

Vertical Navigation Research

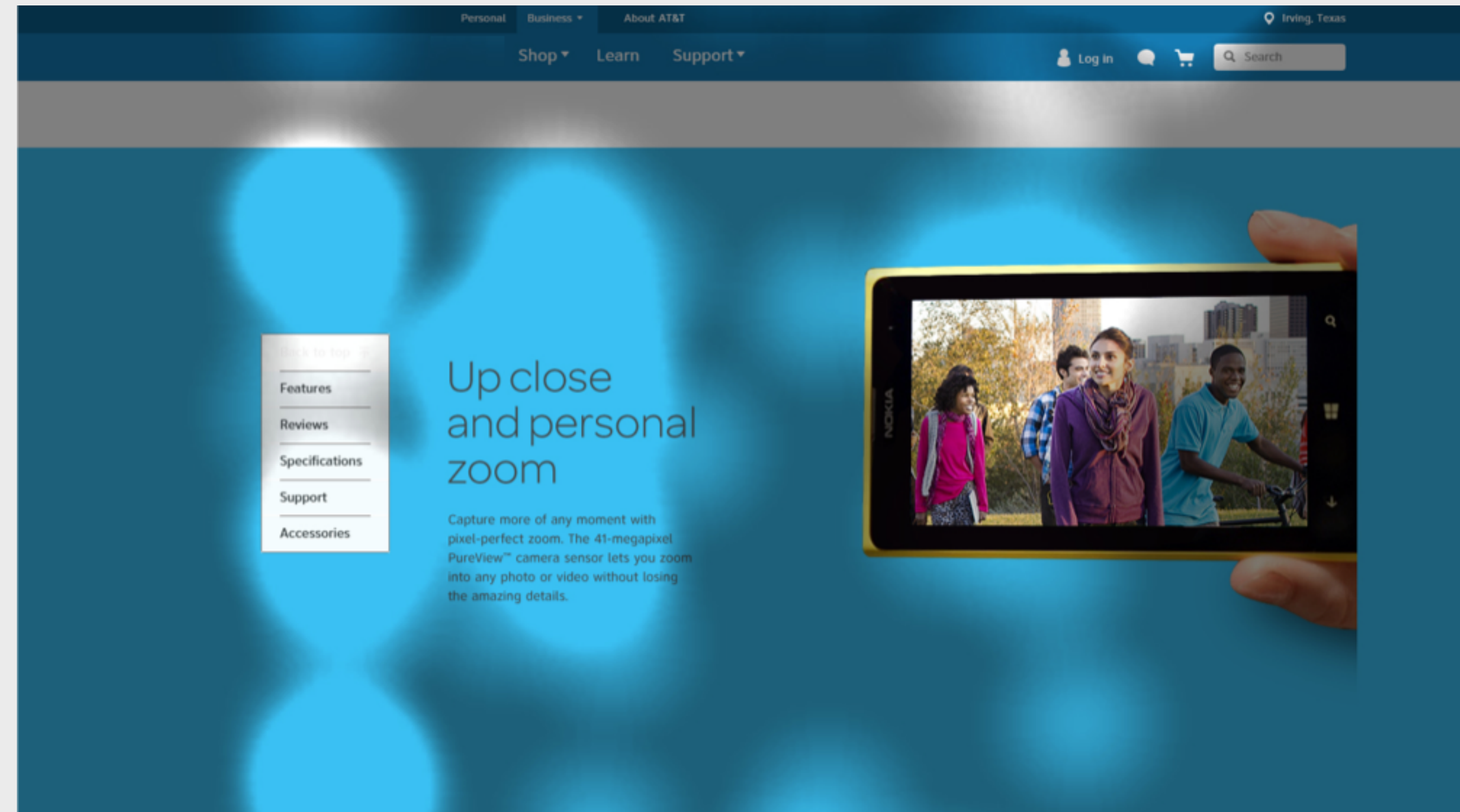
Interactive Prototype Testing

July 2014

research

Testing Methodology

- The purpose of the test was to determine
 - 1) if users noticed the vertical navigation bar
 - 2) if users *used* the vertical navigation bar.
- The test consisted of 5 tasks total. The tasks were designed to force the users to have to navigate the full length of the page multiple times.
- We observed users by using the Tobii eye-tracking system.
- Eye-tracking data was aggregated across all tasks in order to gauge the overall usage of the vertical navigation.



