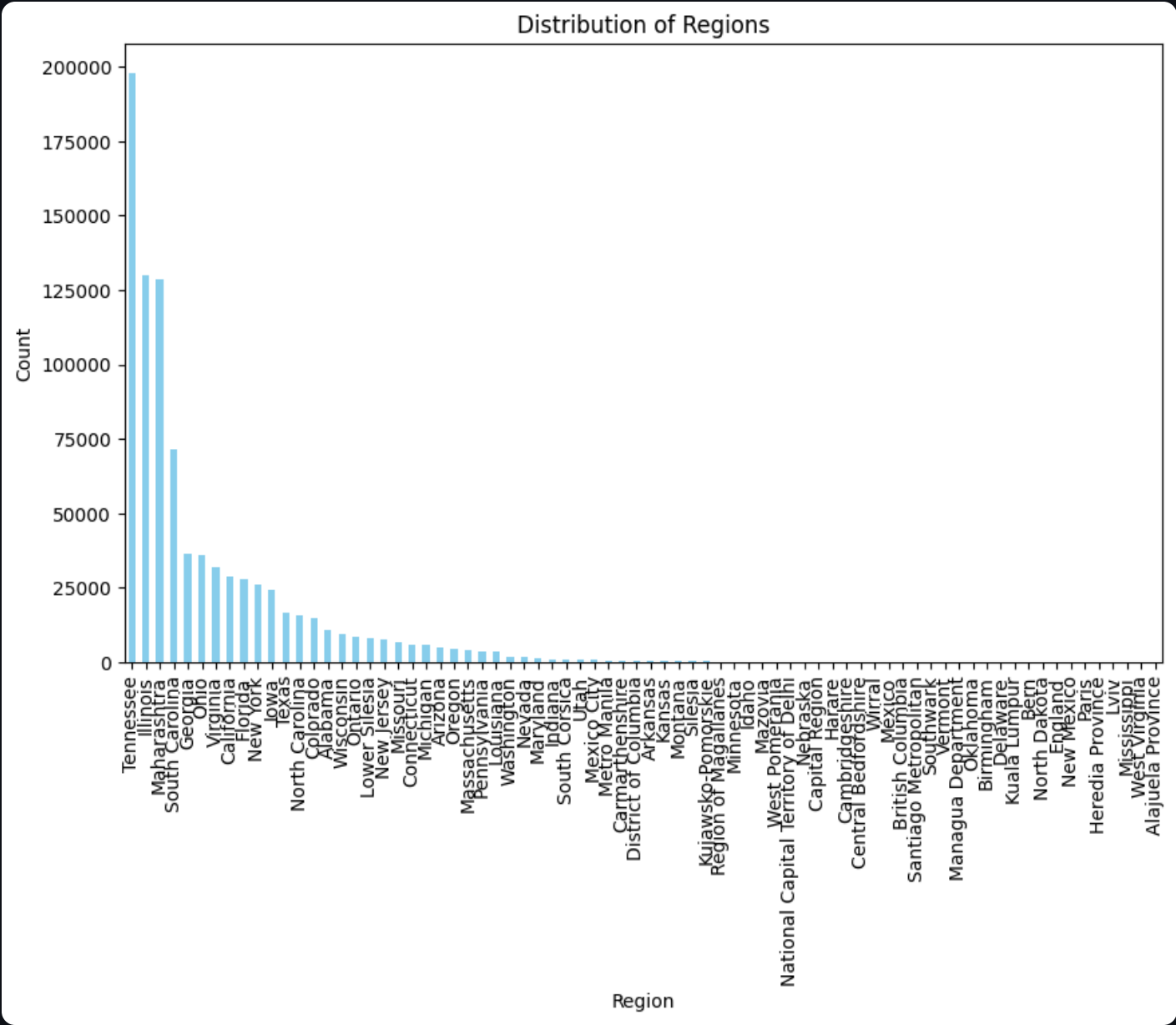


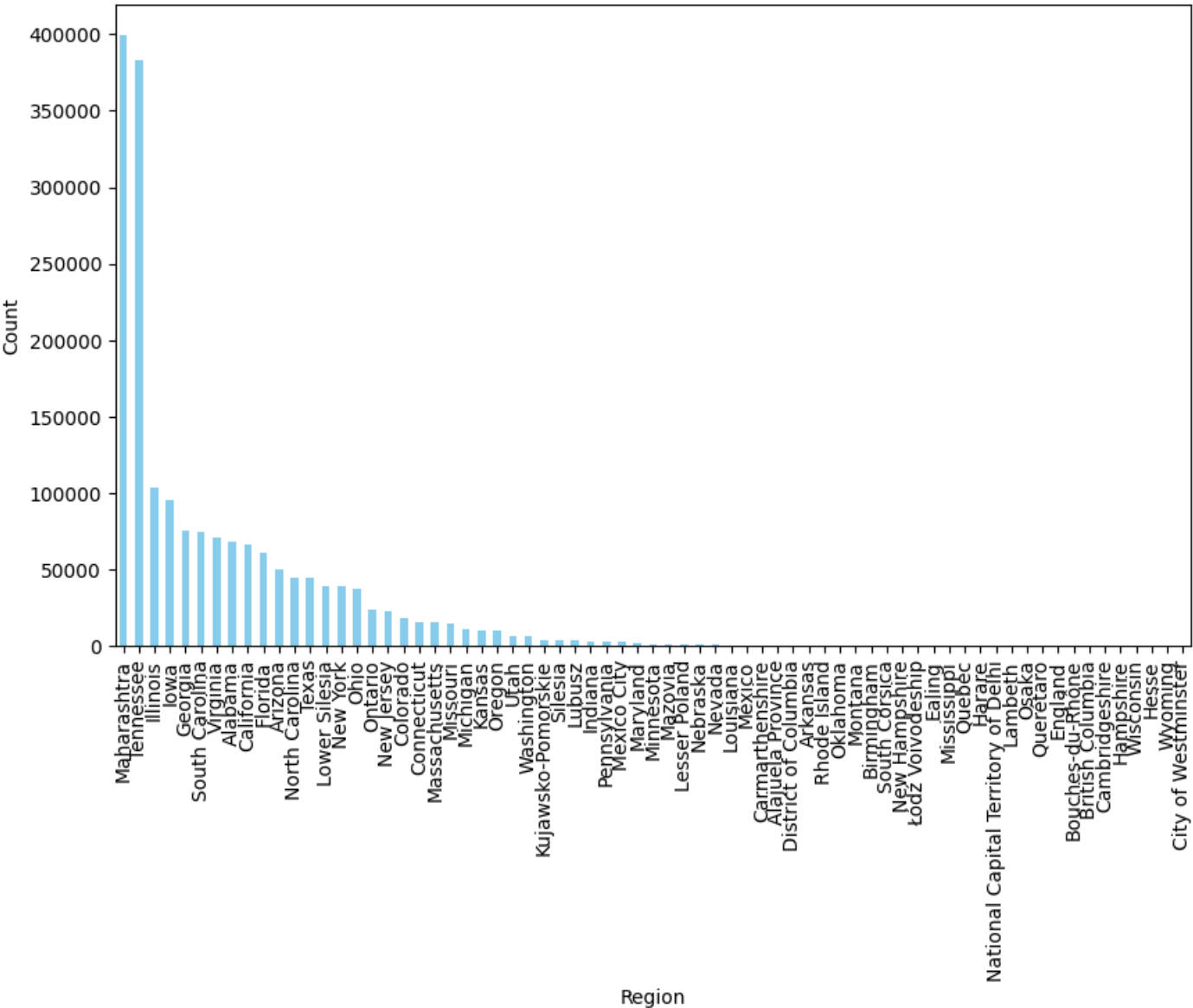
# Regional Distribution 2024



User Activity by Region in 2024

# Regional Distribution 2025

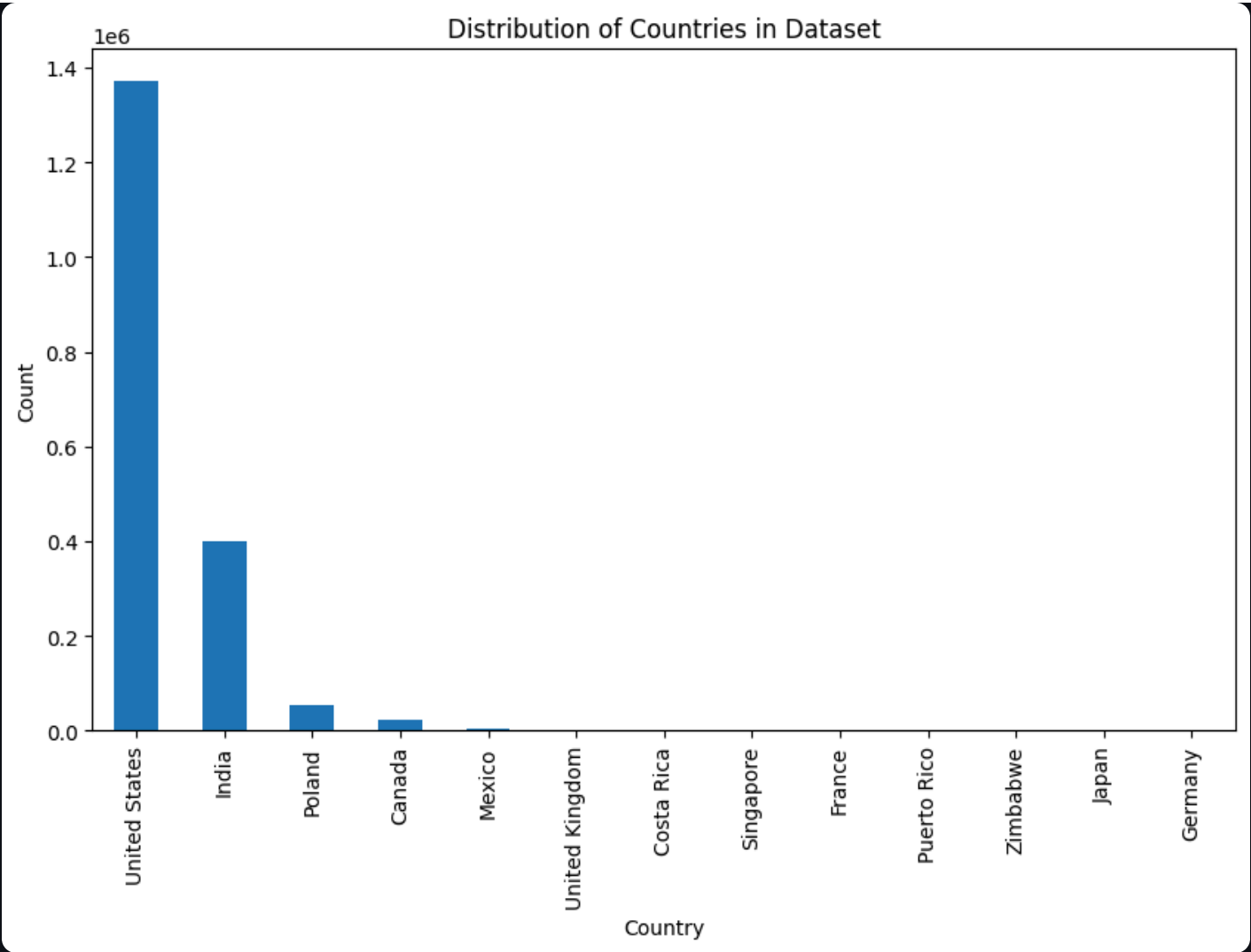
Distribution of Regions



User Activity by Region in 2025

**Insight:** Maharashtra has surpassed Tennessee in user activity, and new regions like Iowa and Georgia are gaining prominence. This shift suggests evolving engagement patterns across different geographic areas.

