

Synaptix Digital Solutions

USER ENGAGEMENT ANALYSIS

FOR TECH APPLICATION

Project Name: Synapcore

Date: January, 2025

COMPANY INTRODUCTION

Synaptix Digital Solutions offers innovative solutions that propel businesses toward the digital frontier.

With automated processes and advanced analytics, they empower your journey through the digital landscape.



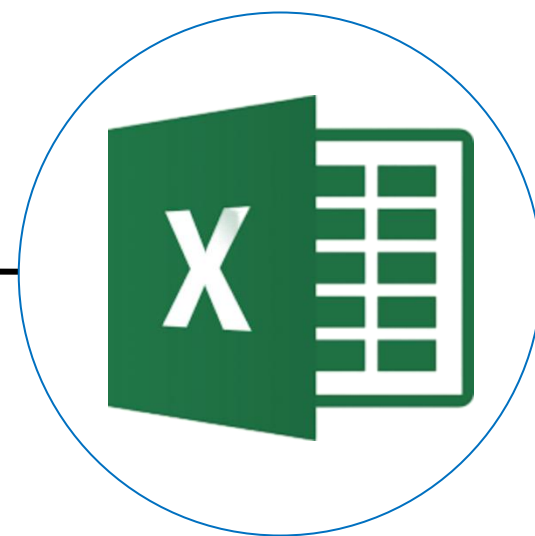
PROJECT OBJECTIVES

- Identify patterns and trends in user engagement data.
- Develop strategies to increase app usage and user retention.
- Use **data-driven insights** to improve user experience.

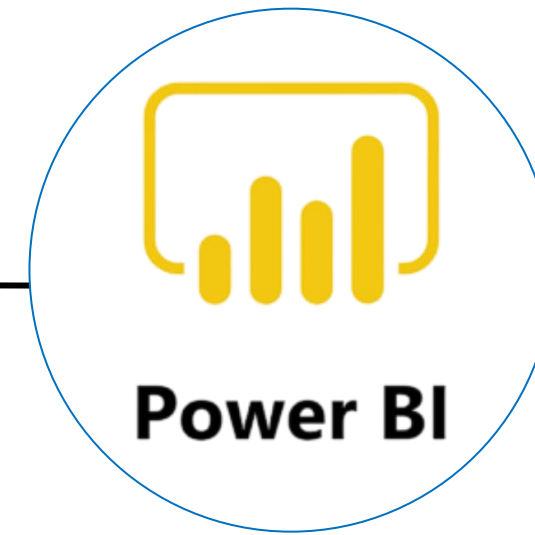
Tools **USED**



– Data
extraction



– Data
cleaning



– DAX
– Dashboard



– Slides
presentation

KEY OBSERVATIONS

The data appears to be clean with:

- No missing values
- Consistent data types
- No negative values where they shouldn't exist
- Reasonable value ranges
- Consistent date formatting
- Clear categorical values
- No duplicate of data
- No blanks



✓  users

- ☐ Σ Age
- ☐ Σ AppUsageHoursPerDay
- ☐ Σ AverageSessionDurationMinutes
- ☐ DeviceType
- ☐ FirstName
- ☐ Gender
- > ☐  LastLoginDate
- ☐ LastName
- ☐ Location
- ☐ Σ NumberOfSessions
- ☐ Σ TotalEngagementScore
- ☐ Σ UserID

DASHBOARD



Synaptix Digital Solution (User Engagement & Device Usage Analysis)