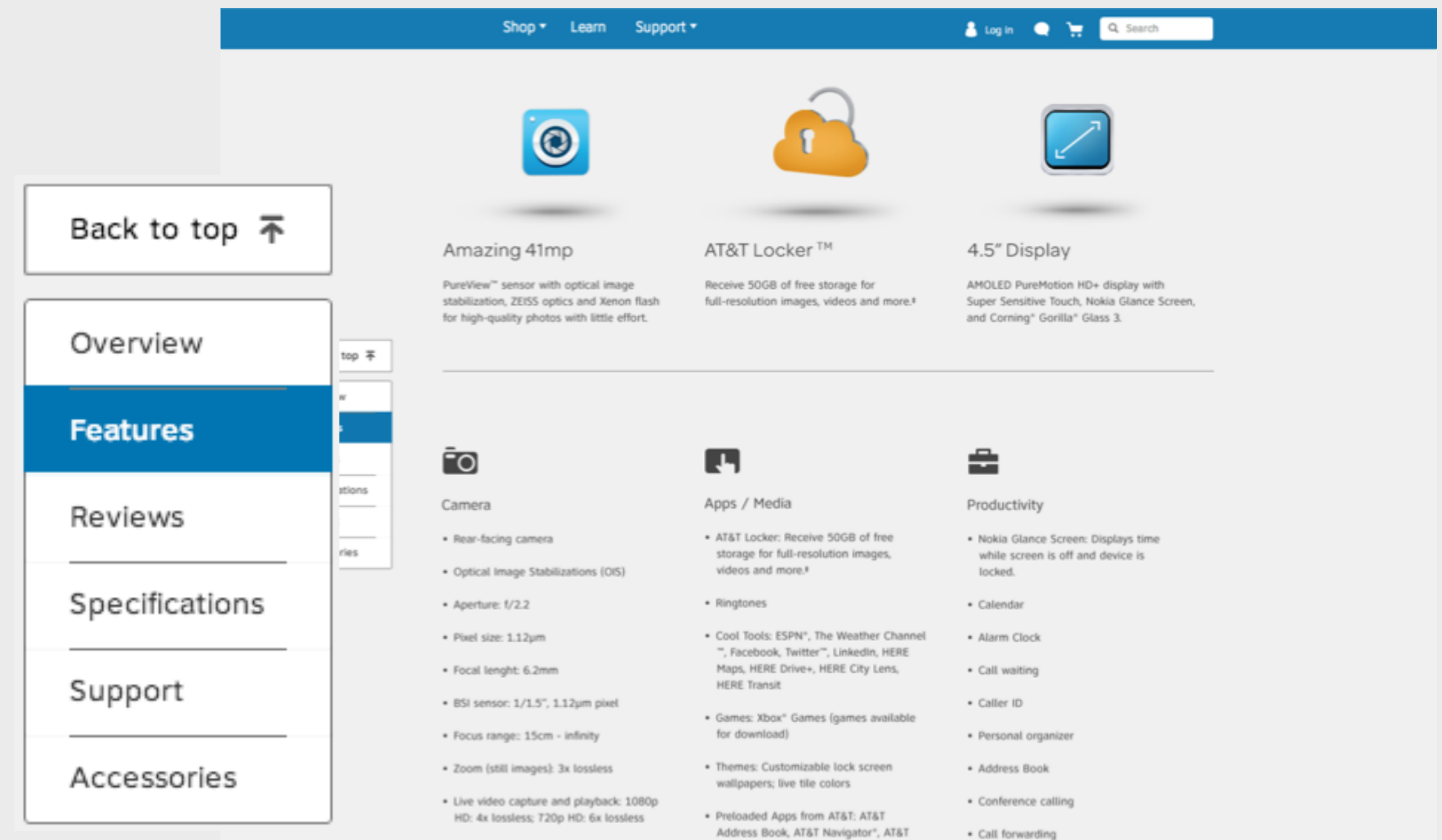
Executive Summary

It was observed that the Vertical Navigation was seen and used, and **100% of users** directly interacted with it.

The image shows a product page for the Nokia Lumia 1020. On the left, a vertical navigation menu is overlaid, containing the following items: Overview (highlighted), Features, Reviews, Specifications, Support, and Accessories. The main product page includes a top navigation bar with links for Personal, Business, and About AT&T, along with a search bar and location indicator (Irving, Texas). The product title is "Nokia Lumia 1020". Below the title, there is a 5-star rating (7 Reviews) and a description: "The advanced options of a digital SLR camera in a smartphone that's always with you." A promotional offer states: "\$100 off Nokia Lumia 1020. Get a \$100 credit on your bill with qualified voice and data plan. [More on offers](#)". A "Save up to \$25/mo" badge is also present. The product is shown in a yellow color, with options for 16 GB, 32 GB, and 64 GB storage. The contract is set to 2-years and the quantity is 1. The price is \$299.99, and there is an "Add to Cart" button. At the bottom, there is a section titled "41 megapixels Amazing detail Brilliant Zoom." with a sub-headline: "The Nokia Lumia 1020 combines the image quality of a 41-megapixel image sensor with the simplicity and convenience of a".

Results Summarized

- **100% of users** clicked on the vertical navigation at least once during the test.
- **90% of users** were able to identify where they were on the page without needing to scroll
- On average, **each user** looked at the vertical navigation bar just under **15** times across the five tasks
- On average, **each user** clicked on the vertical navigation bar just over **4** times across the five tasks



Detailed Results

Key Observations

- The average time for users to notice the navigation bar for the first time is 19.47 seconds
- Users looked at the navigation bar an average of 14.7 times throughout the five tasks
- Users clicked on the navigation bar an average of 4.3 times over the five tasks