# Country Distribution (2025)

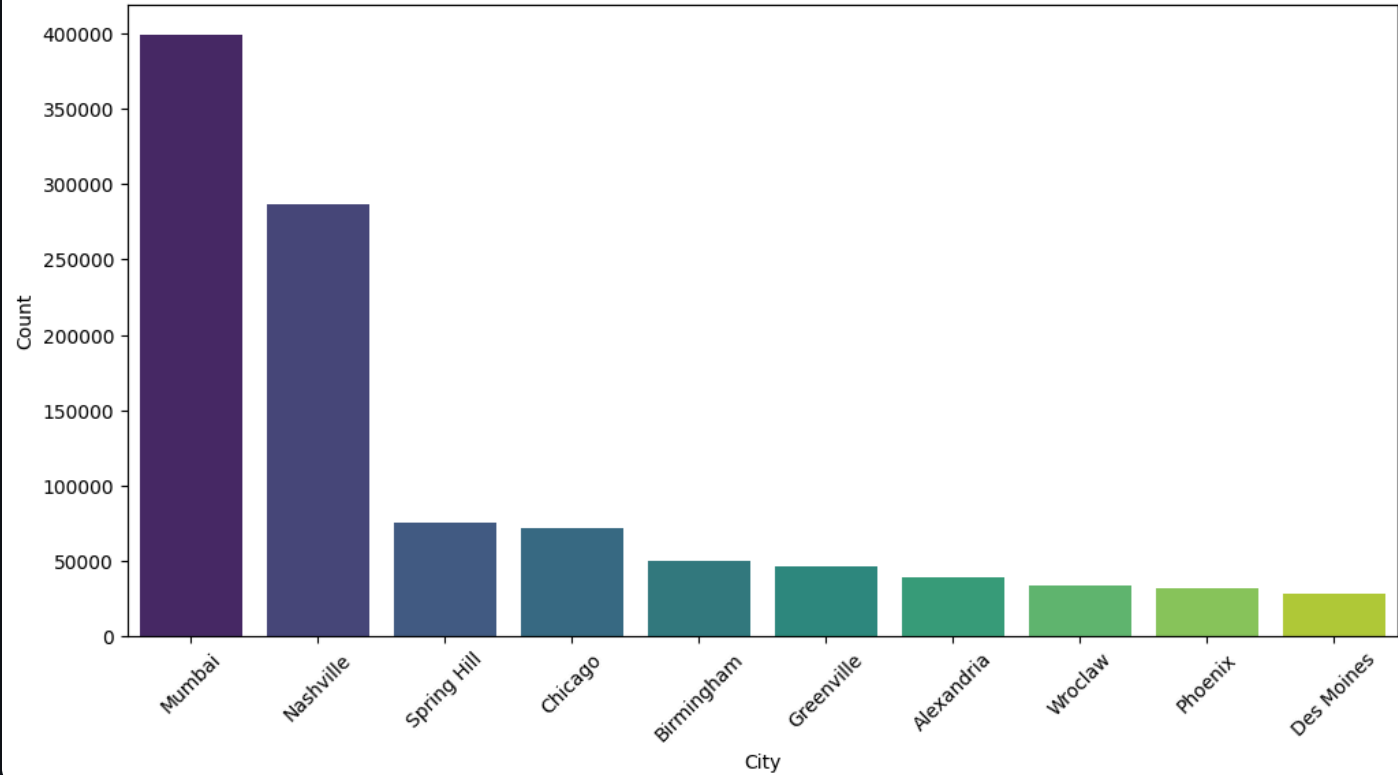


User Activity by Country in 2025

**Insight:** The platform remains heavily dominated by users from the **United States and India**, with **Poland** seeing a **significant increase in activity**. Engagement strategies should prioritize these regions to maximize retention.