AvgSession/mins

60.9

Total Customer

10,000

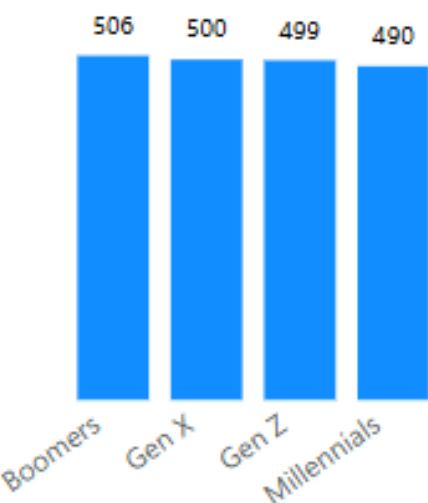
AvgUsageHr/Day

6.1

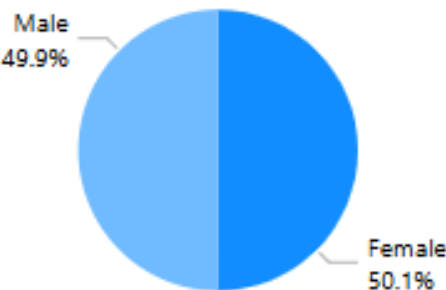
AvgEngagementScore

498.6

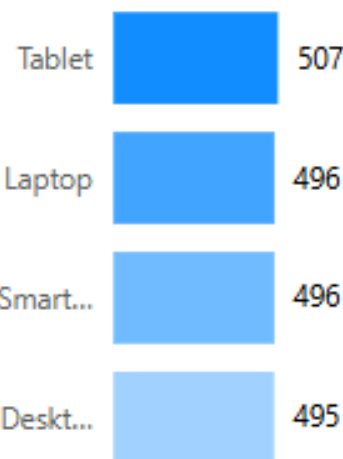
EngagementScoreAvg by AgeGroup



EngagementScoreAvg by Gender



EngagementScoreAvg by DeviceType



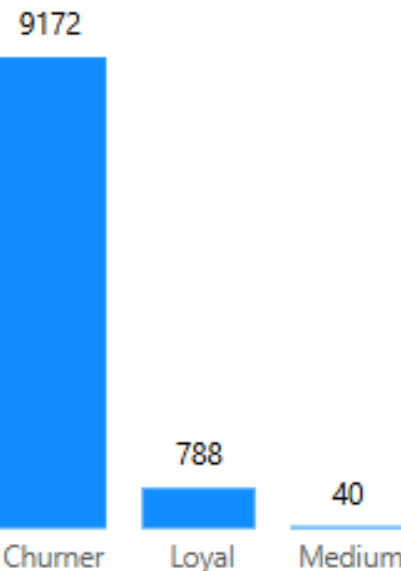
Top 3 Location with Highest Engagement



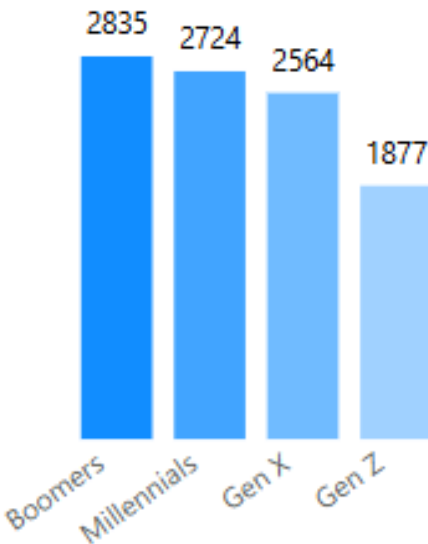
Bottom 3 Location with Lowest Engagement