Statistical Term Definitions

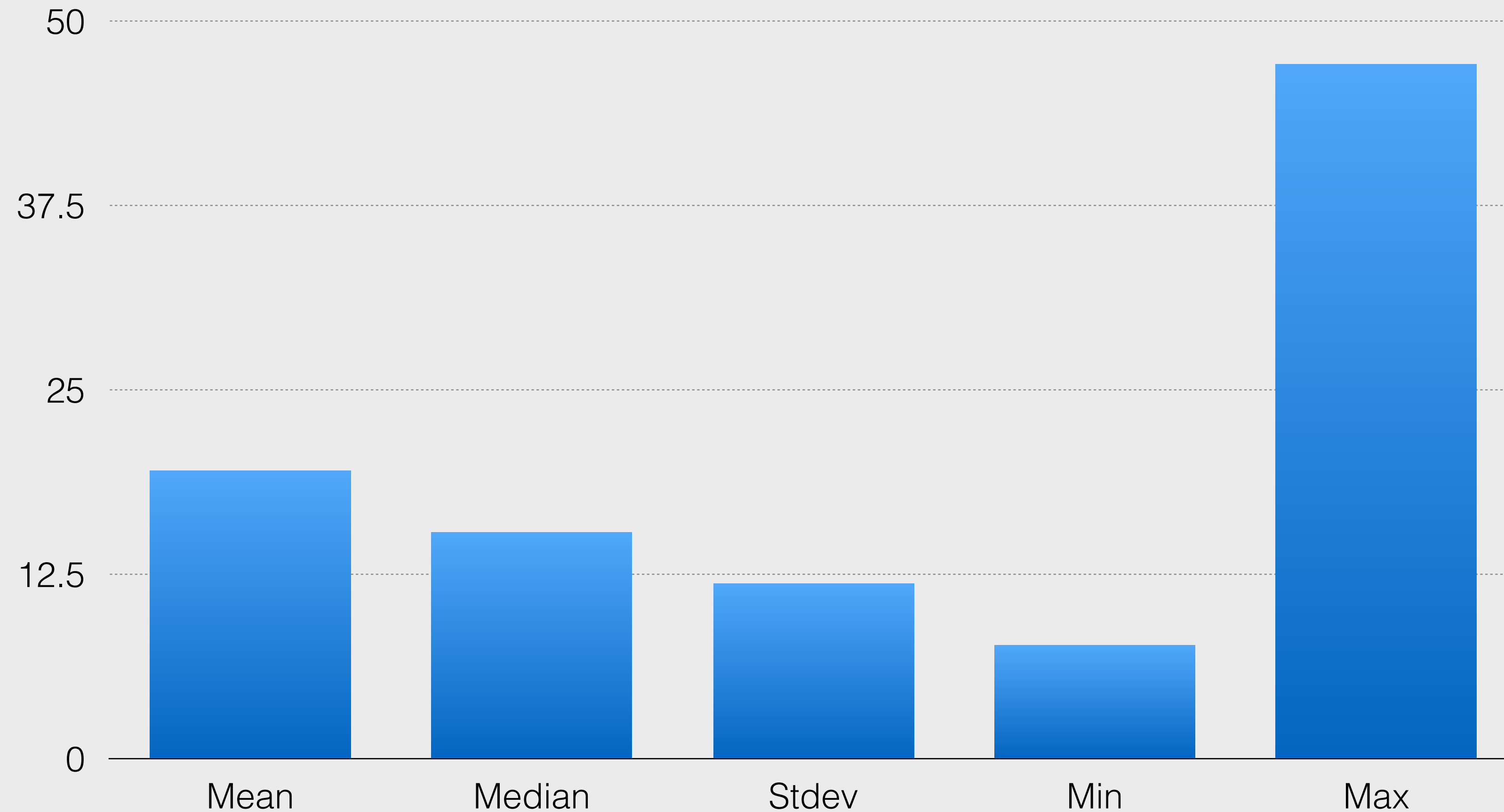
Descriptive Statistic	Definition
N	Number of data values or sample size used to calculate the Mean and Stdev (number of recordings, fixations, visits or participants).
Mean	Describes the central tendency of a set of data values. It is calculated by summing all the data values and dividing by N (number of data values). Tobii Studio calculates the arithmetic mean.
Max	Highest value in the data set.
Min	Lowest value in the data set.
Sum	The sum of all data set.
Median	The value that separates a data set in two halves. The value is calculated by first arranging a finite list of data values from lowest to highest value and then determining which data value is located at the middle of the list - the median value. If the number of data values is even, then there is no single middle data value. The median is then defined by the average of the two data values.
Stdev (Standard Deviation)	Describes the variability in a set of data values. The value is calculated by square rooting the average of the squares of the deviations of each data value from the mean. Tobii Studio calculates the sample standard deviation (N-1).

Time to First Fixation

This metric measures how long it takes before a test participant fixates on an active area of interest (i.e. Vertical Navigation)

Participant	N	Mean	Median	Stdev	Min	Max	Sum
Time to First Fixation	10	19.47	15.33	11.85	7.65	47.03	194.66

- It took users between 7.65 and 47.03 seconds to fixate on the vertical navigation bar for the first time