# City Distribution (2025)

Top 10 Most Frequent Cities

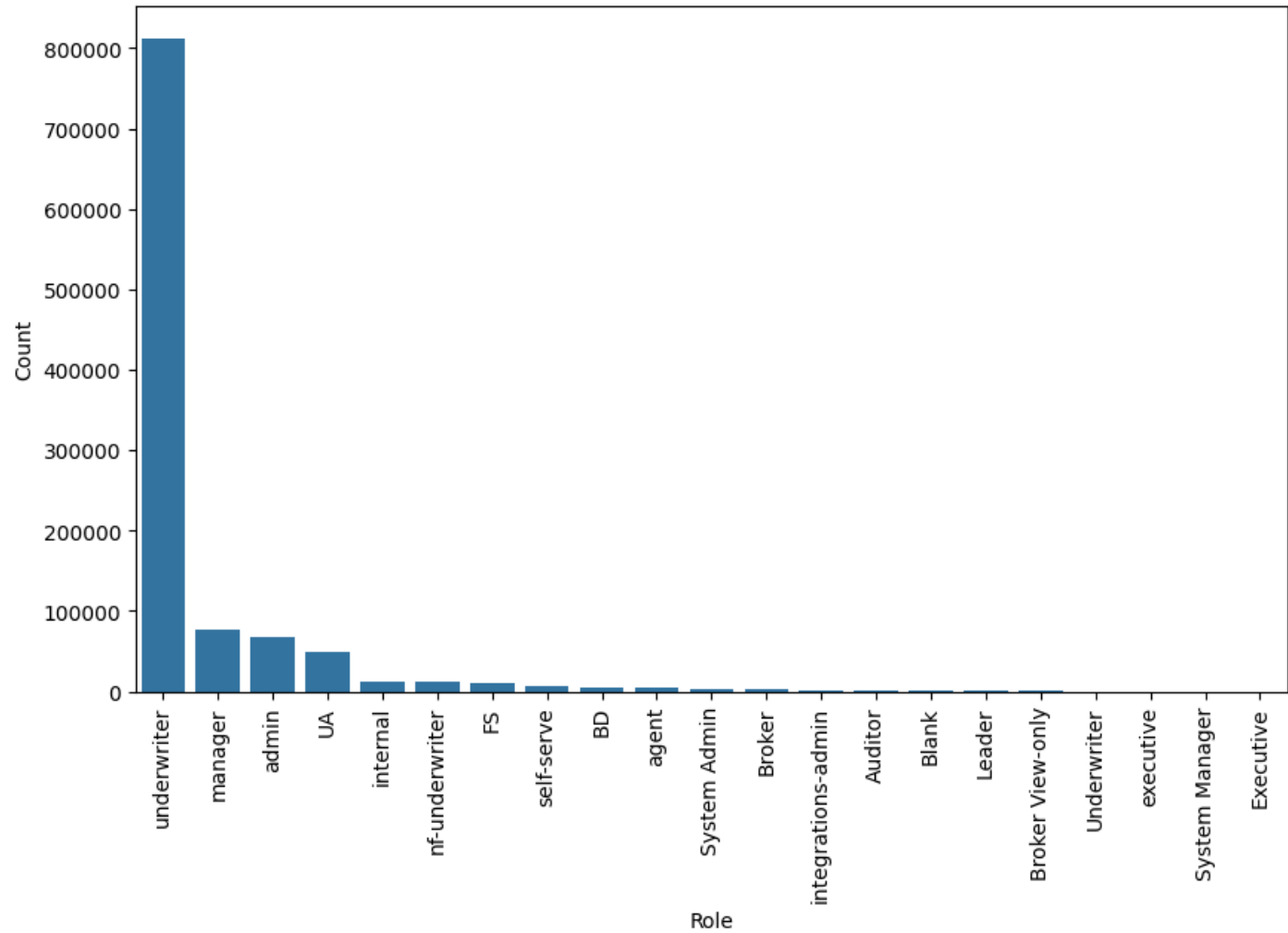


User Activity by City in 2025

**Insight:** Mumbai and Nashville remain dominant, with increasing activity in