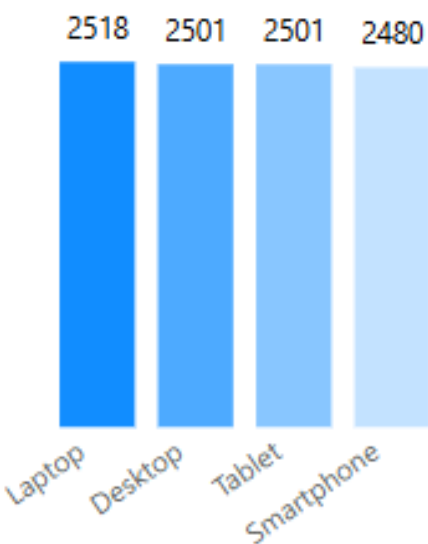
ChurnRisk by Session



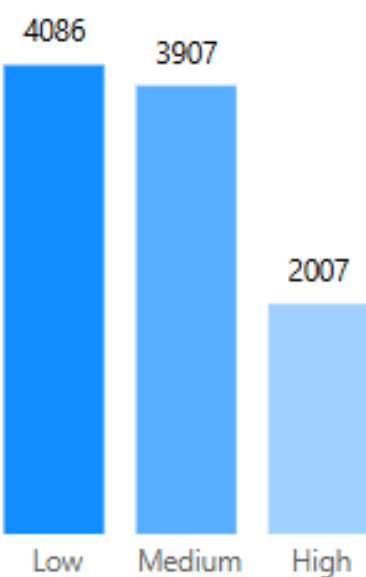
Age Group



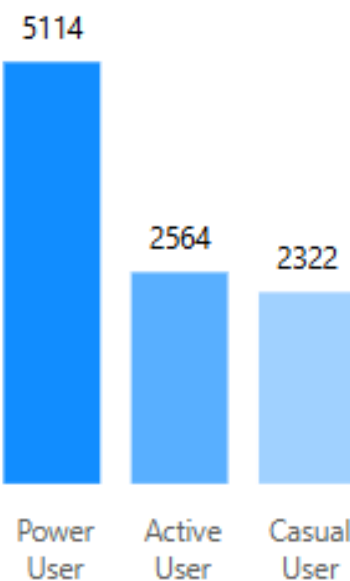
Device Segment



Engagement Segments



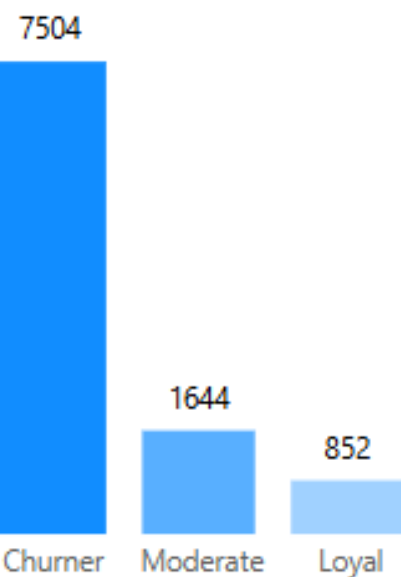
Behavioural Segment



Device vs Engagement Correlation



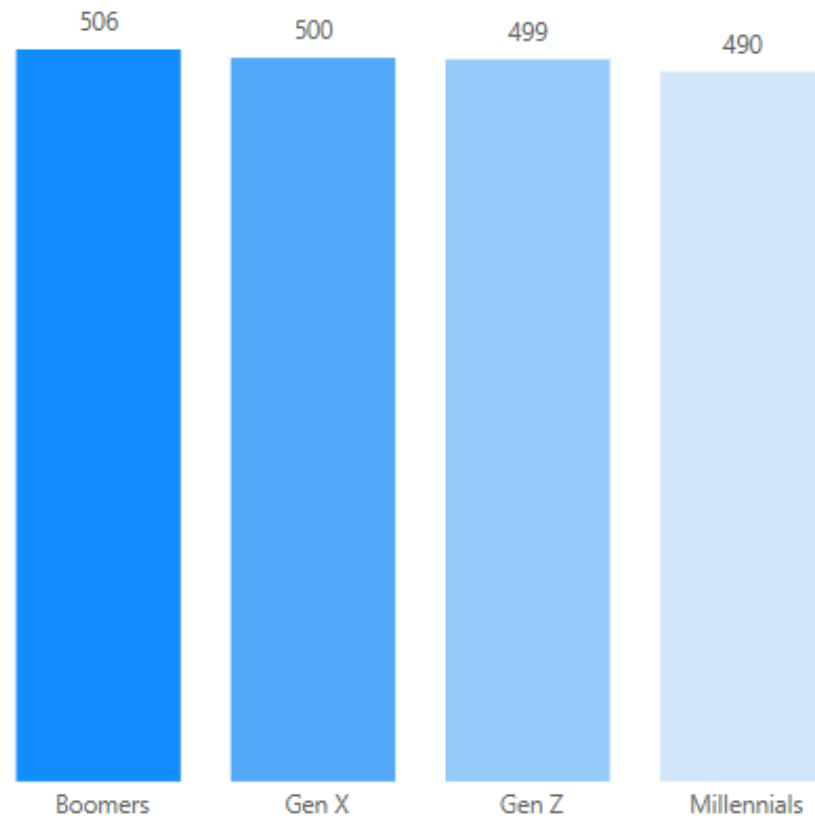
ChurnRisk by LastLoginDate



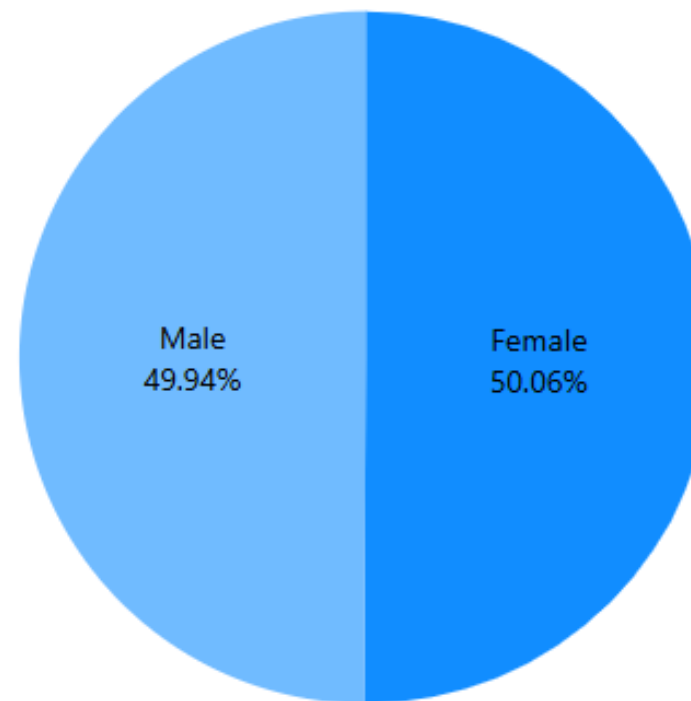
Top-Performing User Segments & Key Characteristics