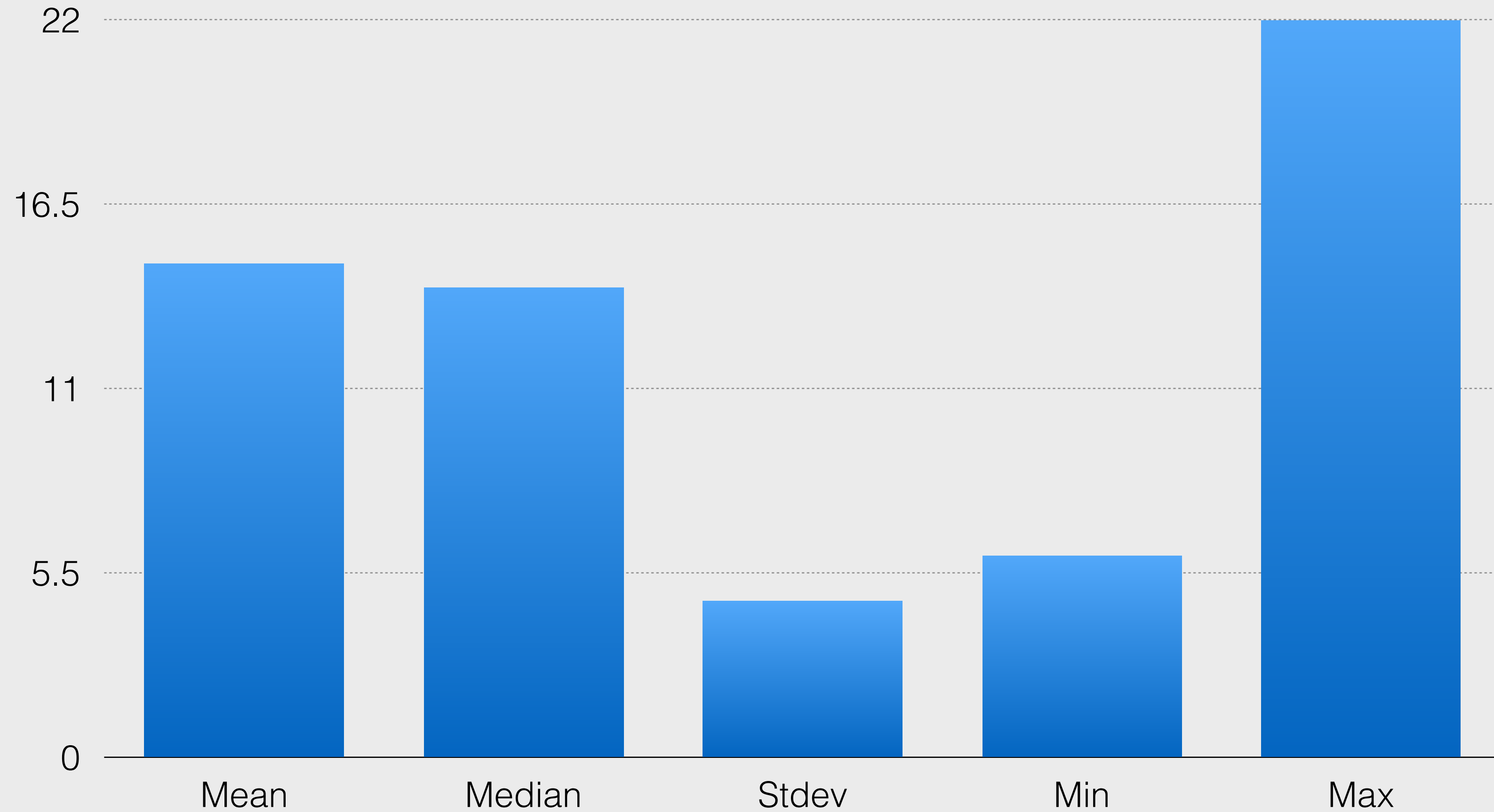


Visit Count

This metric measures the number of visits within an area of interest (i.e. Vertical Navigation)

Participant	N	Mean	Median	Stdev	Min	Max	Sum
Visit Count	10	14.7	14	4.64	6	22	147

- Users looked at the vertical navigation bar between 6 and 22 times over the five tasks

