

# Quarterly Report to Board Management: Q1 2023

## Overview

During the first quarter of 2023, we have tracked several key performance indicators to assess the effectiveness of strategies across different platforms and evaluate the impact of user acquisition campaigns. Below is a summary of findings.

## Key Performance Indicators

### Platform Performance

- Clicks on Live Button: There was a statistically significant difference in the average number of live button clicks per user between control and treatment groups, with control group users clicking more frequently.
- Retention Rates: Live button retention rate was notably higher among users in the control group compared to the treatment group. This suggests that legacy users prefer the older interface, while newer users did not engage as deeply with the redesign.
- Feature Discovery: A higher percentage of users in the treatment group discovered the live button, possibly due to improved visibility in the new layout.
- Ads and Odds Impressions: No significant differences were found in the average or total number of ads and odds impressions per user across the groups, indicating stable performance in these areas across different versions of the app interface.

### User Acquisition Effectiveness

- Paid vs. Organic Users: There is a noticeable difference in retention and activity levels between organic and paid users. Organic users generally show higher engagement and retention, possibly reflecting a more genuine interest or better match with platform's offerings.
- User Acquisition Costs: The cost associated with paid user acquisition remains a concern, as the return on investment, measured through engagement and long-term retention, is not as high as expected.

### Model Performance (Organic vs. Paid Users)

- Model Overview: Developed in HW8, the model uses ML techniques to differentiate between organic and paid users based on their interaction patterns and engagement levels.
- Model Accuracy and Utility: The model has shown promise in accurately classifying users, which could potentially allow for tailored marketing strategies and improved resource allocation.
- Issues and Observations: The model occasionally misclassifies engaged paid users as organic, suggesting that further refinement is needed to enhance its predictive accuracy. Continuous training with updated data sets will be essential.

## Insights and Recommendations

- User Interface: The redesign of the live button, while increasing discovery, did not necessarily enhance user retention, indicating possible issues with its usability or appeal.
- Paid Acquisition: While necessary for rapid scaling, the strategy should be optimized to improve the quality of acquired users, possibly through better targeting and personalization.

## Recommendations

- Enhance User Interface: Based on feedback and data from the treatment group, further iterative testing of the live button interface could help enhance usability and engagement.
- Model Improvement: Continue refining the organic vs. paid user model by incorporating more known data and considering additional features that may influence user classification.

## Future Considerations

- Model Monitoring: Regular monitoring of the model's performance.

## Conclusion

The first quarter of 2023 has provided valuable insights into: - product's interaction with users and - the effectiveness of marketing strategies.

By focusing on data-driven decision-making, continuous improvement of the models, and optimizing user acquisition strategies, user engagement and retention could be enhanced, ensuring growth.