Transforming User Experience

A/B Test Results

Problem Statement

Current Challenge:

Low completion rates and high user frustration with the traditional online process.

Goal:

Assess whether a redesigned, intuitive user interface (UI) with in-context prompts improves user experience, engagement, and completion rates.
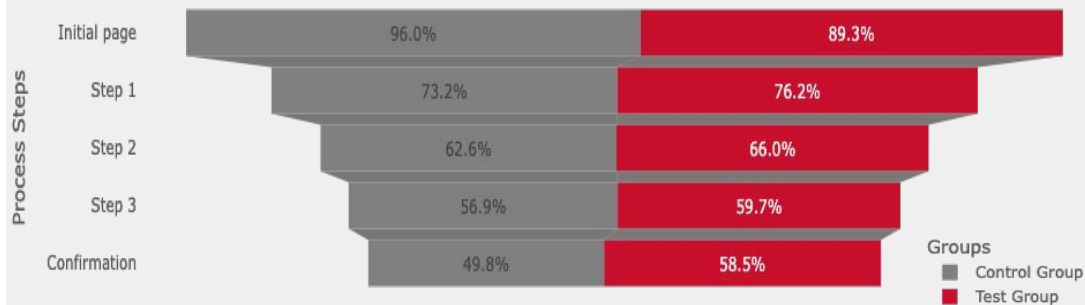
New Design Enhancements:

❏ Modernized Interface: Simplified navigation and clean design.
❏ Contextual Prompts: Timely cues, messages, and hints guide users through tasks.
❏ Expected Outcomes: Faster task completion, deeper engagement, and higher satisfaction.
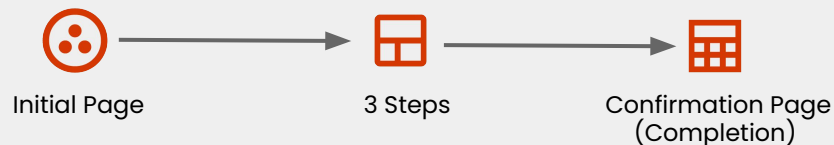
A/B Test Overview

Study Design

❏ **Timeline:**
March 15, 2017 – June 20, 2017

❏ **Groups:**
- Control Group: Traditional online process
- Test Group: Redesigned UI

❏ **Raw Data Sources:**
- Client Profiles: Demographics, age, gender, account details.
- Digital Footprints: Online activity (consolidated tracking).
- Experiment Roster: Participant list for A/B testing.

❏ *Dataset Cleaned and Combined*:
Key features include client demographics, activity logs, process steps, and engagement metrics.

Process Steps Funnel Chart

Process Steps	Control Group	Test Group
Initial page	96.0%	89.3%
Step 1	73.2%	76.2%
Step 2	62.6%	66.0%
Step 3	56.9%	59.7%
Confirmation	49.8%	58.5%

Groups
- ■ Control Group
- ■ Test Group

Process Flow

Initial Page → 3 Steps → Confirmation Page (Completion)

48,51
Avg Client Age

2,26
Avg No. of Accounts

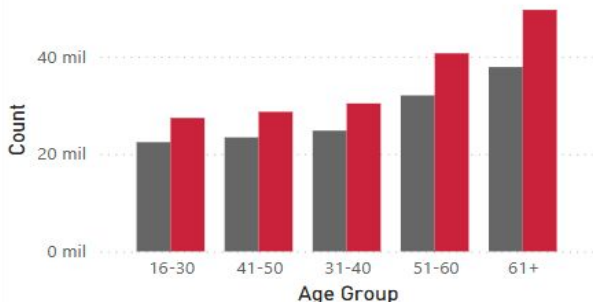# 160,75
Avg Balance

12,17
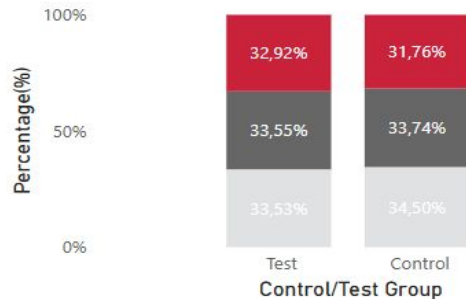Avg Tenure(yrs)

6,27
Avg Logons(6m)

3,23
Avg Calls(6m)

Age Group Distribution by Control/Test
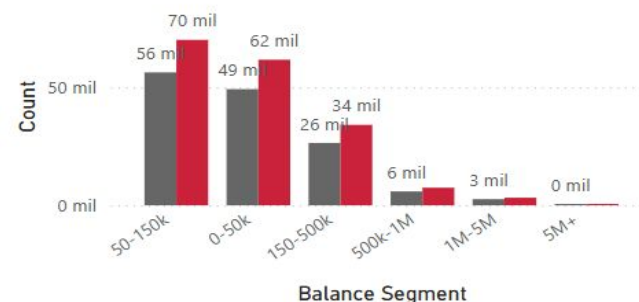
Group ● Control ● Test

Gender Distribution by Control/Test

Gender ○ U ● M ● F

	Test	Control
F	32,92%	31,76%
M	33,55%	33,74%
U	33,53%	34,50%

Balance Segment Distribution by Control/Test

Group ● Control ● Test

Values shown: 56 mil, 70 mil, 49 mil, 62 mil, 26 mil, 34 mil, 6 mil, 3 mil, 0 mil

Balance Segment: 50-150k, 0-50k, 150-500k, 500k-1M, 1M-5M, 5M+

Tenure in Years by Control/Test

● tenure (yrs)

Test vs Control Frequencies by Process Step.