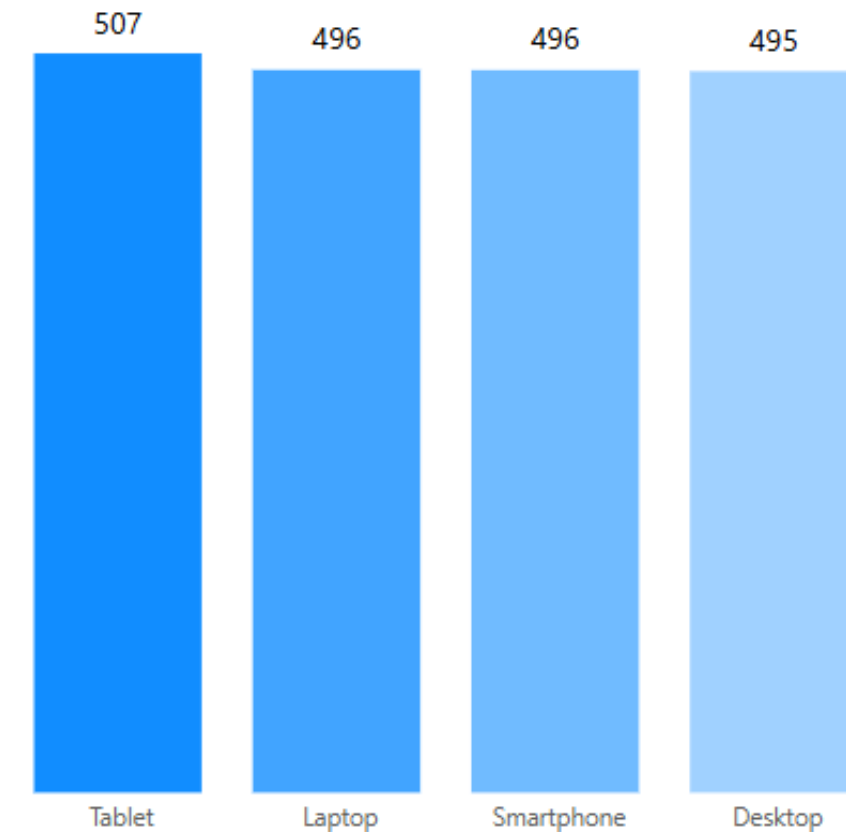
Avg_TotalEngagementScore by AgeGroup



Avg of TotalEngagementScore by Gender



Avg of TotalEngagementScore by DeviceType



The highest engagement scores are most common among the following user segments:

- 1. Boomers (Older Users, Ages 60–75)** – showed the highest engagement.
- 2. Females slightly engaged more** – Females had slightly higher engagement than males.
- 3. Device type matters** – Tablet users exhibited the highest engagement scores.