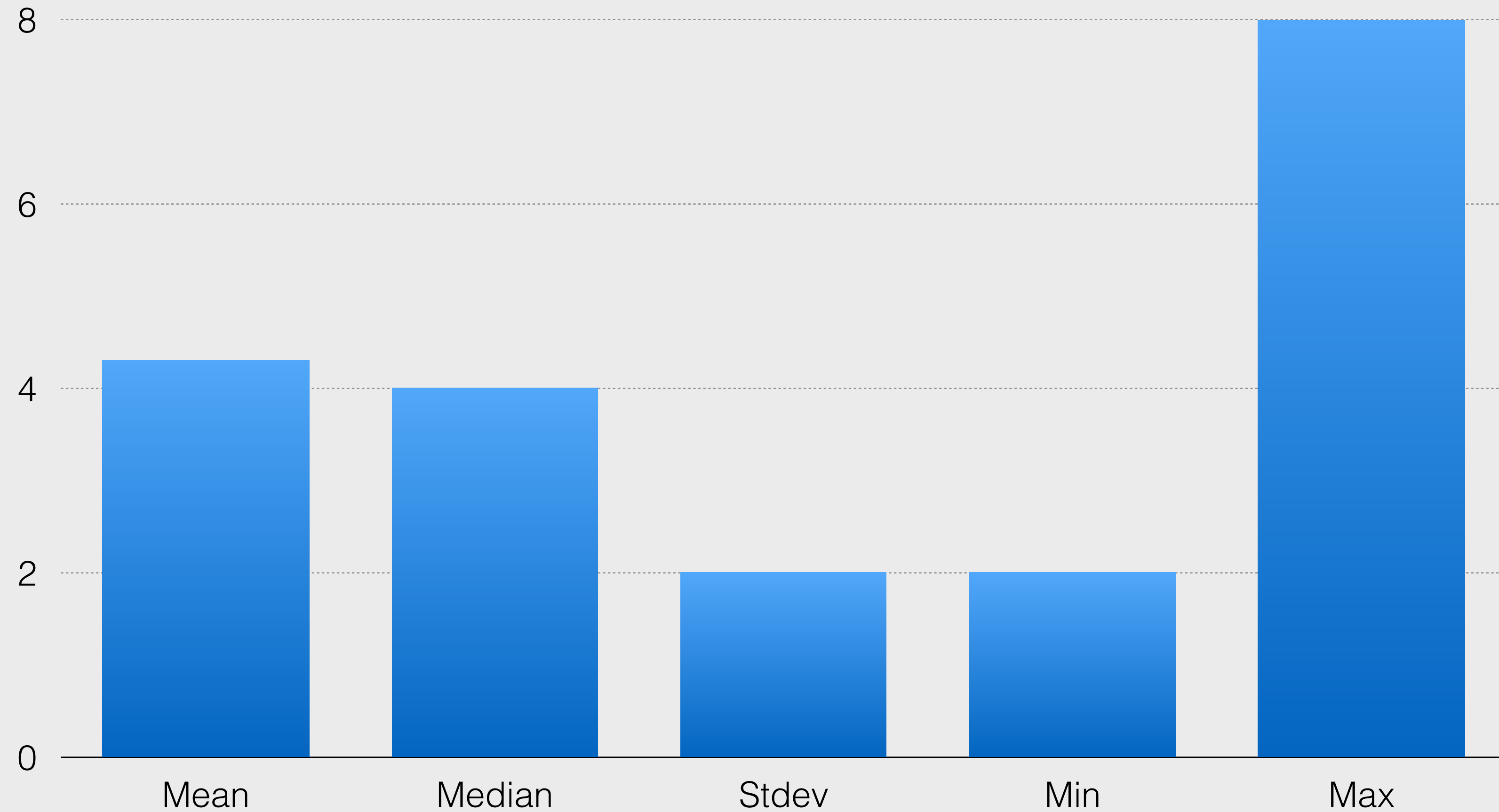


Mouse Clicks

This metric measures the number of times the participant left-clicks with the mouse on an area of interest (i.e. Vertical Navigation)

Participant	N	Mean	Median	Stdev	Min	Max	Sum
Mouse Clicks	10	4.3	4	2	2	8	43

- Users clicked on the vertical navigation bar between 2 and 8 times over the five tasks



Appendix

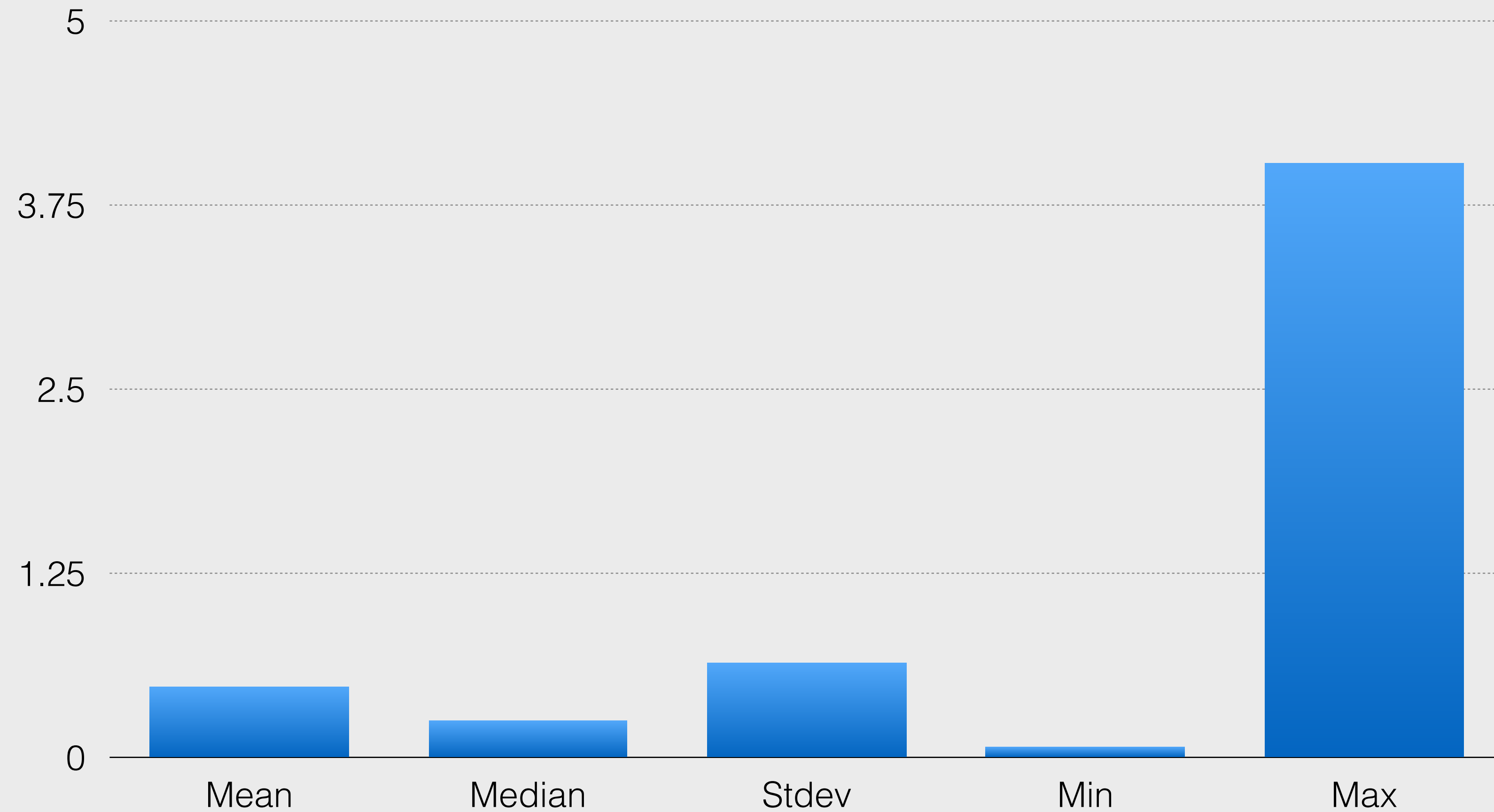
List of Tasks

1. What is the weight of the phone?
2. How many megapixels does the front facing camera have?
3. What section are you in?
4. Does this phone have any cases available for purchase?
5. What colors is this phone available in?

