

A/B Web Page Background Colour Test

Scenario

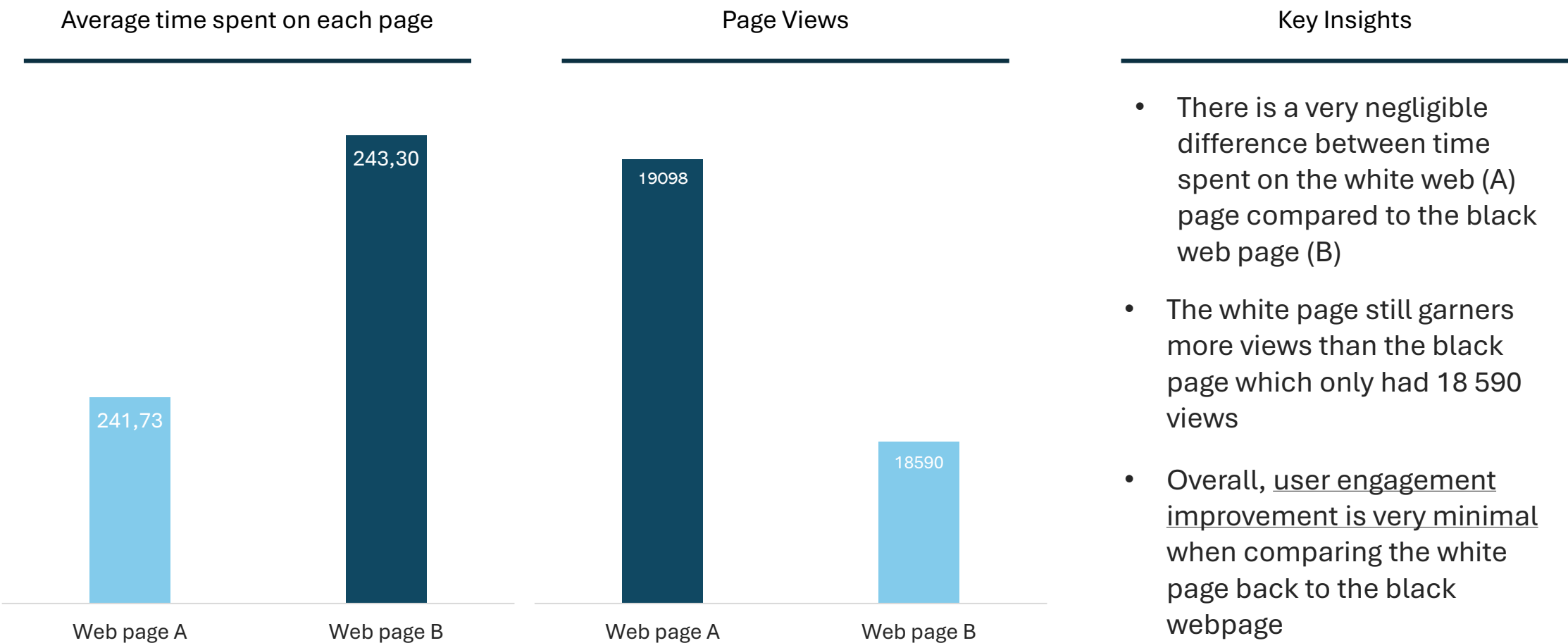
The information gathered is regarding visits made by users on our website around the United Kingdom. The users have been split into two groups, A and B, each of which represents a control group and treatment group respectively. Our company needs to test out a new change on the website which is, **"Do people spend time on a website if the website background color is White or Black"**

The main goal is to understand whether there is a significant improvement in website views if the newer setting is applied. This can be answered through the use of A/B Testing.