Group ● Control ● Test

Process Step	Control	Test
0_start	45 mil	56 mil
1_step	30 mil	39 mil
2_step	26 mil	31 mil
3_step	23 mil	26 mil
4_confirm	17 mil	26 mil

Vanguard
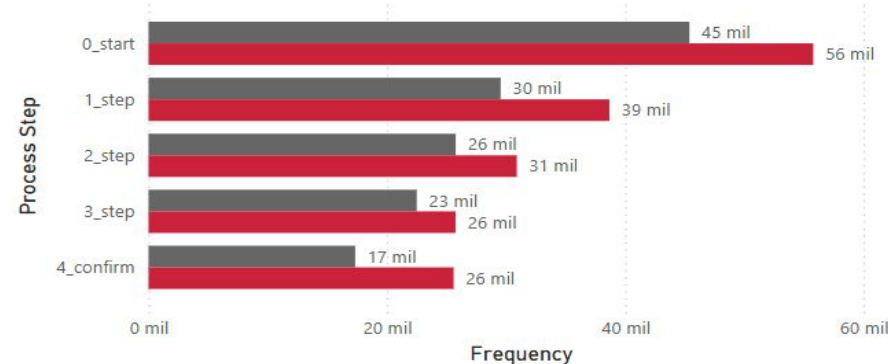
Why These KPIs Matter

A/B Test results for major KPIs

Completion Rate(%): Control 50, Test 59
Time Spent on Each Step(secs): Control 97, Test 93
Error Rate(%): Control 19, Test 24
Drop-Off Rates(%): Control 32, Test 30

Legend: Control, Test

X-axis: Value (%) — 0, 25, 50, 75, 100
Y-axis: KPI
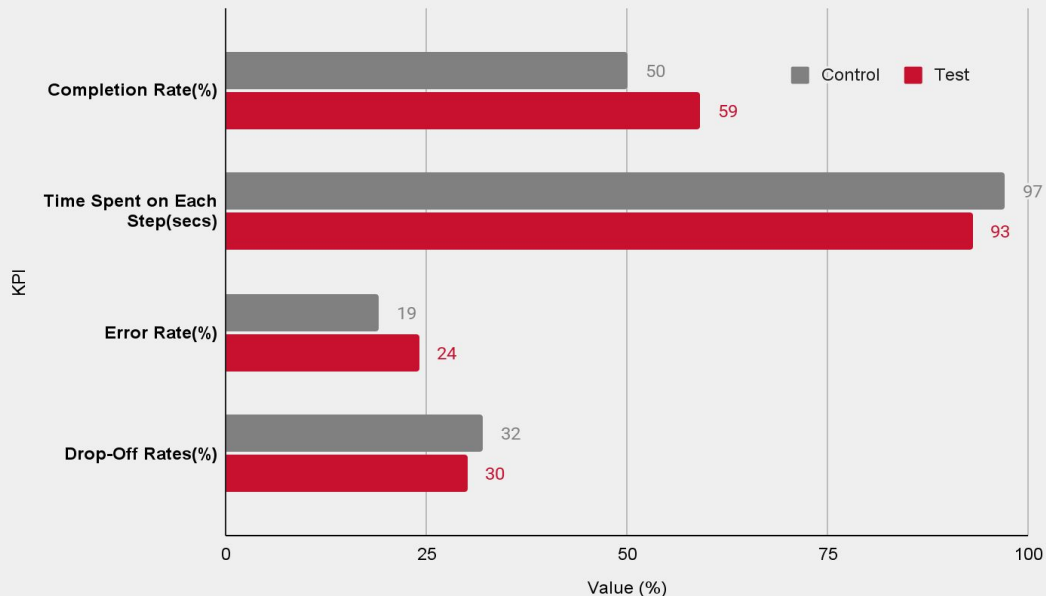
Completion Rate
Proportion of users reaching the confirmation page.

Time spent
Average duration at each step.

Error Rate
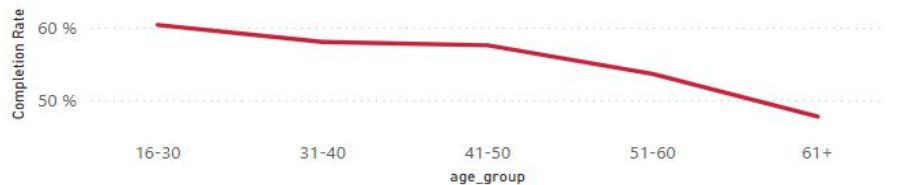Frequency of users reverting to earlier steps.