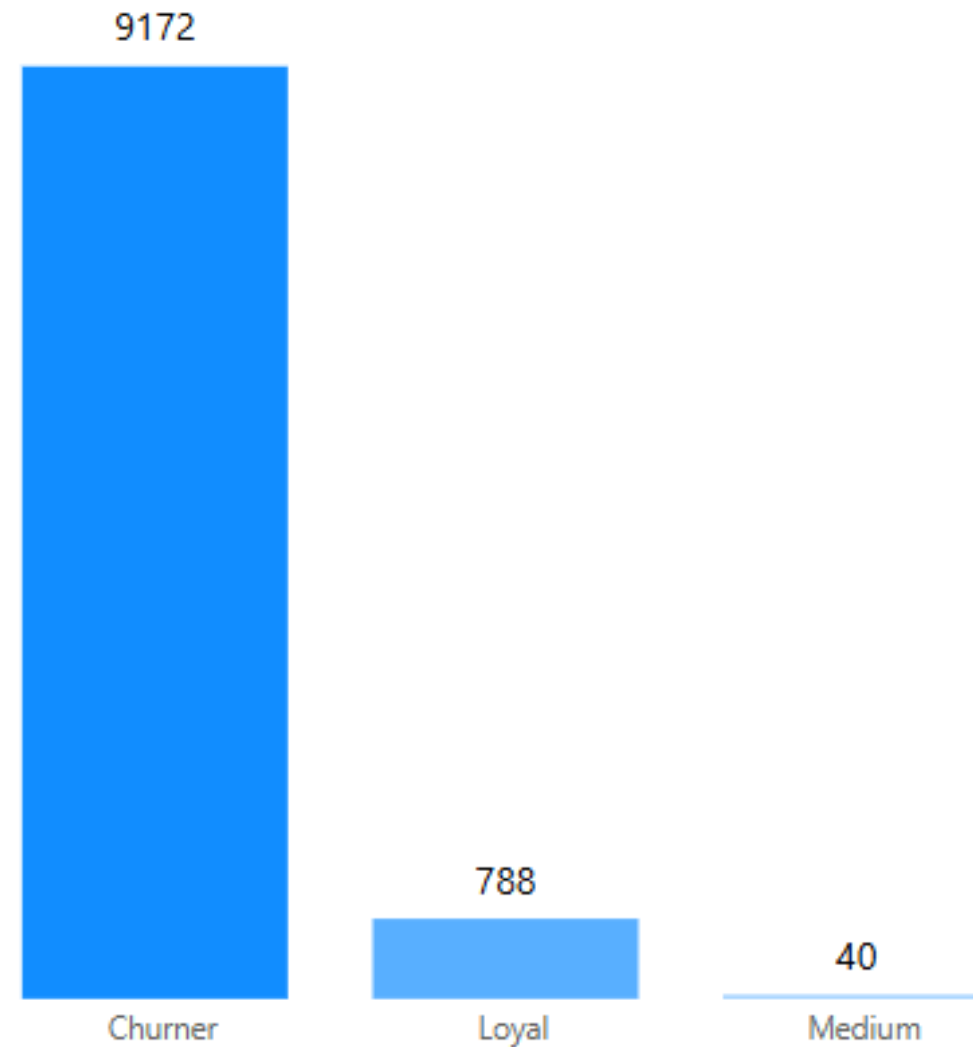
Common Characteristic: Both user characteristics (age and gender) and technological interaction preferences appear to be influencing engagement.

Female Boomers using **tablets** had the highest engagement rates.

