

# Relation between input method and width

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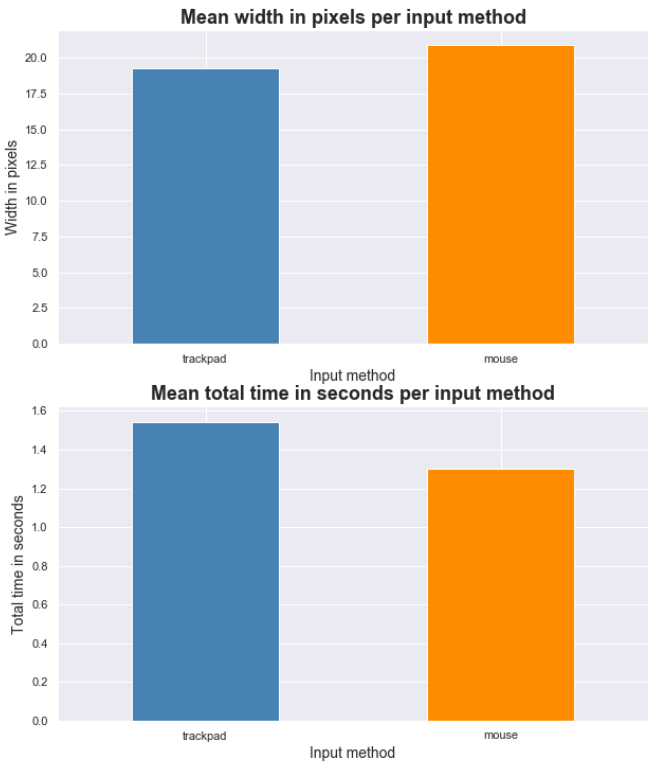
## Introduction

Our world is digitizing faster than ever. Everyone is working online using a computer or laptop. When using your laptop you can either use a mouse or a trackpad. In this research we will look if the input method influences the width of the path a user takes to go from the origin to a target. We will also look if the radius of the target influences the width of the path. Next to that we will also look at the time of the path. In this research we will answer these questions. This research is conducted with TU/e students.

## Methods

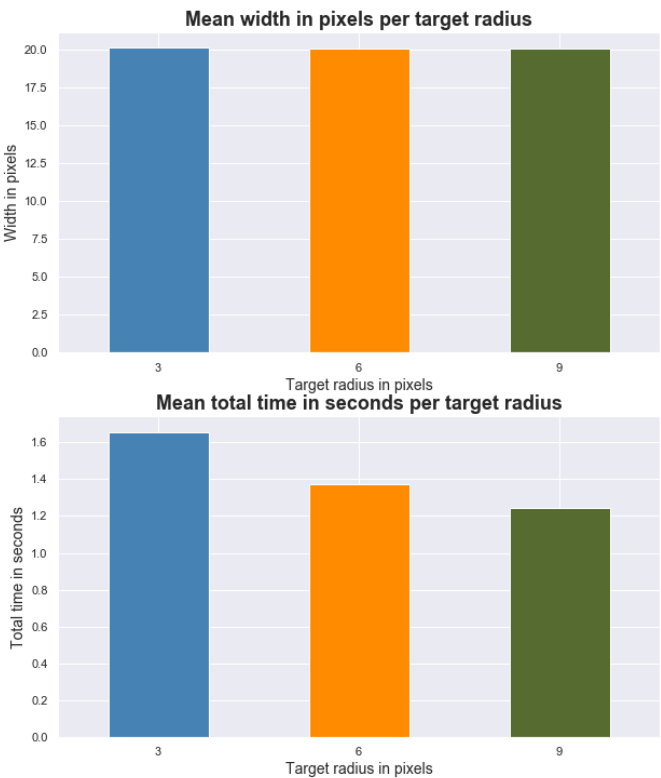
To provide the answer to the relation between the input method and the width of the path, a bar chart is used. A bar chart is also used to provide the answer to the relation between the input method and the total time. To show the relation between the input method, the target radius and the width, a boxplot is used. A boxplot is also used to show the answer to the relation between the input method, the target radius and the total time. To provide the answer to the relation between the width and the target radius, a bar chart is used. A bar chart is also used to provide the answer to the relation between the total time and the target radius. I chose these graphics because they suited best to my research questions.

## Results



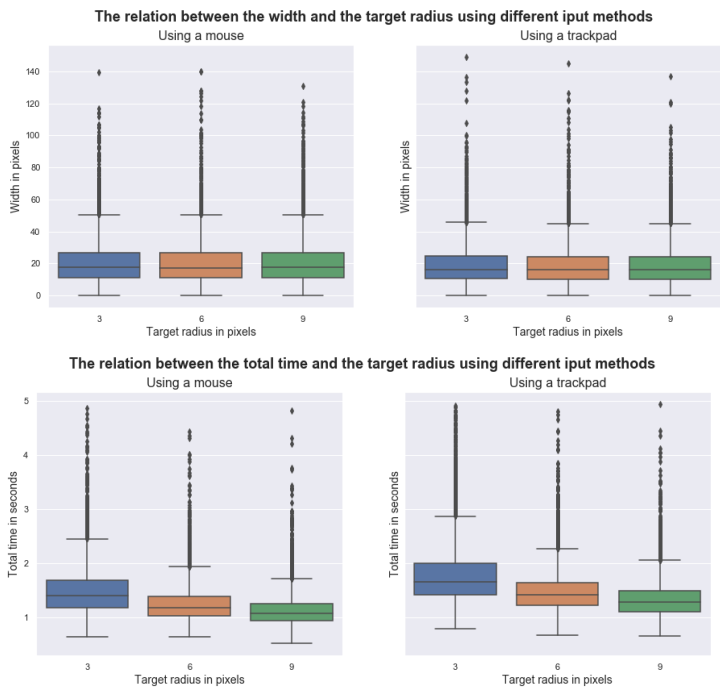
The upper graph shows that the width of the path is smaller when using a trackpad.

The lower graph shows that the total time is less when using the mouse.



The upper graph shows that the width doesn't change when the target radius gets bigger.

The lower graph shows that the total time gets less, when the target radius gets bigger.



The upper graph shows that the target radius and the input method don't influence the width of the path. The lower graph shows that the target radius and the input method do influence the total time. The total time is less when using the mouse. In general, when the target radius is bigger the total time is smaller.

## Discussion

The width doesn't change because of the fine motion skills of the user, when using a trackpad or a mouse.

The total time does change when a different input method is used. People who use a trackpad in everyday life are more likely just as fast with the mouse as people who use the mouse in everyday life. People who use the mouse in everyday life are more likely slower when using a trackpad.

## Conclusion

From the results we can conclude that the input method did influence the width of the path a little bit, seen in bar chart. When a trackpad is used the mean width is smaller than when a mouse is used. In the boxplot we can see that the target radius doesn't influence the width. When the target radius gets bigger, the width stays the same. We can also conclude that the input method did influence the total time of the path, seen in the bar chart. When a mouse is used the total time is less. This we can also see in the boxplot. In the boxplot we can also see that the target radius influences the total time. When the target radius gets bigger, the total time gets smaller.