

**Vanguard<sup>®</sup>**

# Digital Pathway: Reinventing **Vanguard's** User Journey

DEIMANTE PIRAITYTE

# Data

**Digital Challenge:** Vanguard aim was to enhance user experience through a modern UI and timely in-context prompts, to test whether these adjustments would boost client engagement.

**Information:** Analysis were done using 3 datasets containing times of user's activity online, during various steps of the process.

**Preparation:** To ensure precision:

- Missing values were addressed
- Column names refined
- Various hypotheses tested to attain statistical clarity

# EDA of a primary user

**46**

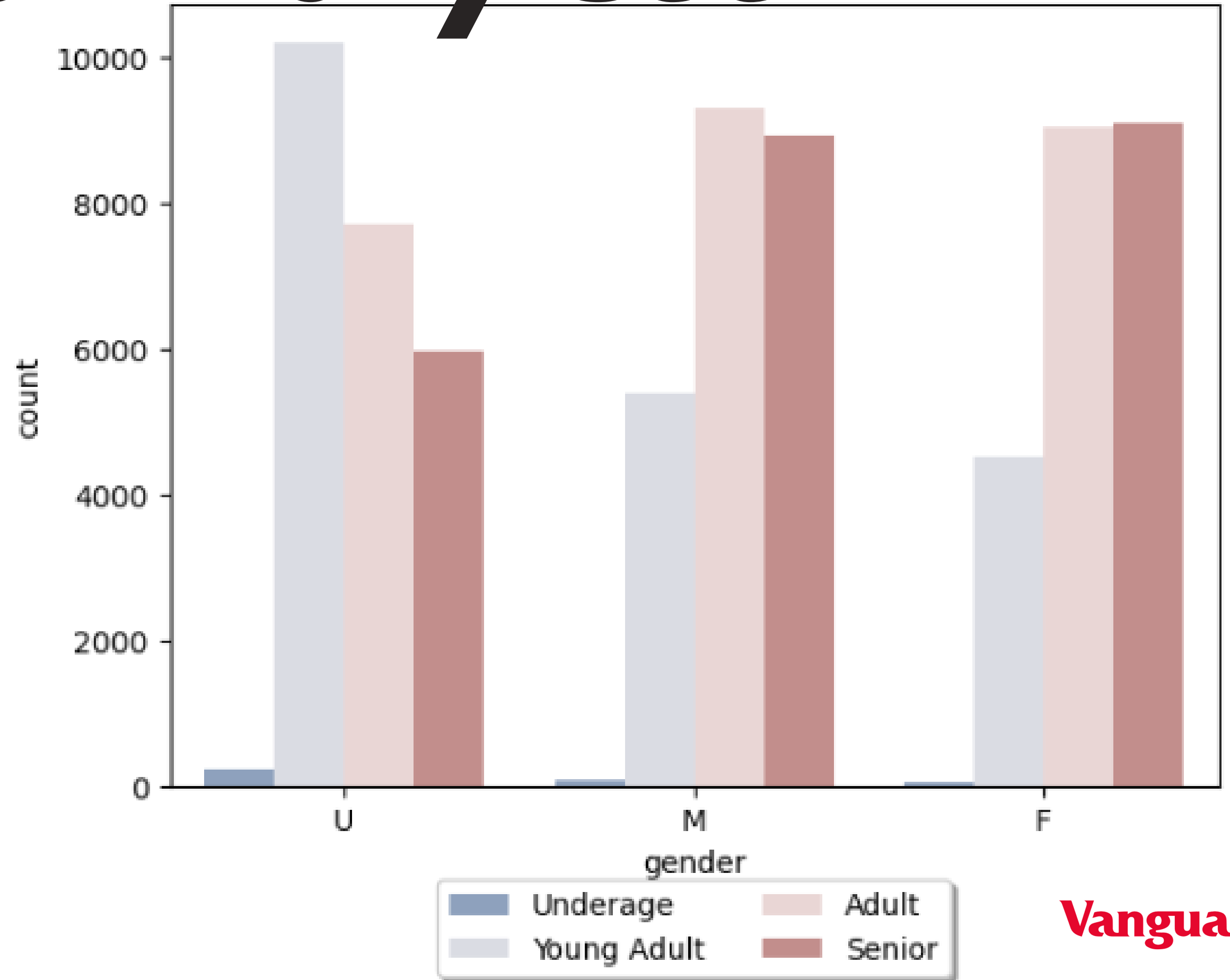
Average client age

**34%**

Female/Male user

**>10**

Registered over 10 years



# EDA: balance overview

**66%**

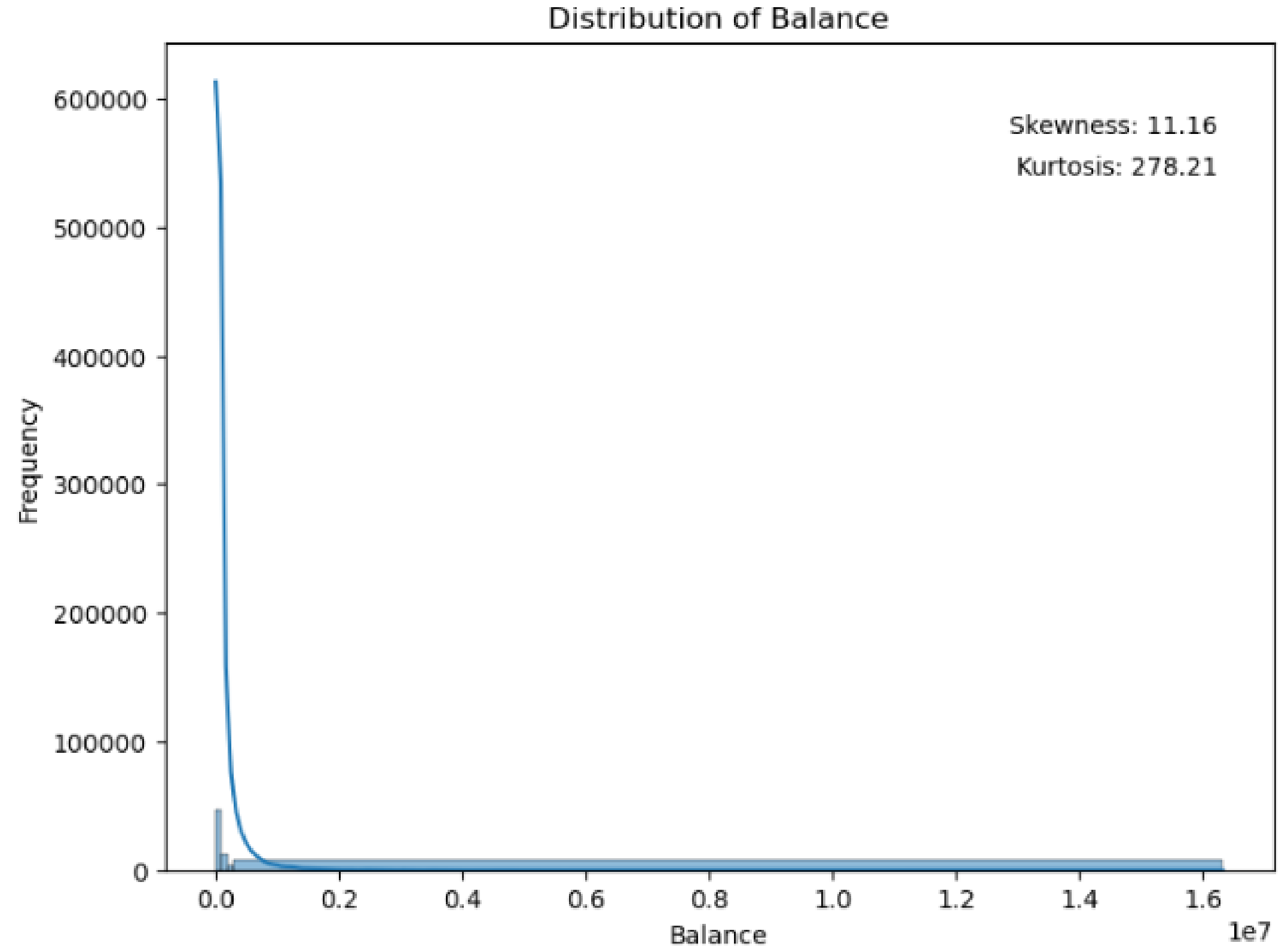
Clients have less than 100k  
balance

**11.16**

Right skewed distribution