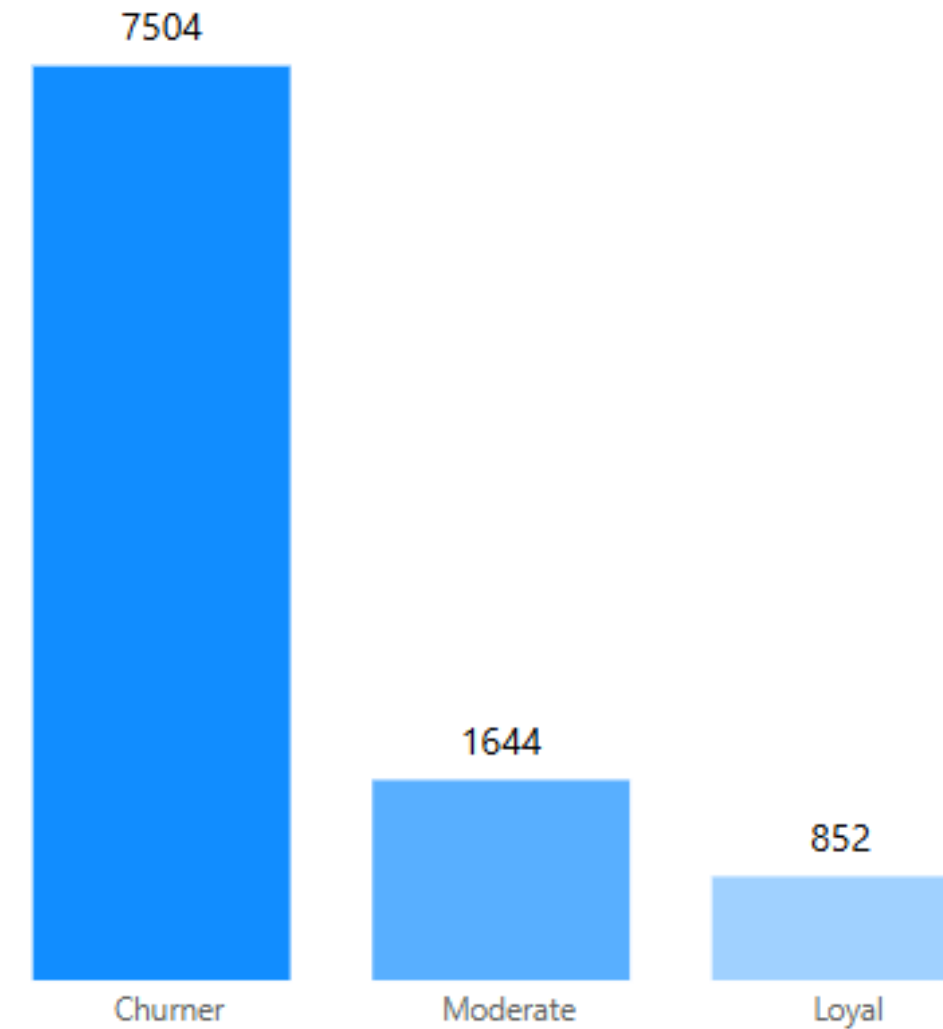
Identifying Users At-Risk of Churn



ChurnRisk by Session



ChurnRisk by LastLoginDate



- ✓ Loyal: Avg Session Min ≥ 10 & Days Since Last Login ≤ 237
- ☹ Medium: Avg Session Min ≤ 5 & Days Since Last Login < 252
- ✗ Churner: Avg Session Min < 5 & Days Since Last Login ≥ 252

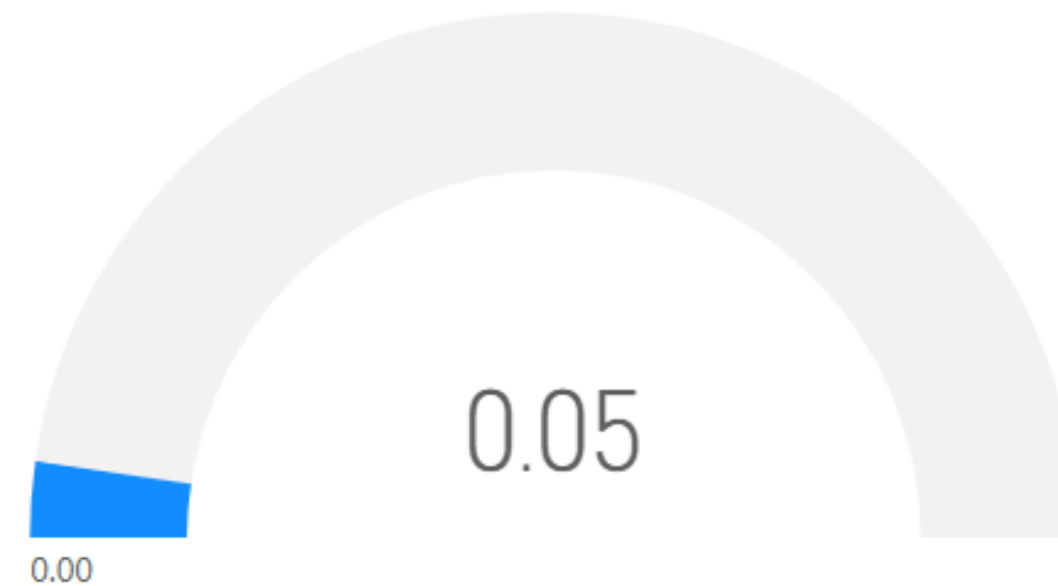
91% of users are at high risk of churn, as their average app usage remains **below 5 minutes over a period of more than one and half months**, signaling minimal engagement and potential abandonment.

- ✓ Loyal: LastLoginDate ≤ 237 days (30 days)
- ☹ Moderate: LastLoginDate ≤ 297 days (60 days)
- ✗ Churner: LastLoginDate ≥ 298 days

75% of customers are at high risk of churn, whereas only **8.5% are classified as loyal users**.