Drop-off Rates
Percentage of users leaving the process at each step.

54,45 ...
Completion Rate

45,55
Drop-off Rate

301,80
Avg Session Duration (seconds)

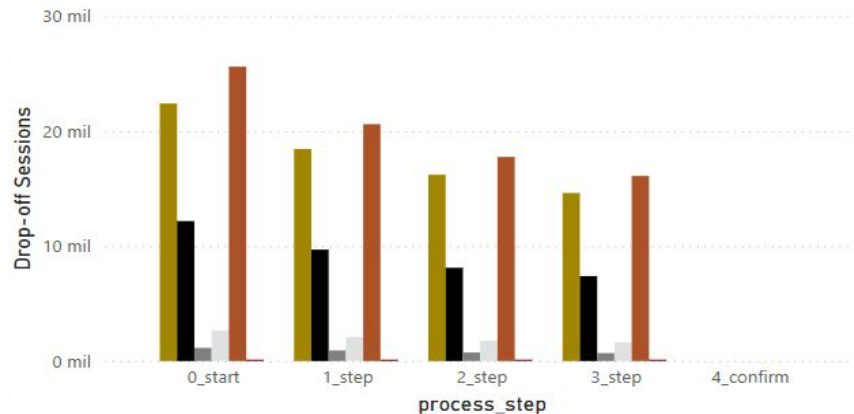## Completion Rate por age_group

Completion Rate por test_control y balance_segment

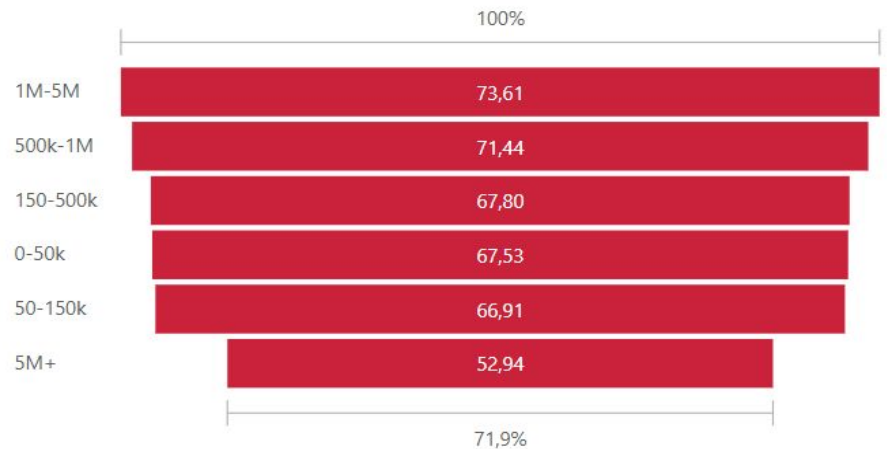balance_segment ● 0-50k ● 150-500k ● 1M-5M ● 500k-1M ● 50-150k ● 5M+

Drop-off Sessions por process_step y balance_segment
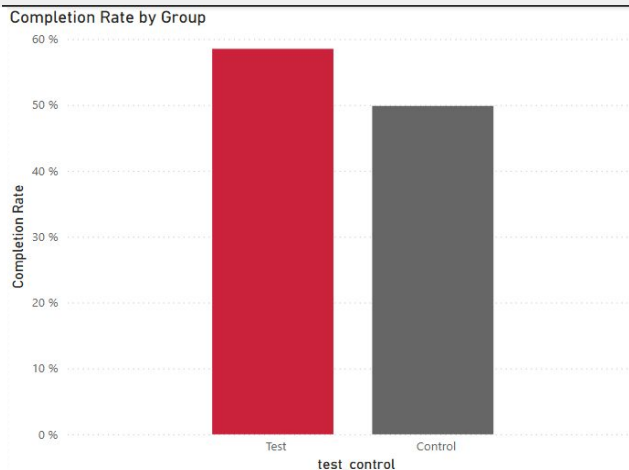
balance_segment ● 0-50k ● 150-500k ● 1M-5M ● 500k-1M ● 50-150k ● 5M+

Completion Rate by Segment por balance_segment

Segment	100%
1M-5M	73,61
500k-1M	71,44
150-500k	67,80
0-50k	67,53
50-150k	66,91
5M+	52,94

71,9%

Hypothesis testing

H1: Completion Rate by Group

Completion Rate by Group

P-Value		P-Value (Threshold)
0,00	VS	0,00
22,86		9,67
Z-Statistic		Z-Statistic (Threshold)

H2: Balance Segment by Group

Balance segment by Group

t-Statistic		P-Value balance
2,88	VS	0,0039...
-3,78		0,9999...
t-Statistic (Threshold)		P-Value (ThresholdB)

Vanguard

Thank you!