

Settlers of Catan

A study on winning strategies in Catan

Question & Hypothesis

1. Which resource-related attributes or actions contribute to the most points gained for a player?

Hypothesis: Individual production of resources should be the most important thing in order to gain the most points. Being self-sufficient pays well as there's no need to rely on other players for resources.

2. How important is controlling a harbor in the early game? Does it lead to more points/victory?

Hypothesis: Individual production of resources should be the most important thing in order to gain the most points. Being self-sufficient pays well as there's no need to rely on other players for resources.

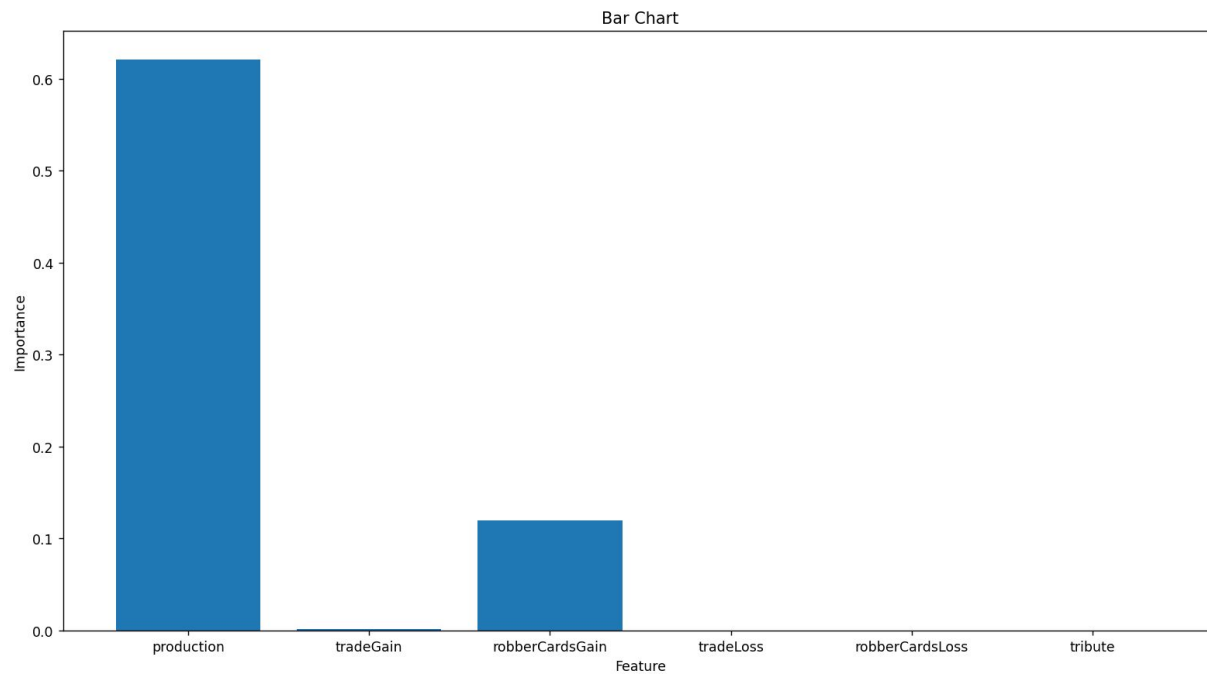
3. How important is resource diversity in the early game?

Hypothesis: Individual production of resources should be the most important thing in order to gain the most points. Being self-sufficient pays well as there's no need to rely on other players for resources.

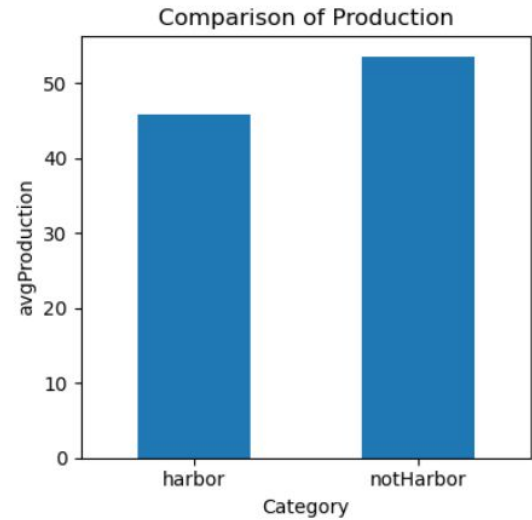
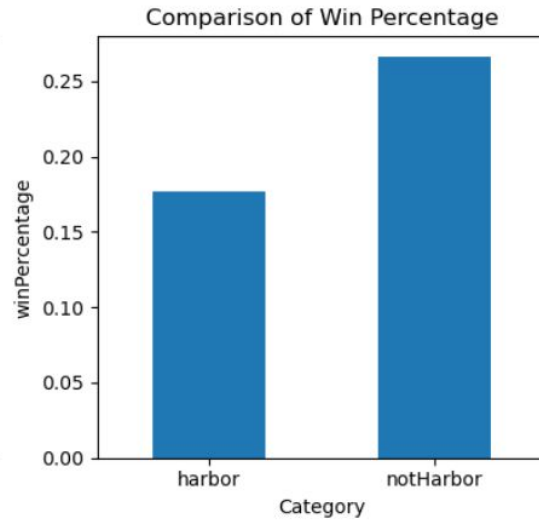
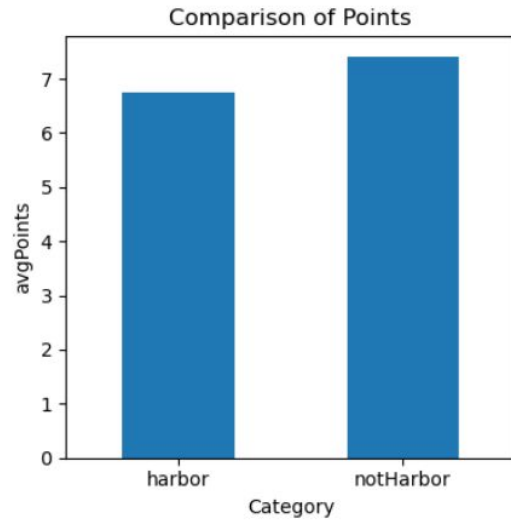
Technical Challenges