cities like **Spring Hill** and **Wroclaw**. Targeted engagement strategies in these cities could improve retention and daily usage.

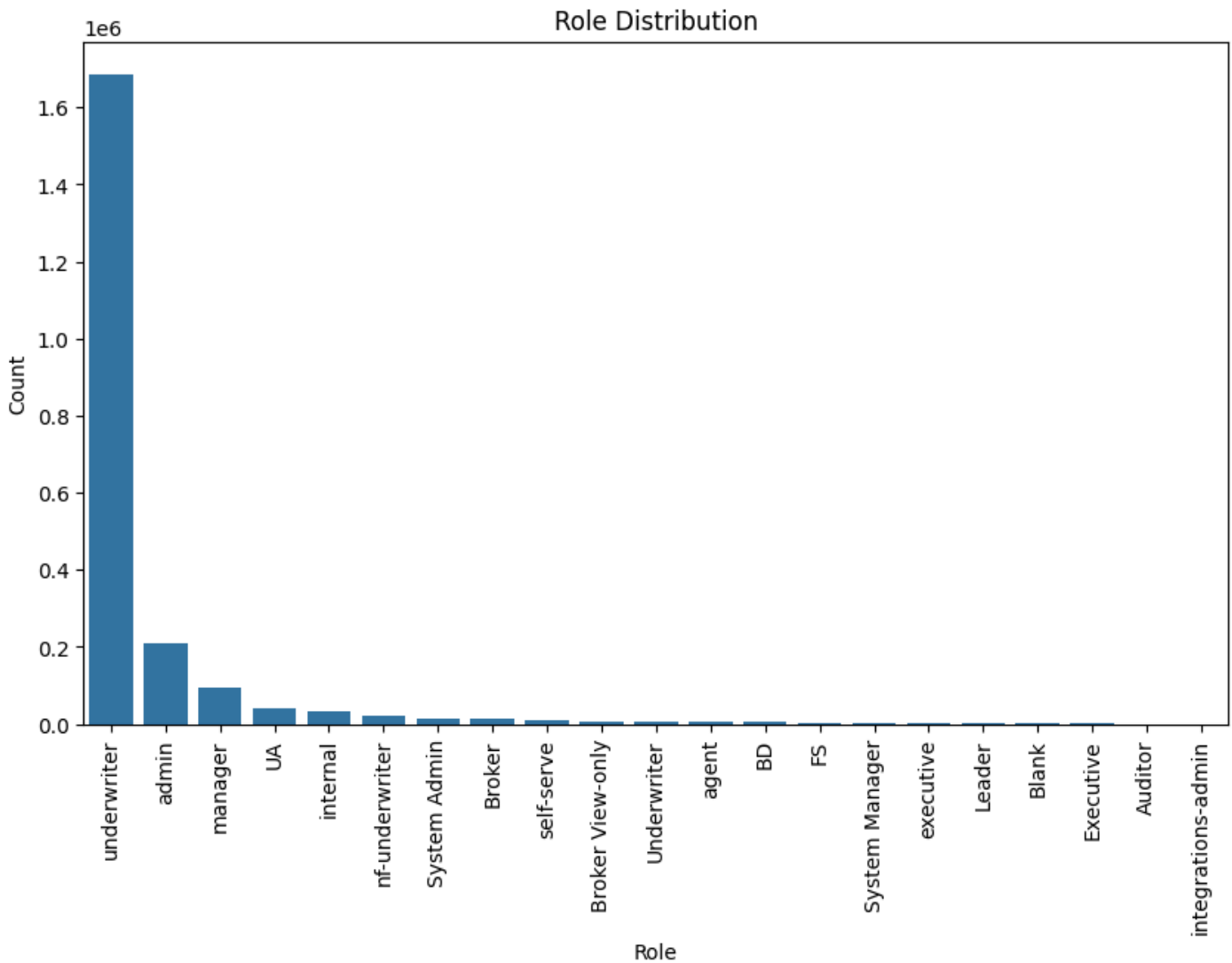
# User Role Distribution (2024)

