# A Benchmark Analysis of Online Footwear Companies Experiences

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#### **Data Source**

- Using Google's BigQuery interface at https://console.cloud.google.com/bigquery query the crux data set
- Dataset: chrome-ux-report

There are a number of tables within the chrome-ux-report, many have a histogram type layout and are very data intensive.

Given that, data quotas were met, therefore the scope of this report was adjusted to what could be queried within the free tier.

Looking at the materialized table and by country\_summary, there was enough useful information to make a reasonably helpful report in R

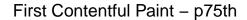
#### Steps

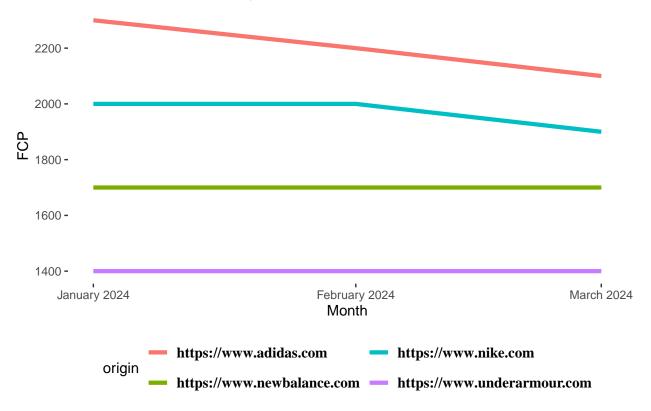
- get data from BigQuery, repeat sql states, as shown above, for each month (note data is aggregated by month in BigQuery)
- export each query result to a .csv file
- in **R Studio**: create datasets and show a series of graphs to demonstrate how different companies rank against each other.
- goal: show how the user experiences differ from site to site.

### Cavets

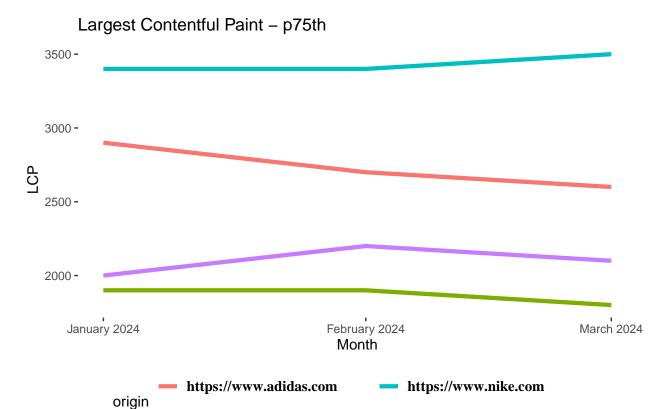
- This data is from Jan, Feb, March of 2004
- Data is origin based, meaning it is an aggregate of all pages and subpages throughout the entire domain

Starting with the First Contentful Paint, we get our first glance on how these companies compare



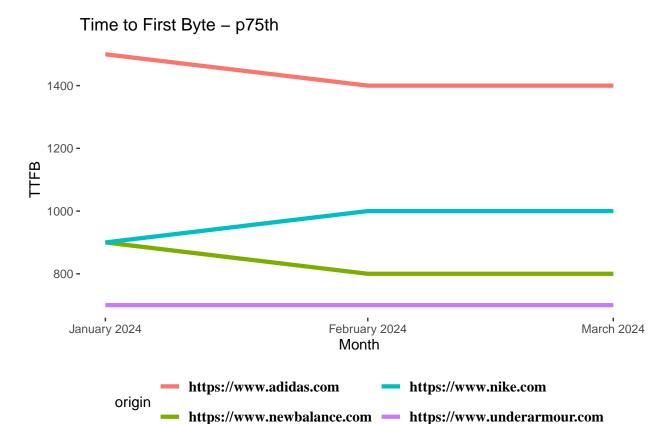


Next we look at Largest Contentful Paint, we can see the rankings remain fairly similar



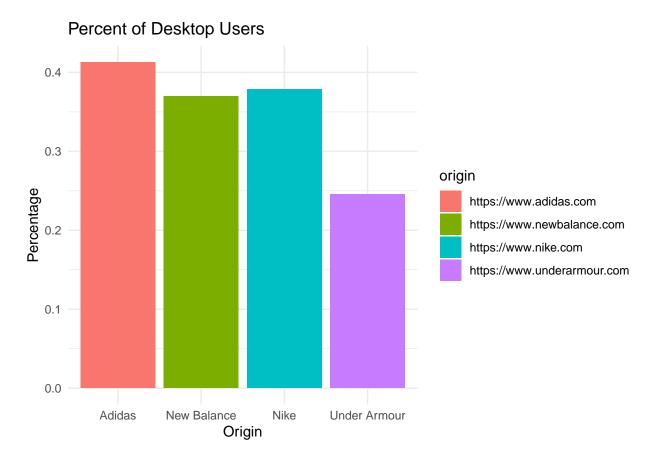
https://www.newbalance.com — https://www.underarmour.com

Moving to Time to First Byte, we see a few deviations from the previous graphs, however it's making us want to dig deeper to explain the why LCP scores differ



For the fun of it, let's look at the percentage of users that were on desktop by company, we can assume the rest of the users were on mobile.

We can see that Under Armour's users definitely prefer mobile web.



Digging further into the LCP metric, this shows the precentage of users that experience a 'Fast LCP', meaning the LCP score was under 2.5 seconds.

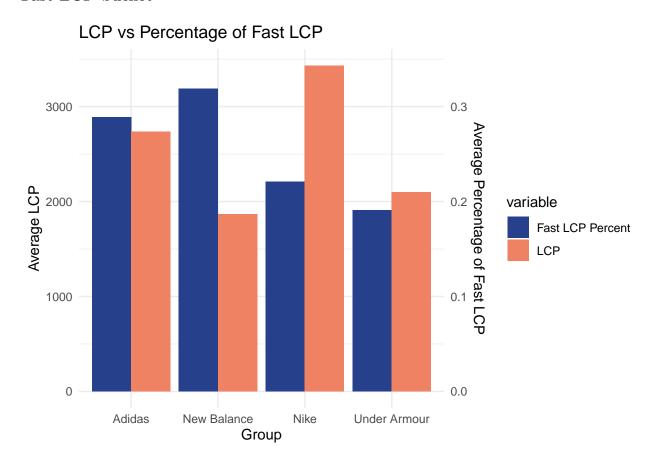
The faster the p75 LCP, we would assume that we'd have more users in the 'Fast LCP' bucket

This holds true for New Balance, it's fast and they have a big Fast LCP bucket

Conversely for Nike, it's rather slow and thusly a small LCP bucket

Adidas in the the middle for both p75 LCP and, as predicted, the Fast LCP bucket

But what is going on with Under Armour, it's LCP is good but it has the smallest Fast LCP bucket



Exploring more RUM metrics, we can inspect the percetage of users that are on 4G networks or better

Under Armour has the smallest amount of 4G users. This would explain the smaller Fast LCP bucket shown in the previous bar graph.

It would also infer that Under Armour would have an even better overall LCP score if they had a higher percentage of users utilizing fast networks.