Fixation Duration

Measures the duration of each individual fixation within an AOI.

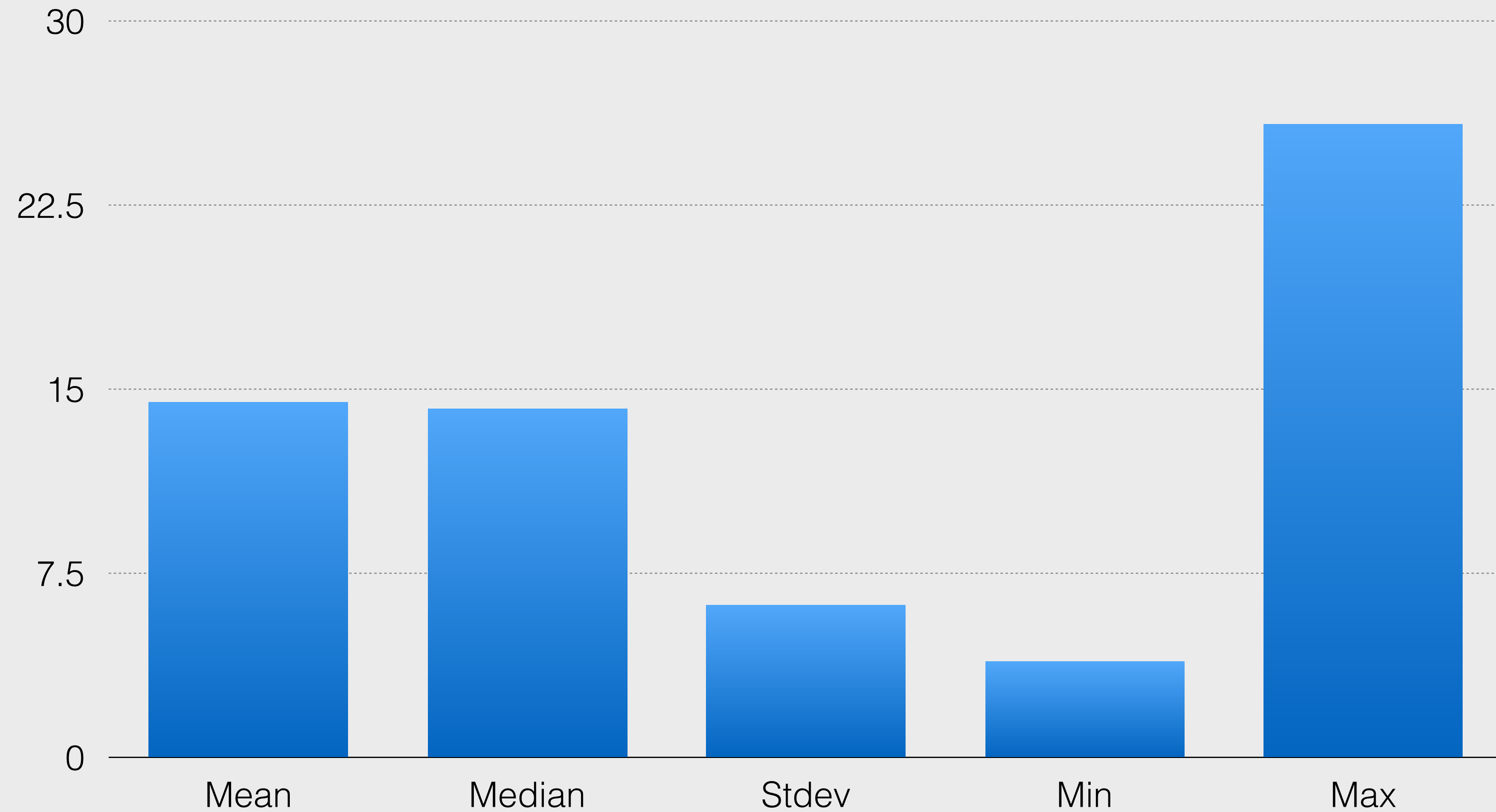
Participant	N	Mean	Median	Stdev	Min	Max	Sum
Fixation Duration	301	0.48	0.25	0.64	0.07	4.03	144.46