Device Type vs. User Engagement

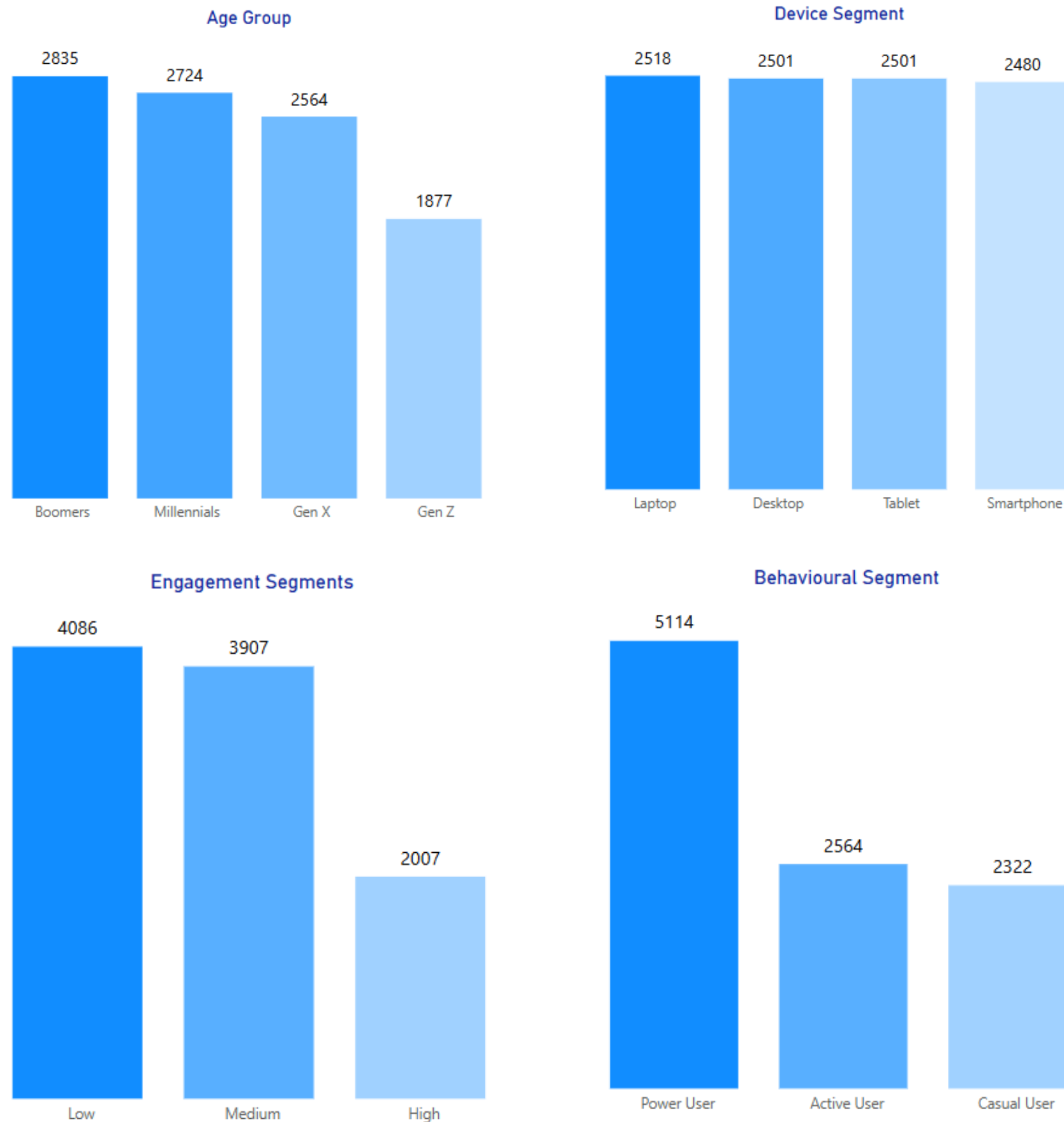
Device type & TotalEngagementScore Correlation



The correlation between **Device Type** (encoded numerically) and **TotalEngagementScore** is approximately 0.05, indicating a very weak or negligible relationship between the two variables.

✓ *This implies that the type of device used does not significantly influence the user engagement levels.*

Personalized In-App Features for User Engagement



1) Engagement Segments Features:

- Simplify user onboarding.
- Notifications:**
- Activate personalized offers, e.g., Here's a 10% discount for coming back."

2) Age Group e.g. Gen Z (<25)

- Features:**
- Interactive content, and social sharing options.
- Notifications:**
- Fun challenge like "Can you beat your best time today?"

