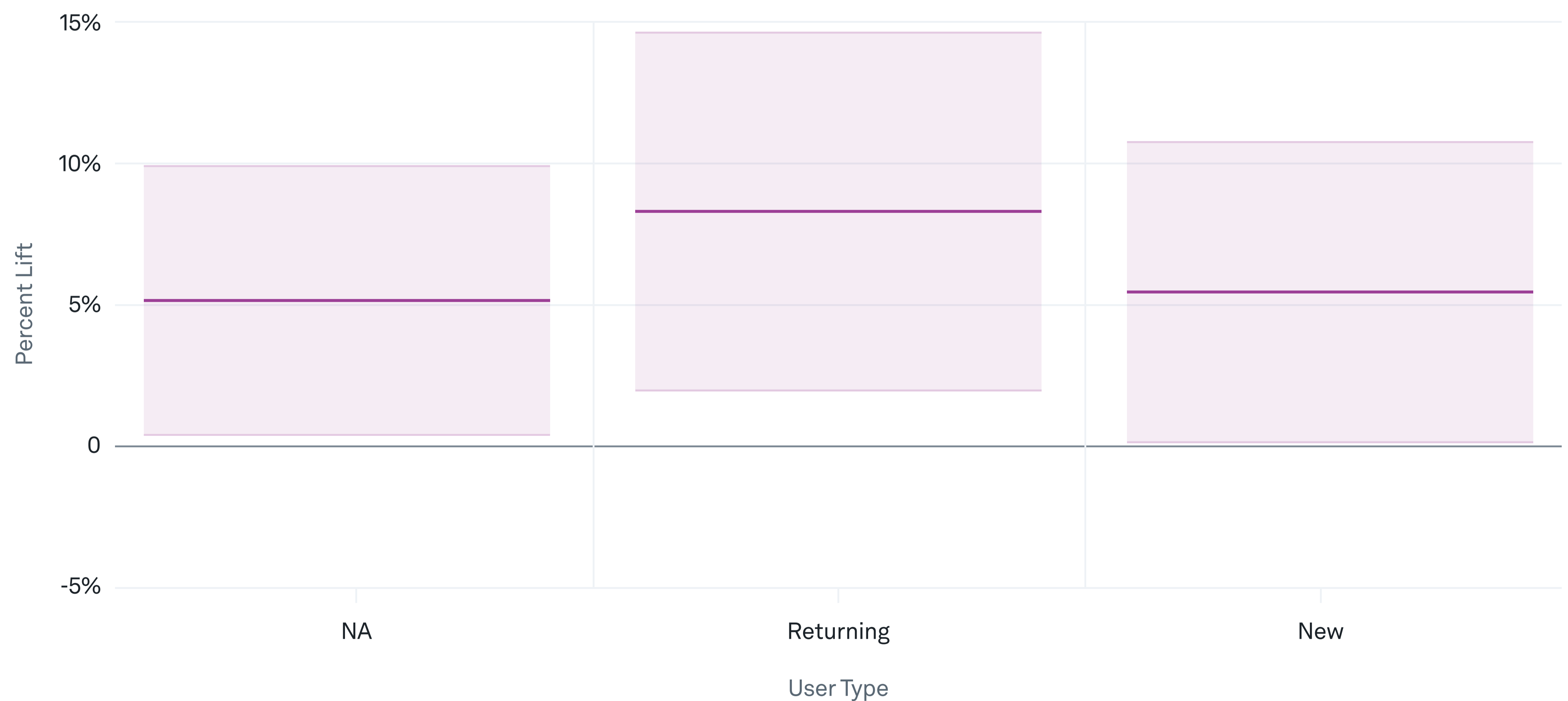


PERCENT LIFT + CONFIDENCE INTERVAL

(B) Price conscious algo

Average Purchase Value per Order by User Type

(B) Price conscious algo vs. **(A)** Control

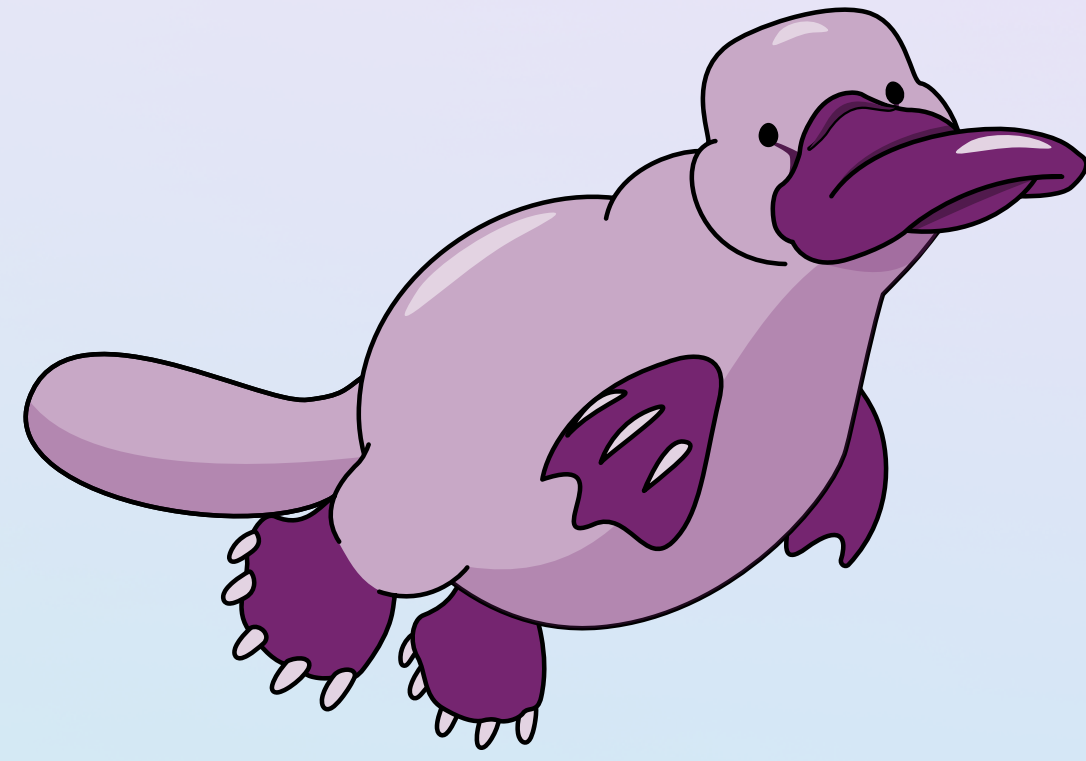



PERCENT LIFT + CONFIDENCE INTERVAL

(B) Price conscious algo

Next Steps

We recommend exploring further changes to the new algorithm. In particular, trying an even heavier weight on price to see if we can boost average purchase value per order even further.



Created in  eppo