

FINAL PROJECT

MODULE 3

Executive Summary



BASIC INCOME DATASET



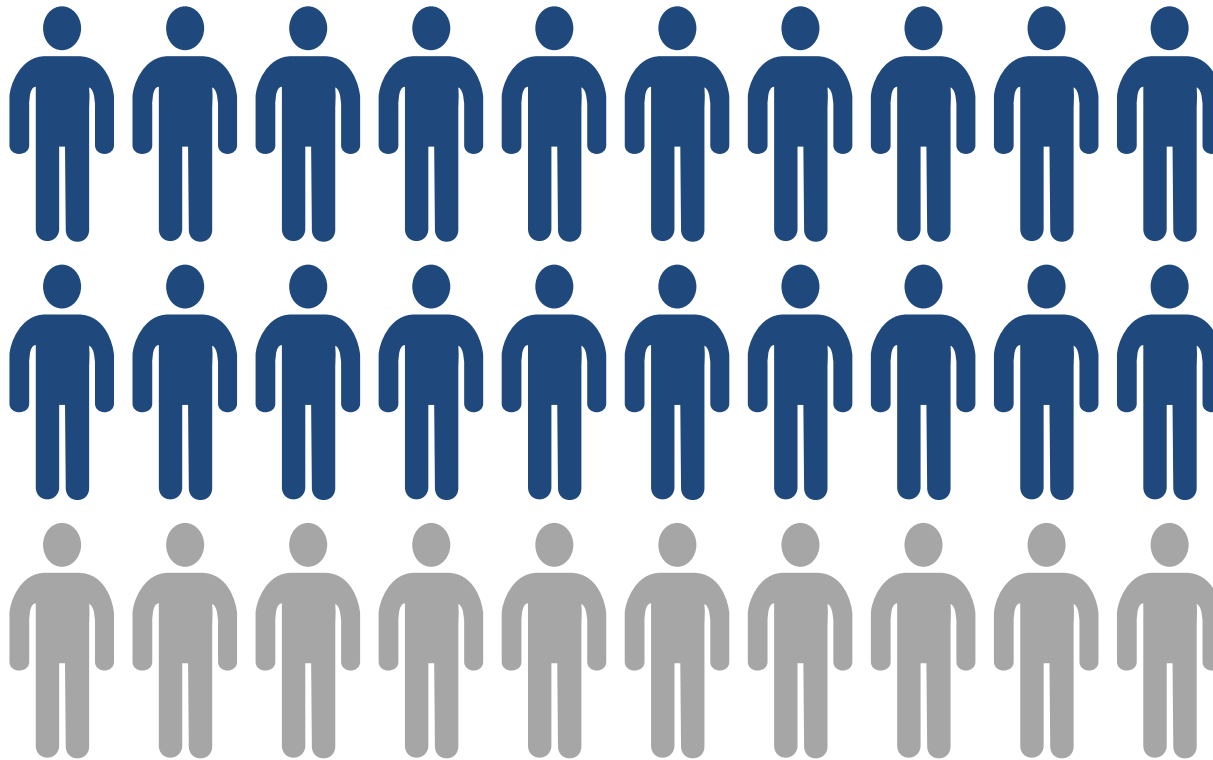
- Representative survey
- By Dalia Research
- Conducted in April 2016
- Across 28 EU member states
- 9,649 records x 15 columns
- With demographics* and opinions**
- Available on [kaggle.com](https://www.kaggle.com)

* age, gender, education, living area (city or rural), having children, having a full time job

** awareness of concept, effect on work choices, convincing arguments for and against



IF THERE WOULD BE A REFERENDUM ON INTRODUCING BASIC INCOME TODAY, HOW WOULD YOU VOTE?