Role Distribution



Role-based Engagement Trends in 2025

# User Role Distribution (2025)

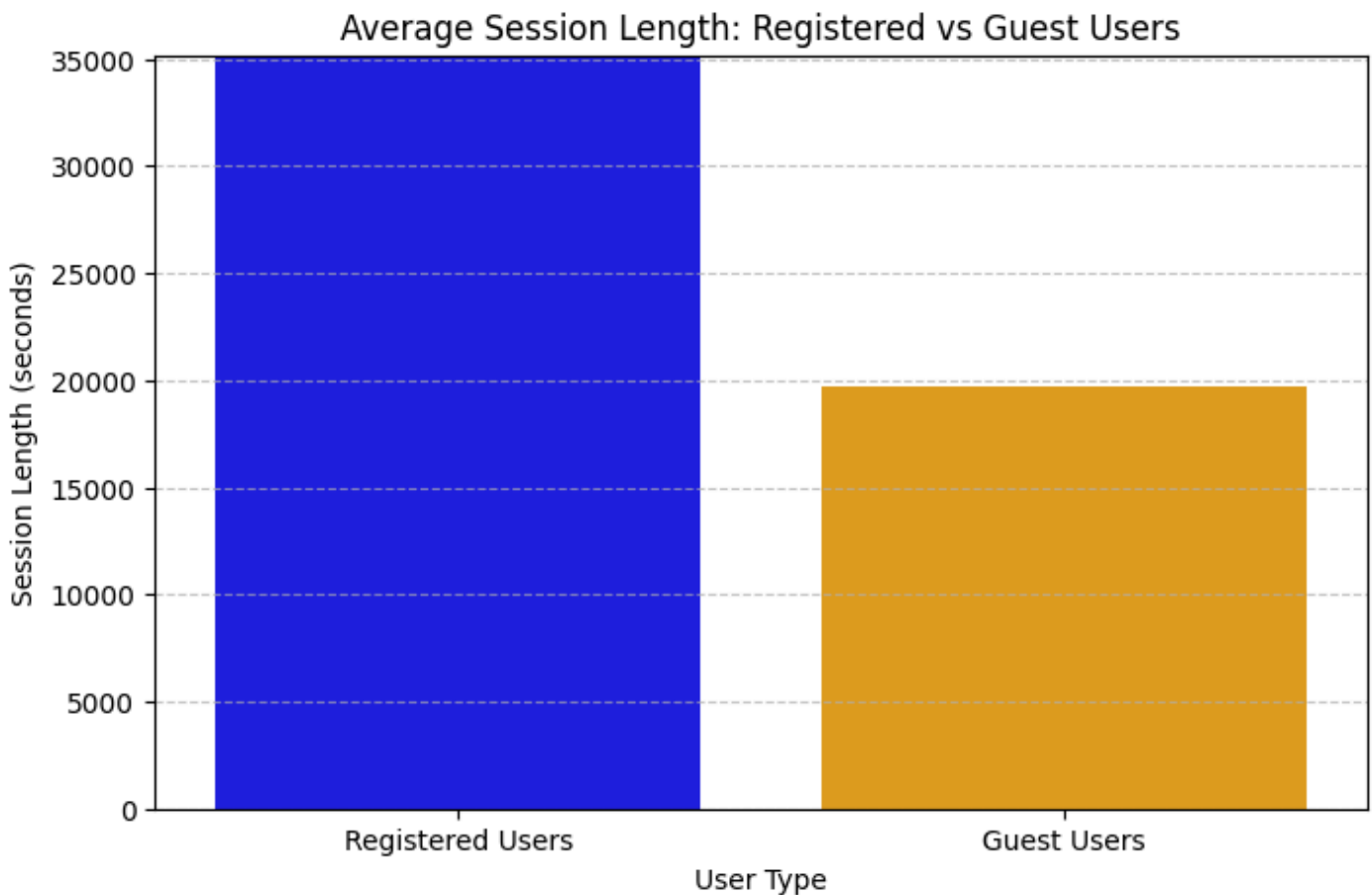


### Role-based Engagement Trends in 2025

#### Insight:

- **Underwriters dominate the platform.** Ensuring that platform tools are optimized for their workflow can improve daily retention.
- **Admins and Internal users have grown significantly,** suggesting the need for better management and oversight tools.
- **Executives and Leaders are now more engaged.** Adding high-level insights, reports, and automated dashboards could further drive engagement.
- **UA and FS roles have declined,** possibly indicating disengagement. Investigating their usage patterns could help recover lost users.

