

Project Plan Outline for A/B Testing to Enhance Consumer Experience on Finacle by Infosys

Introduction

- Briefly introduce the Finacle platform and the significance of enhancing the consumer experience.
- Outline the key KPIs you aim to improve: engagement and satisfaction scores.

Objectives

1. To address user complaints regarding automated customer support.
2. To improve dashboard design and response times.
3. To optimize security protocols to enhance user trust and safety.

KPIs to Monitor

1. Customer satisfaction score (CSAT)
2. User engagement metrics (time spent on the platform, number of interactions, etc.)
3. Security incidents reported
4. Response times for customer support and dashboard functionalities

Timeline

- Phase 1: Planning (Week 1)
- Phase 2: Development and Pre-Test (Weeks 2-4)
- Phase 3: A/B Testing (Weeks 5-8)
- Phase 4: Analysis and Implementation (Weeks 9-10)
- Phase 5: Monitoring and Feedback (Weeks 11-12)

Phase 1: Planning

1. Team formation and roles
2. Set baseline metrics for KPIs
3. Choose A/B testing tools and software

Phase 2: Development and Pre-Test

1. Create alternative solutions (Version A and Version B) for the automated customer support system.
2. Develop alternative dashboard designs.
3. Plan for security protocol changes.

Phase 3: A/B Testing

1. Roll out Version A to a selected group of users.
2. Roll out Version B to a different selected group of users.
3. Monitor real-time data and ensure everything is recorded properly.

Phase 4: Analysis and Implementation

1. Analyze the results of the A/B tests.
2. Decide which versions to implement based on KPI improvement.
3. Implement the winning versions.

Phase 5: Monitoring and Feedback

1. Monitor KPIs to ensure that they have improved as expected.
2. Open channels for user feedback for further iterations.
3. Make ad-hoc adjustments based on real-time data and user feedback.

Budget and Resources

- Provide an estimate of the budget for the A/B tests.
- List the human and material resources needed.

Risk Assessment

- Outline possible risks, such as negative user feedback, and have contingency plans in place.

Conclusion

- Summarize the project plan and emphasize its importance for improving the user experience on Finacle.

Module 1

Check if Quick summary button is helping the users.

Problem Definition

Problem: Whether the absence of a "Quick Summary View" is limiting user experience and efficiency.

Hypothesis: Introducing a "Quick Summary View" will improve user experience and increase user engagement.

Metrics

Metric	Description
Primary Metric	User engagement rate with the Quick Summary <ul style="list-style-type: none">• click-through rate• time spent on the summary
Secondary Metrics	<ul style="list-style-type: none">• Change in overall dashboard usage time• Customer Satisfaction Score (post-interaction)• Number of help requests or queries related to the account summary• Conversion rate (if the summary leads to other actions like transactions)

Experiment Design

	Control Group (A)	Treatment Group (B)
Users	Users who see the original dashboard without the Quick Summary View	Users who see the dashboard with the Quick Summary View

Sample Size

Term	Definition
Baseline conversion rate	The current rate of the metric you're trying to improve. For instance, if 5 out of 100 users currently engage with a section of the dashboard, your baseline engagement rate is 5%.
Minimum detectable effect (MDE)	The smallest effect size you want to be able to detect. For example, if you want to see at least a 2% improvement in engagement, then your MDE is 2%.
Statistical Power	Typically set at 0.8, this is the probability of detecting an effect if there is one.
Significance Level (alpha)	Typically set at 0.05, this is the probability of detecting an effect that isn't there (false positive).
Sample Size Calculation	Online calculators are available to input these values and get the required sample size.

Duration of the Test

Factors to Consider for Test Duration	Description
User Traffic	If your platform has 1,000 daily active users, and you need 20,000 users for your test, then you'll need to run the test for at least 20 days.
Business Cycle	If there's a weekly pattern (e.g., more usage on weekdays vs. weekends), you'd want the test to run for a full week or multiple weeks to capture the entire cycle.
Seasonality	Avoid running tests during atypical times of the year, such as holidays or special events, unless the test specifically pertains to those periods.

For Finacle for InfoSys

Factor	Description
Sample Size	If you expect a small change (e.g., a 1-2% increase in engagement), you might need a larger sample—maybe tens of thousands or even more users in each group (Control & Treatment).
Duration	With a large user base, you could reach this sample size in a relatively short period, perhaps a couple of weeks. However, for capturing weekly patterns, consider running the test for at least 2-3 weeks.

Execute the Test: Randomly assign users to either the control or treatment group. Ensure that the assignment is indeed random to prevent biased results.

Data Collection :

Collect data on the aforementioned metrics for both groups.

Analysis using Python

Code with Jupyter notebook

Conclusion

Based on the p-value, determine if the "Quick Summary View" had a statistically significant positive impact on user engagement.

Enhancements:

Feedback Mechanism: Allow users to provide feedback on the new feature.

Segment Analysis: Maybe the feature is particularly beneficial for a specific user segment (e.g., business accounts, frequent users).

Iterate: Use feedback and data to improve the feature and perhaps run another A/B test after making refinements.

Reporting

Prepare a detailed report highlighting the setup, findings, statistical significances, and qualitative feedback, if any.

Rollout

If successful, consider rolling out the feature to all users, and

monitor its performance in the live environment.