2/3

„I would vote for it“ +
„I would probably vote for it“

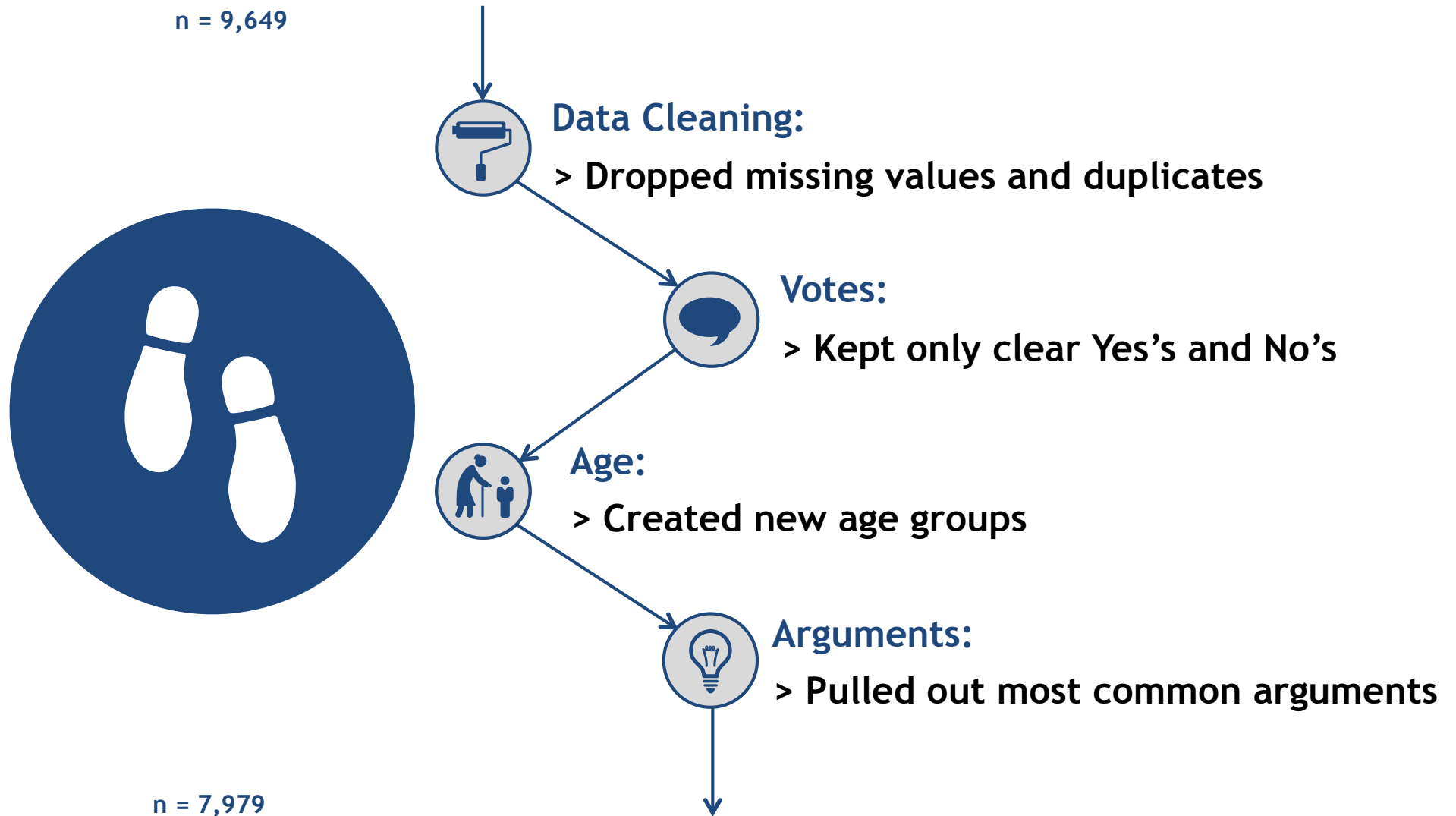


CHALLENGE

Could we possibly predict
whether someone is
for or against
the idea of a basic income?



STEPS OF DATA PREPARATION



DIFFERENT CLASSIFICATION MODELS

>> Similar Accuracy Scores

SVM

Accuracy: 78%

Logistic Regression

Accuracy: 78%

XGBoost

Accuracy: 77%

Tuned Accuracy: 78%



Decision Tree

Accuracy: 68%

Tuned Accuracy: 76%

Random Forest

Accuracy: 75%

Tuned Accuracy: 77%



NEXT: TWEAKING THE SETTINGS

What was done?