Total Fixation Duration

This metric measures the sum of the duration for all fixations within an AOI

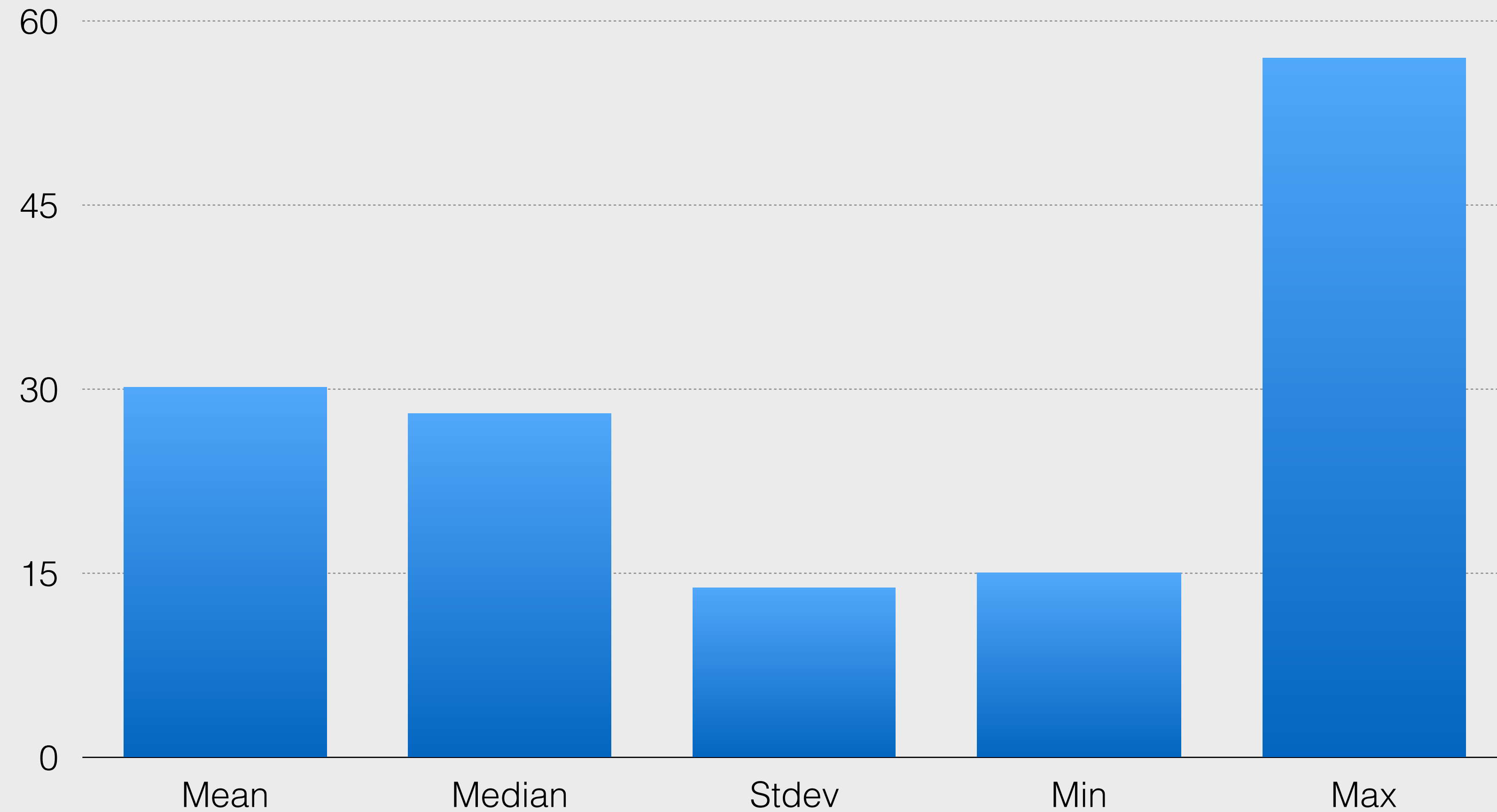
Participant	N	Mean	Median	Stdev	Min	Max	Sum
Total Fixation Duration	10	14.45	14.17	6.19	3.86	25.75	144.46



Fixation Count

This metric measures the number of times the participant fixates on an AOI

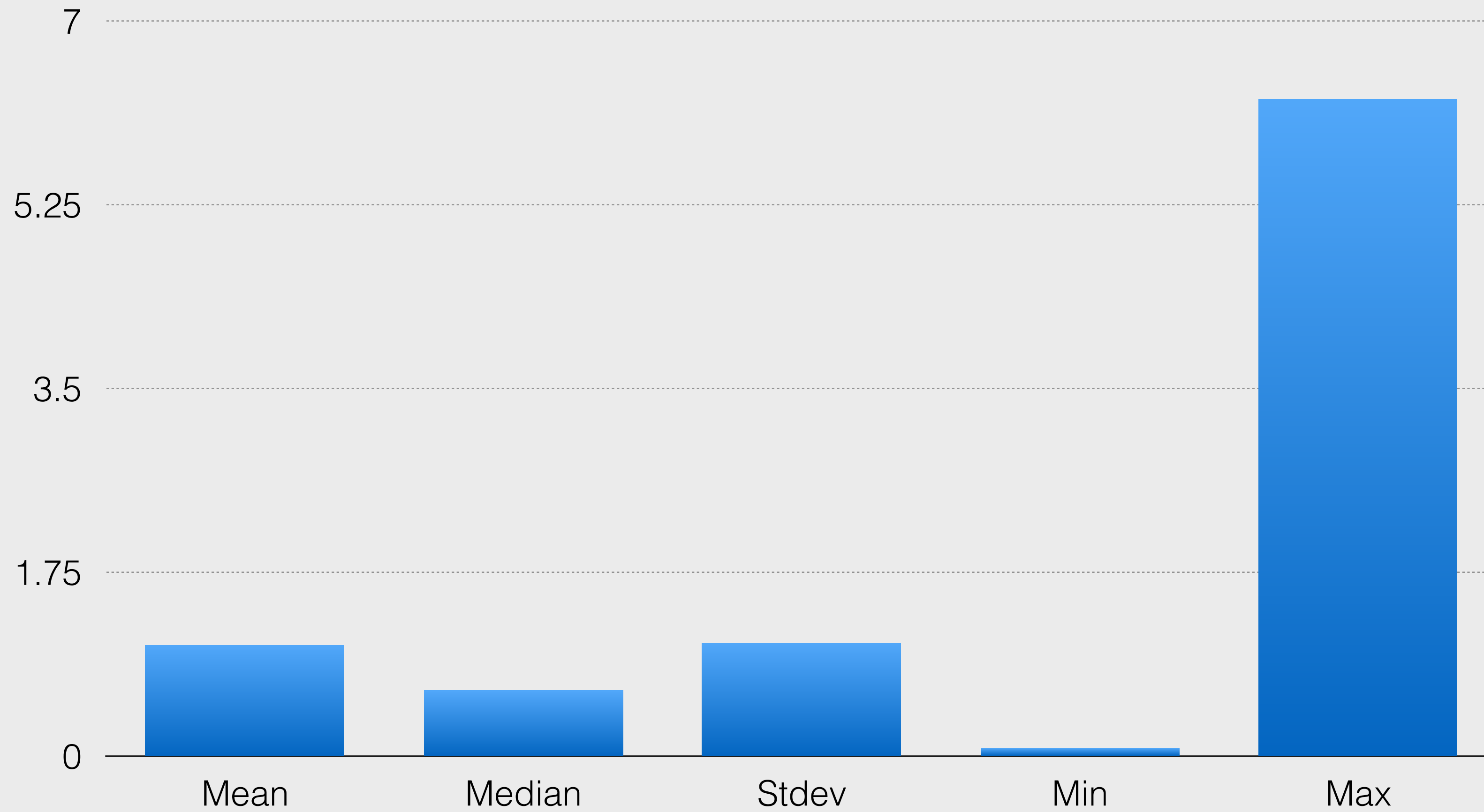
Participant	N	Mean	Median	Stdev	Min	Max	Sum
Fixation Count	10	30.1	28	13.76	15	57	301