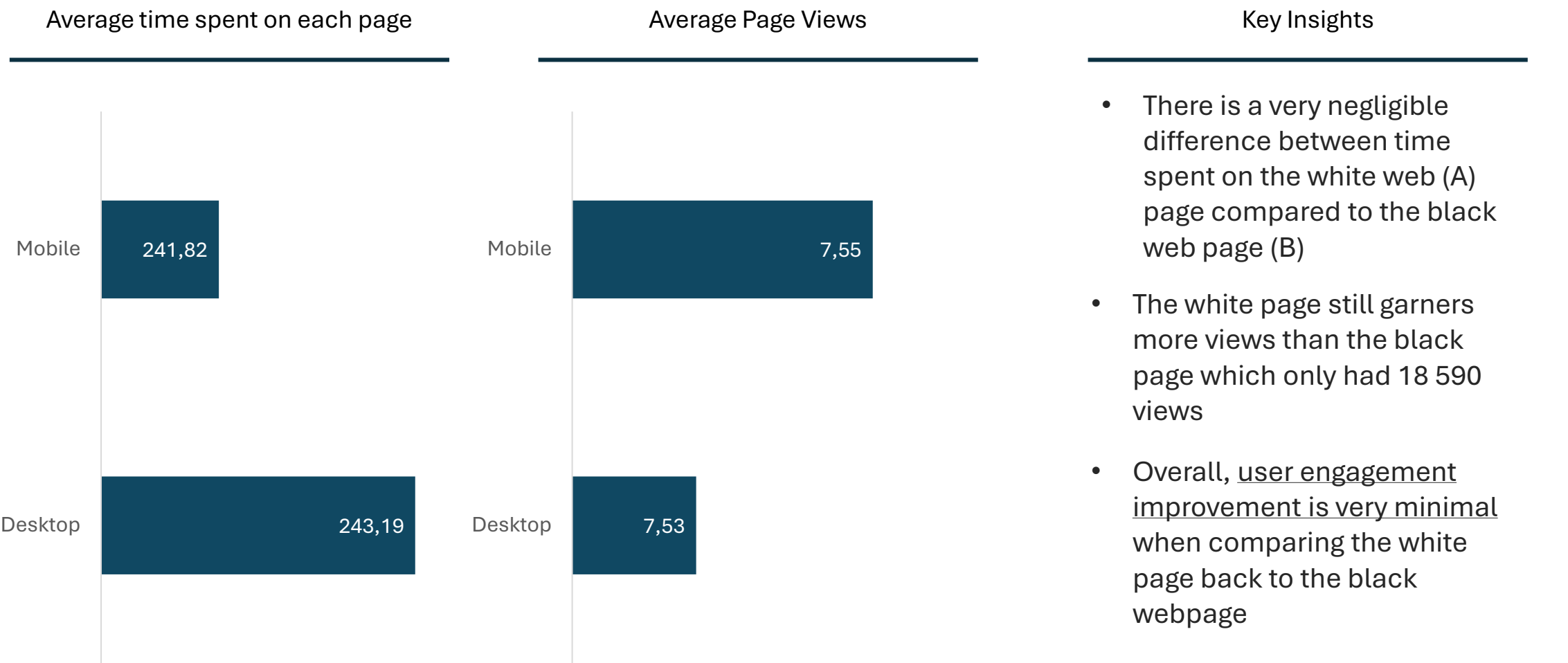
Data Information

Column Name	Description
User ID	Serves as an identifier for each user.
Group	Contains both the control group (A) and treatment group (B).
Page Views	Number of pages the user viewed during their session.
Time Spent (seconds)	The total amount of time, in seconds, that the user spent on the site during the session.
Conversion	Indicates whether a user has completed a desired action (Yes/No).
Device	Type of device used to access the website.
Location	The country in UK where the user is based in.

Users spent 0.65% more time on Web Page B compared to Web Page A but site A had 498 more views compared to site B

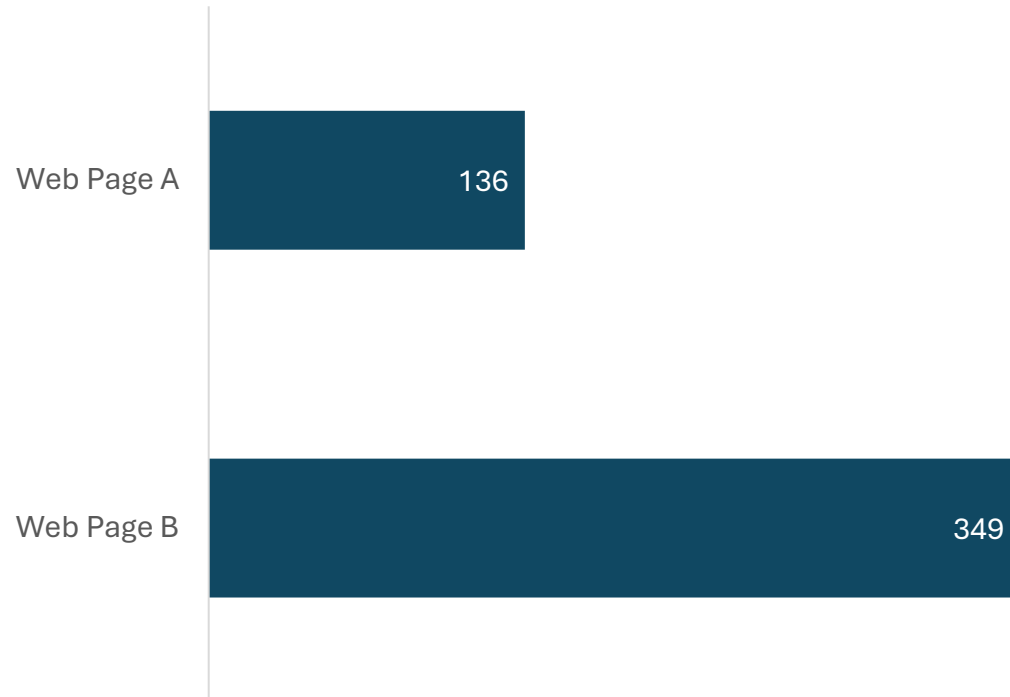


Users spend more time viewing the website on a desktop but view more pages on mobile