1. Some of the data contained invalid values. Those are not included in the analysis
2. The format of 'settlement1' and 'settlement2' are spread out among multiple unnamed columns.

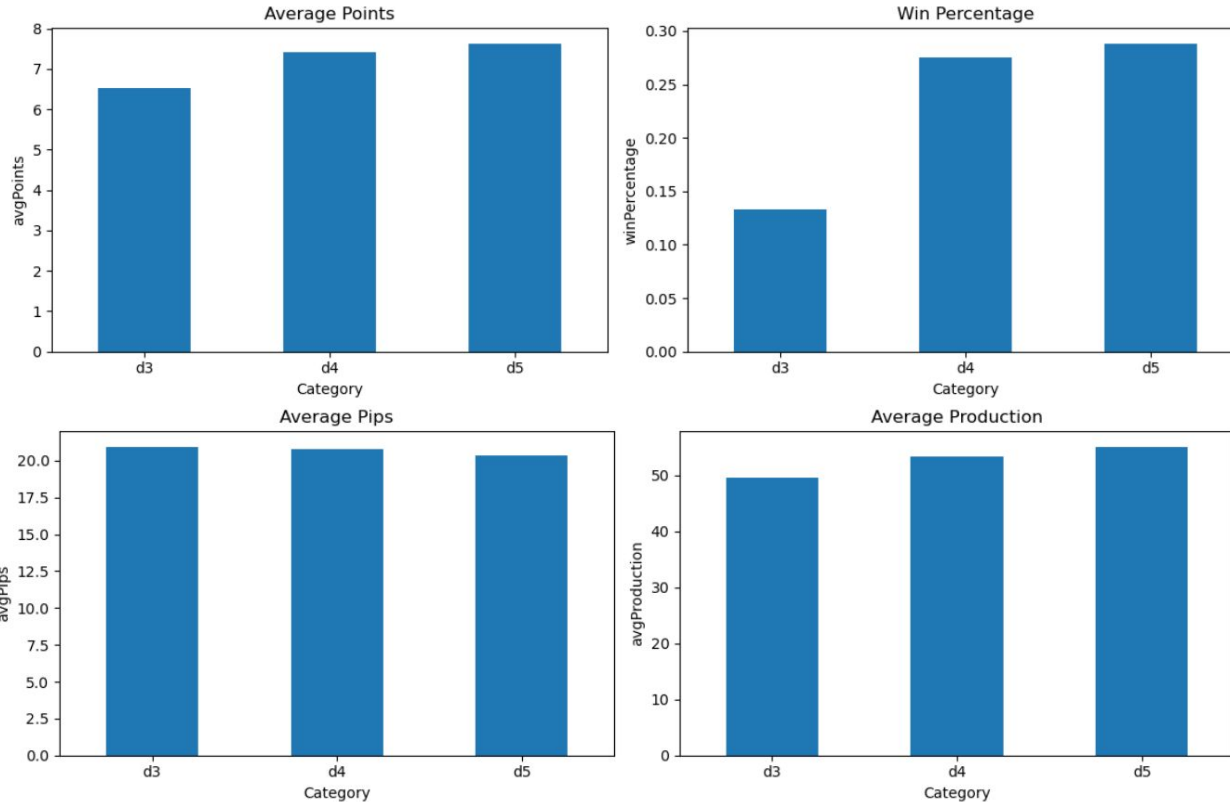
Question 1



Question 2



Question 3



Conclusion

1. Individual production of resource is the most important aspect of resource gaining action that contributes heavily to the amount of points a player received.
2. Early game harbor are not important and leads to significantly less victories.
3. More diversity is preferred but there's not much difference in controlling four unique resource tiles to five unique resource tiles.