Visit Duration

This metric measures the duration of each individual visit within an AOI

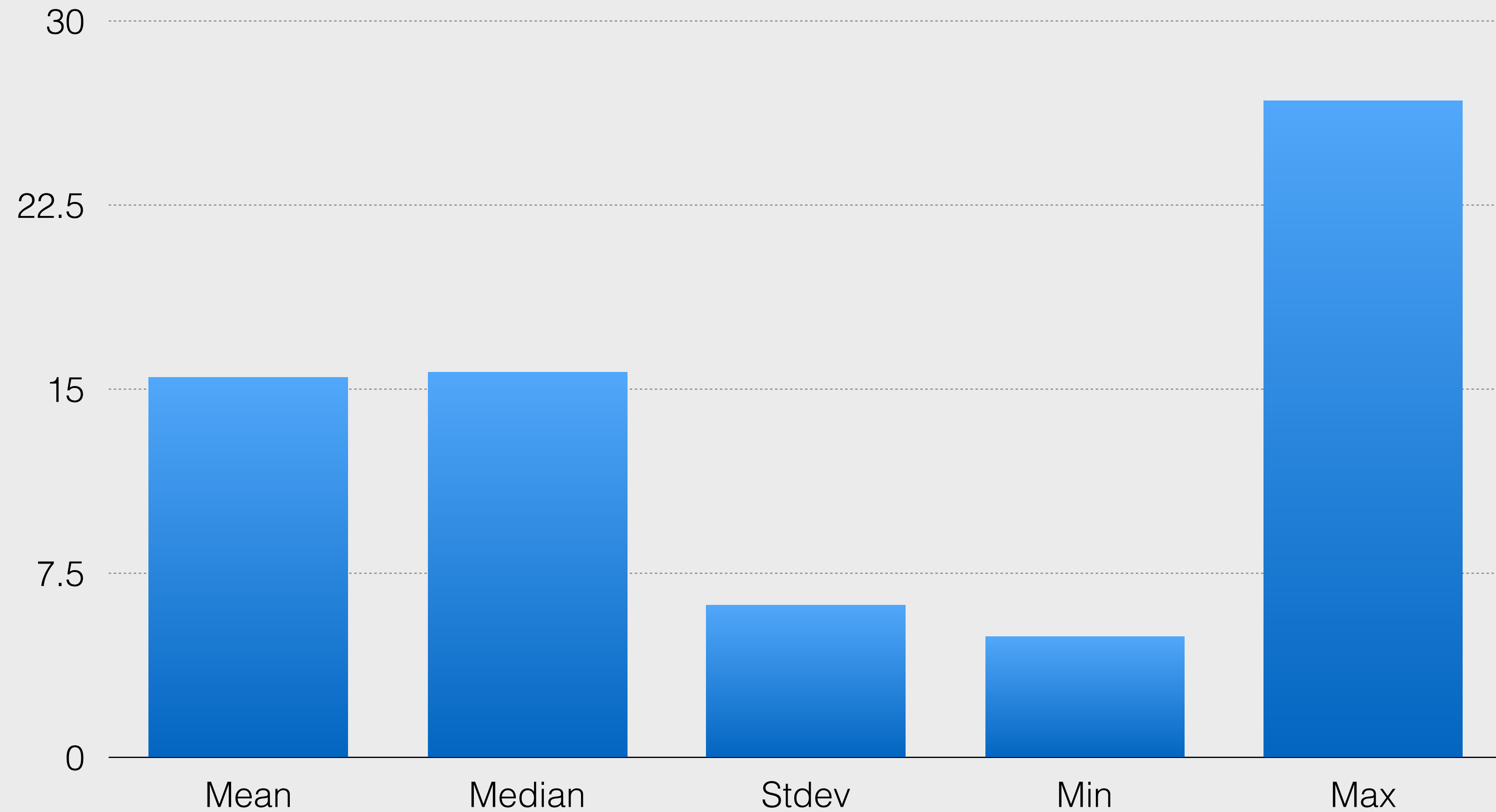
Participant	N	Mean	Median	Stdev	Min	Max	Sum
Visit Duration	147	1.05	0.62	1.07	0.07	6.25	154.71



Total Visit Duration

This metric measures the duration of all visits within an AOI

Participant	N	Mean	Median	Stdev	Min	Max	Sum
Total Visit Duration	10	15.47	15.65	6.2	4.91	26.72	154.71



Thank you