Web page B has increased conversions by just under 10%

Conversion Rates

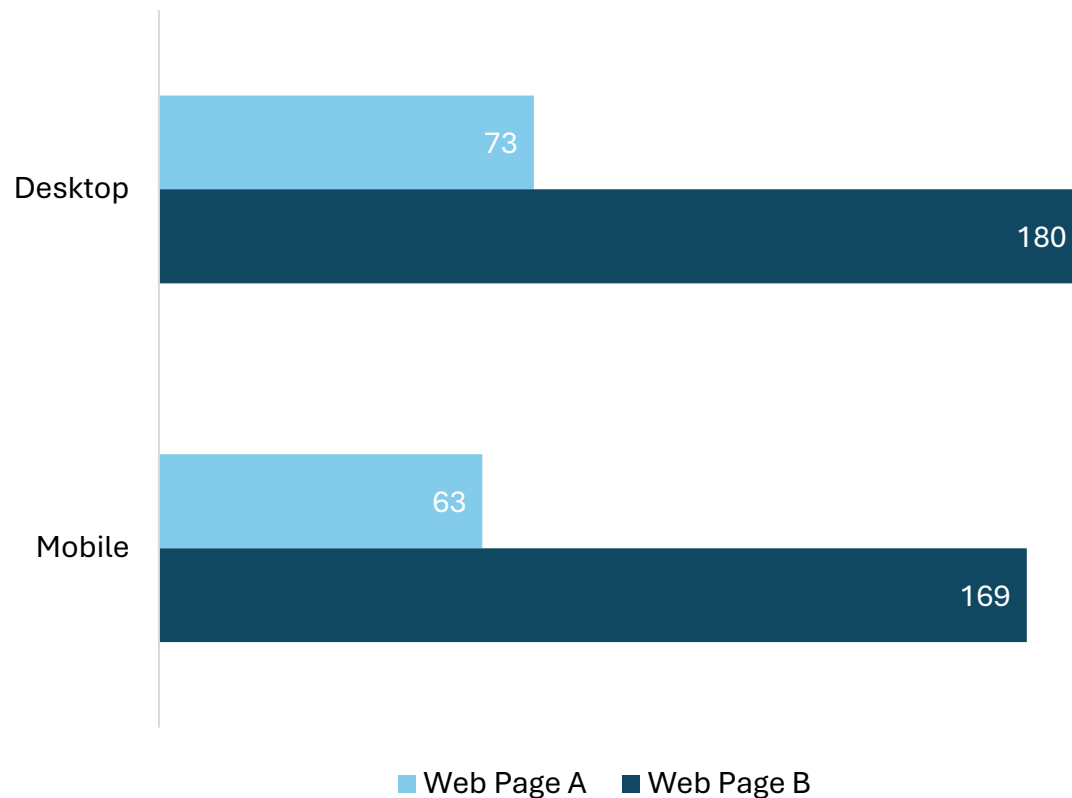


Key Insights

- Out of 2974 users, only 136 lead to a conversion on web page A meaning that there is a conversion rate of 4.57%
- Out of 2481 users, only 349 lead to a conversion on web page B meaning that there is a conversion rate of 14.06%
- The black web page (B) has nearly 3 times more conversions that the white web page (A)

Web Page B makes up around 72% of conversions across both devices

Conversion By Device



Key Insights

- Web Page B has a higher number of conversion on desktop by 107 (146.57%)
- Web Page B has a higher number of conversion on mobile by 106 (168.25%)
- Overall, the black background web page results in a higher number of conversions

Web Page A has more page views and the most time spent in total.

Page Views and Time Spent In Each Country

		England	Northern Ireland	Scotland	Wales
Page Views	A	4600	4696	5114	4688
	B	4885	4601	4601	4503
Time Spent	A	146478	146538	159440	156470
	B	159909	155467	140674	147587

Key Insights

- Scotland has the most page views for web page A and England has the most page views for web page B
 - Scotland has the most time spent for web page A and England has the most time spent for web page B
-

England has the highest number of conversions between the 4 countries

Number of conversions in each country

Web Page	England	Northern Ireland	Scotland	Wales	Total
A	42	31	33	30	136
B	94	72	92	91	349
Total	132	103	125	121	485
Percentages	27.21%	21.23%	25.77%	24.94%	100%

Key Insights

- England has the highest number of conversions with 132 conversions in total and contributing 27.21% of total conversions.
- Northern Ireland has the lowest number of conversions with 103 conversions in total.

Conclusion

Findings:

- Despite web page A having more views and a higher time spent, web page B (the black background website) has a higher conversion rate.
- Most conversions come from England.
- Majority of conversions come from users that use a desktop.

Next Steps:

- Implement a black background for the website.
 - Understand why the white background web page has more views and time spent on it despite having a lower conversion rate.
-