## User Engagement: Session Length Analysis

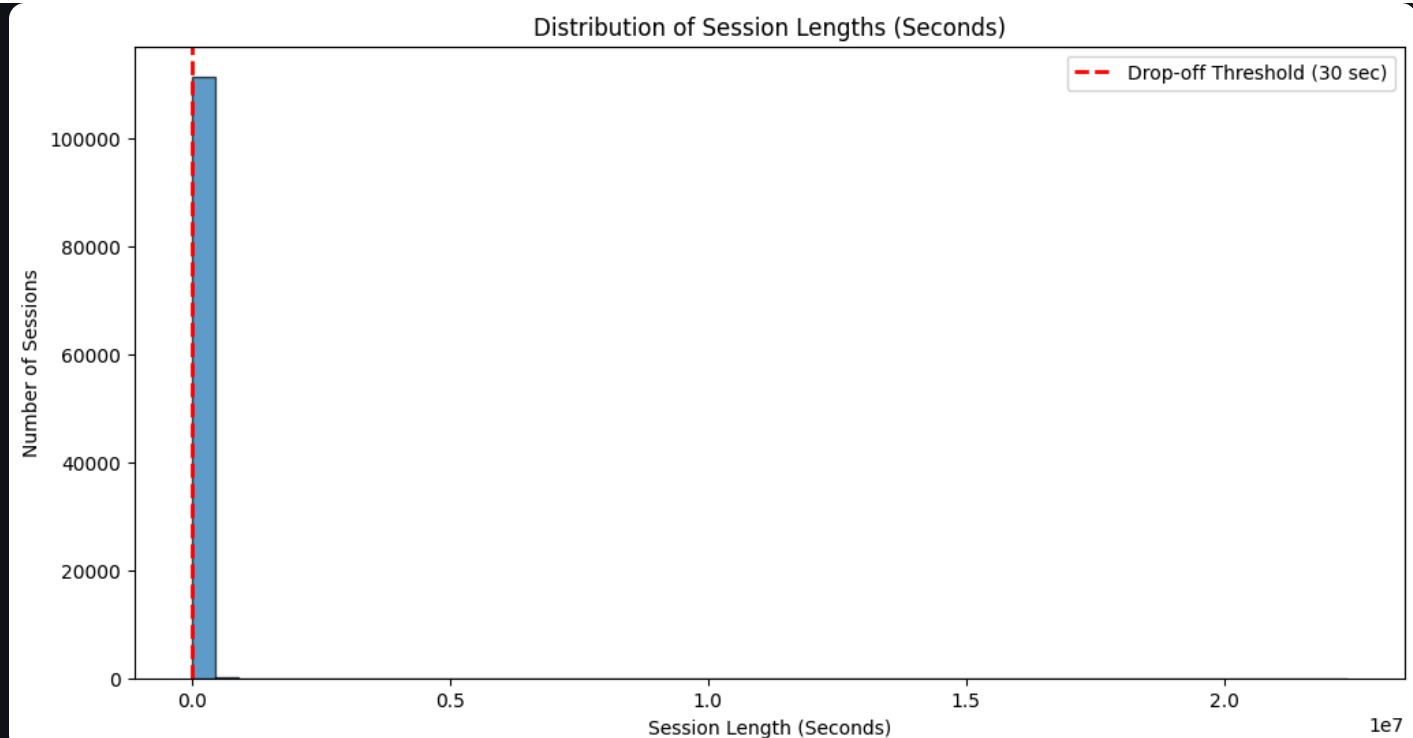


Guest vs. Registered User Session Length

#### Insight:

- Guest users spend ~44% less time on the platform than registered users.
- This suggests friction in engagement, possibly due to:
  - Lack of onboarding
  - No incentive to register
  - Users passively browsing rather than interacting
- Most sessions end after UI rendering, instead of meaningful actions like form submissions or button clicks.
- To improve engagement:
  - Improve onboarding for guest users.
  - Add incentives for registration.
  - Encourage deeper interactions (e.g., personalized recommendations, call-to-action prompts).