**278,2**

Kurtosis showing a lot of outliers



# Performance Metrics

KPI:

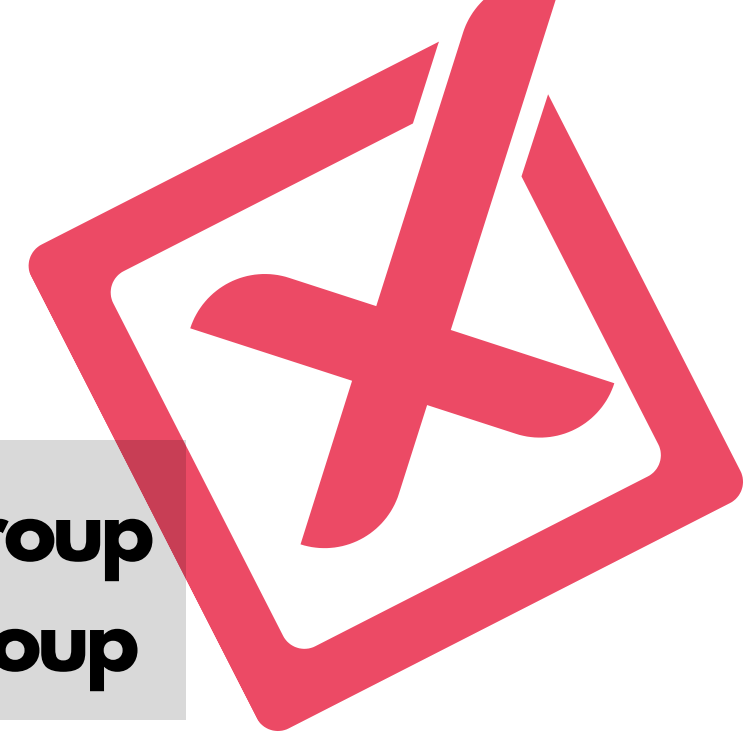
Control      Test

Completion rate  
Time spent on each step  
Error rates:

	66%	69%
	00:01:21	00:01:22
Step 1	38%	41%
Step 2	33%	32%
Step 3	29%	27%

# Hypothesis Testing

- **HO** : completion rate of a test group == completion rate of a control group
- **HA** : completion rate of a test group != completion rate of a control group