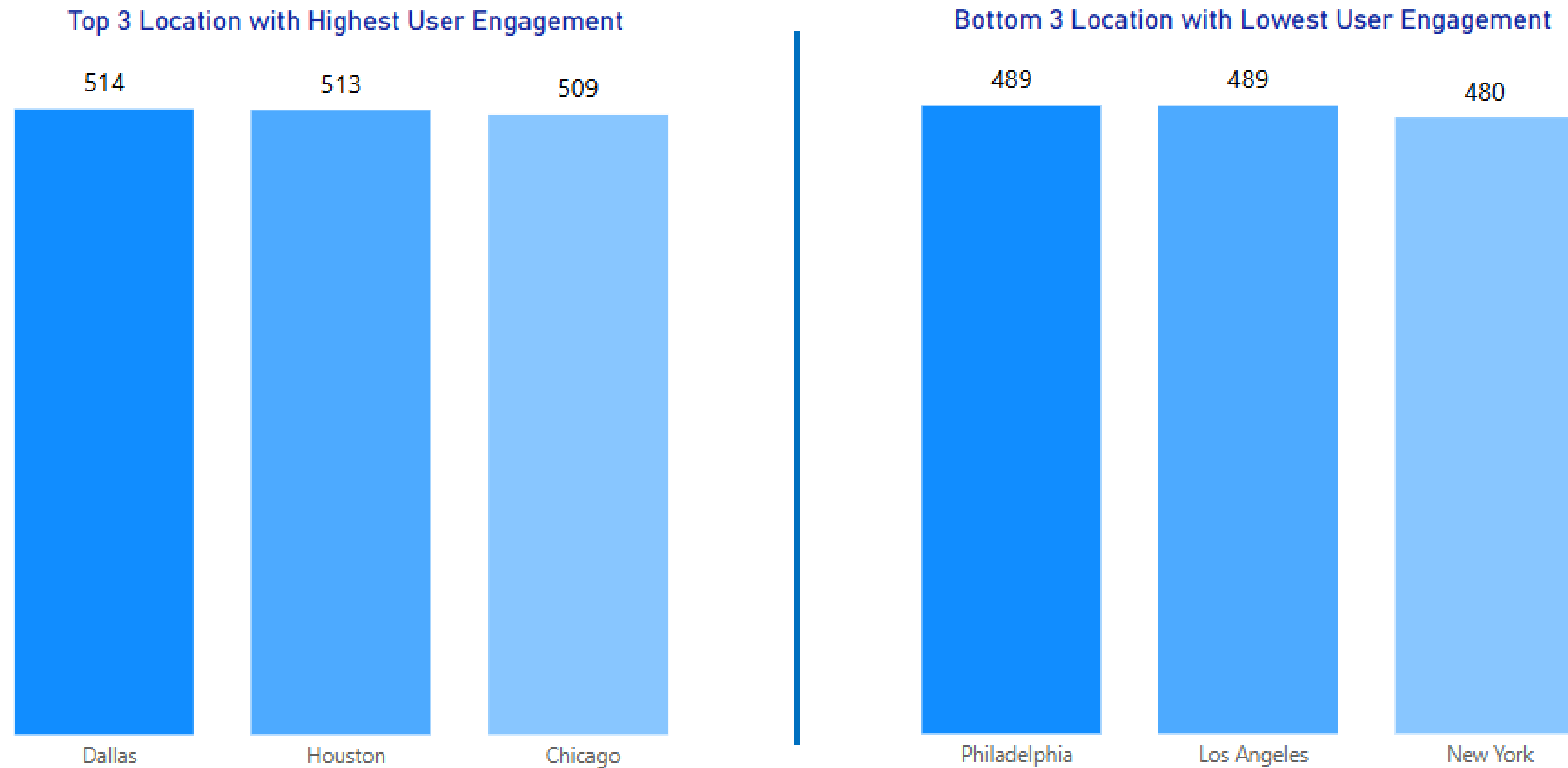
3) Device Type e.g. Smartphone Users

- Features:**
- Intuitive design with offline modes.
- Notifications:**
- Push quick reminders for short tasks or updates.

4) Behavioral Segments e.g. Casual Users

- Features:**
- Quick access to the most-used features.
- Notifications:**
- Gentle re-engagement with value-driven messages.

Top and Least Performing Locations



- With a 513.94 average engagement score, **Dallas** has the highest average engagement score.
- The lowest engagement score (479.91) is in **New York**.

Here are some recommendations for **addressing these disparities**:

- Implement location-specific features and content that resonate with local users.
- Replicates Dallas' successful engagement patterns in places like New York.
- Find out whether participation levels are affected by regional factors (such as commuting).

RECOMMENDATIONS



1. Enhance User Retention Strategies:

- Implement **personalized push notifications** based on user activity.
- Create **incentive programs** for users at risk of churning.
- Provide **re-engagement strategies** like exclusive content or discounts for inactive users.

2. Optimize User Experience by Device Type:

- Improve **tablet and smartphone UI/UX** for a seamless experience.
- Add **offline capabilities** to cater to mobile users.

3. Targeted Marketing Campaigns:

- Focus on **older female users with tablets**, as they show the highest engagement.
- Customize messaging for different **age and behavioral segments**.

4. Regional Customization:

- Implement **location-based marketing strategies**.
- Study **Dallas' engagement model** and **replicate** successful features in low-performing locations like New York.

By leveraging these insights, **Synaptix Digital Solutions** can enhance engagement, reduce churn, and optimize user experiences for tech applications.