The number of predictor variables was reduced by a popular machine learning technique called PCA.

What was the outcome?

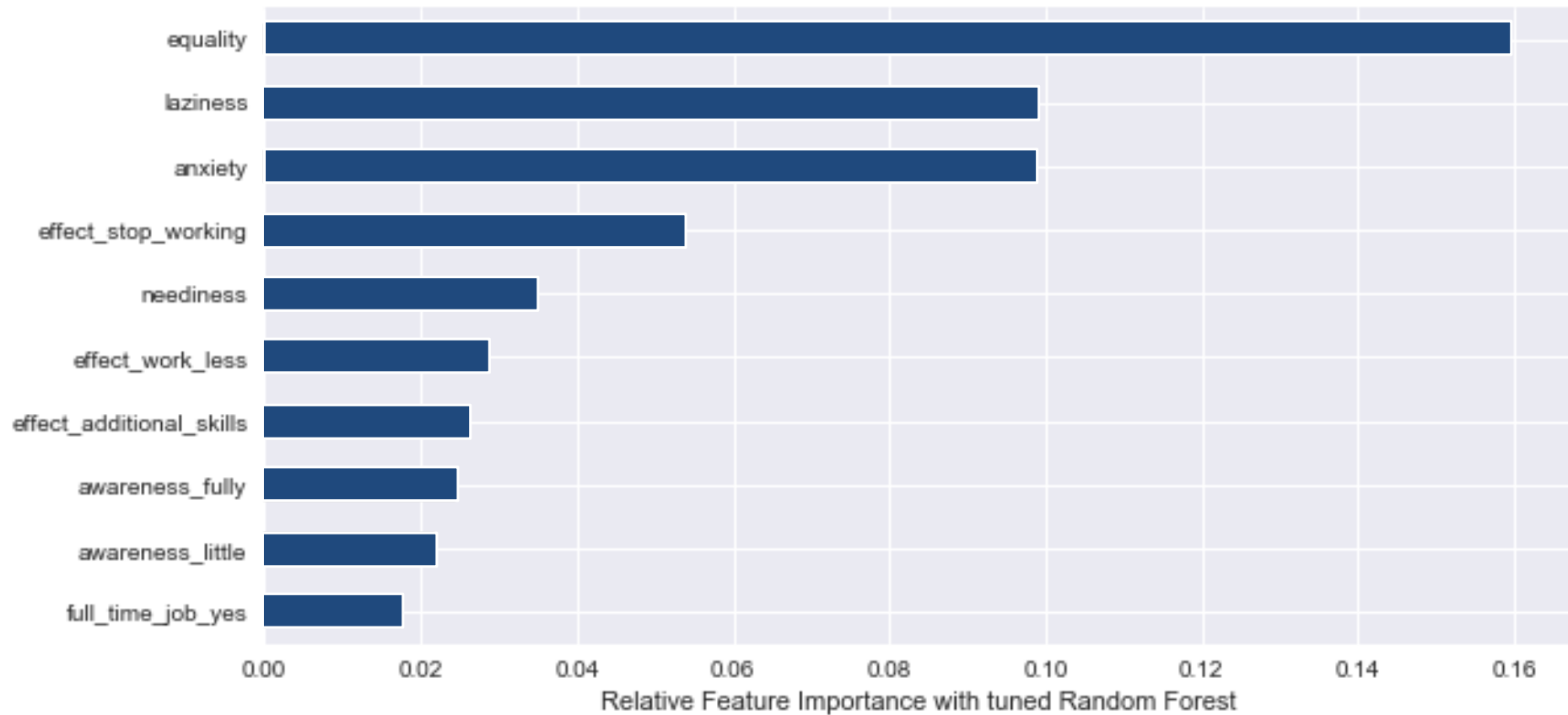
The accuracy got tinily worse - hardly visible.

Will it be applied?

No.



10 IMPORTANT FEATURES FOR PREDICTION



SUMMARY

Could we possibly predict whether someone is
for or against the idea of a basic income?



Yes, we can.

With a „certainty“ of almost 80%.





Thanks for having me!