Significance level :  
**0.05**

**Z-statistic**

**Z-statistic = -8.875;**  
**p = 0.000**

**Chi2**

**137732.672**  
**0.0**

**Z-statistic:** A negative value indicates that the proportion in the Test group is lower than in the Control group.

**P-value:** The p-value being extremely low (close to zero) indicates strong evidence against the null hypothesis,

**Chi-square test:** shows there is a significant association.

**HO :** The completion rate for the Test group  $\leq$  Control group increased by 5%

**HA :** The completion rate for the Test group  $>$  Control group increased by 5%



**Z-statistic**

**Z-statistic = -3.167;**

**p = 0.999**



**Significance level :**

**0.05**

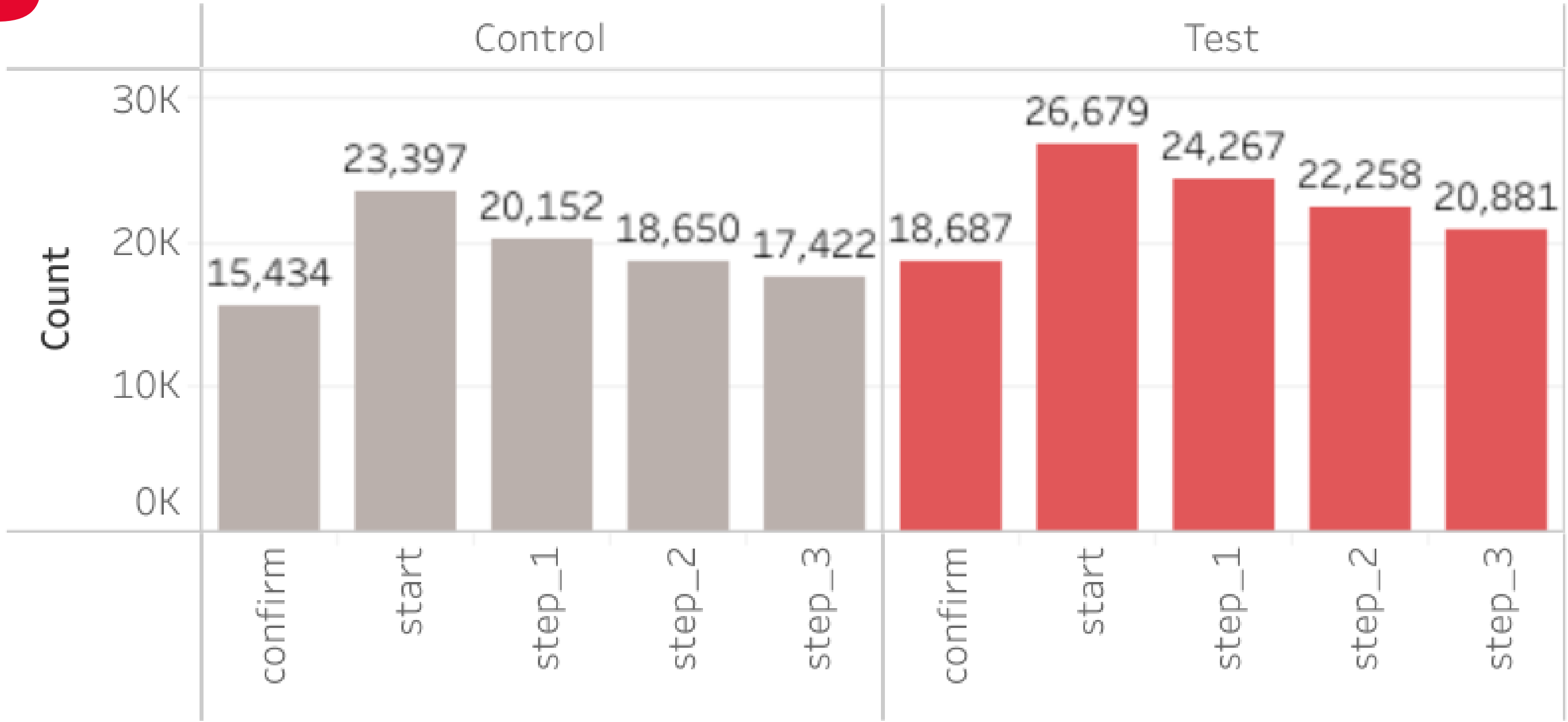
**Z-statistic:** Not enough evidence to support H0 hypothesis.

**P-value:** Since it is higher we cant reject hypothesis.

# Tableau



A/B : Step Rate



A/B : Completion Rate





# Project Summary

## Challenge:

**Experience and general knowledge of statistical testing.**

## Verdict:

**No significant difference with new interface**

## Recommendation :

**To gain deeper insights into the factors contributing to error rates**

**Thank you**