## User Drop-offs: Session Length Distribution



Distribution of Session Lengths

### Insight:

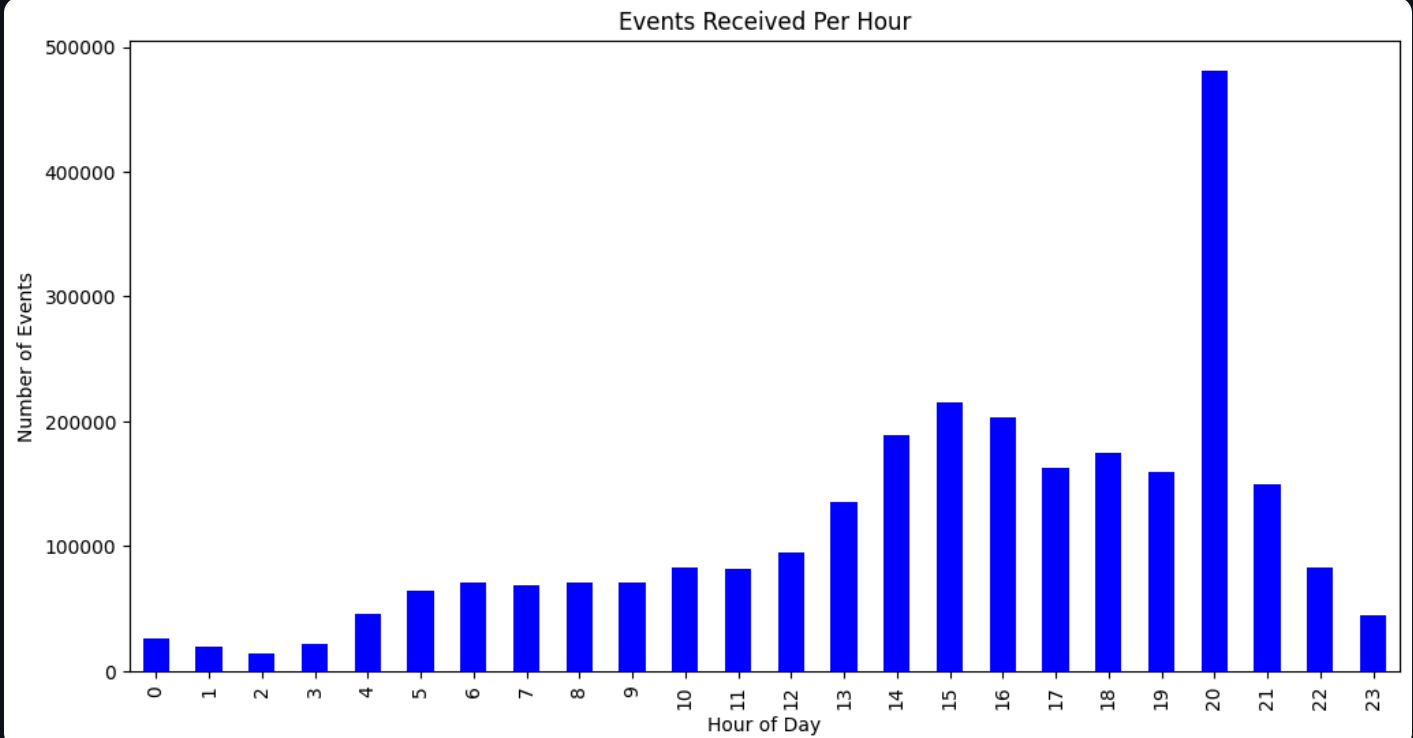
- A large portion of users **drop off** within the first 30 seconds of their session.
- This suggests that users **aren't finding value quickly enough** or are leaving due to **UI/UX friction**.
- **Short session lengths** indicate low engagement, meaning users may be:
  - **Not finding what they need immediately.**
  - **Facing an unintuitive interface.**
  - **Losing interest before interacting with key features.**

### How to Improve Engagement:

- Optimize **onboarding experience** to guide users toward valuable actions.
- Ensure **important content is visible immediately**—reduce friction in navigation.
- Add **clear calls to action (CTAs)** to encourage further engagement (e.g., "Try Feature X Now!").
- **Analyze high drop-off pages** to identify problem areas and improve UI/UX.

## Peak User Activity: Events Per Hour





User Engagement by Hour

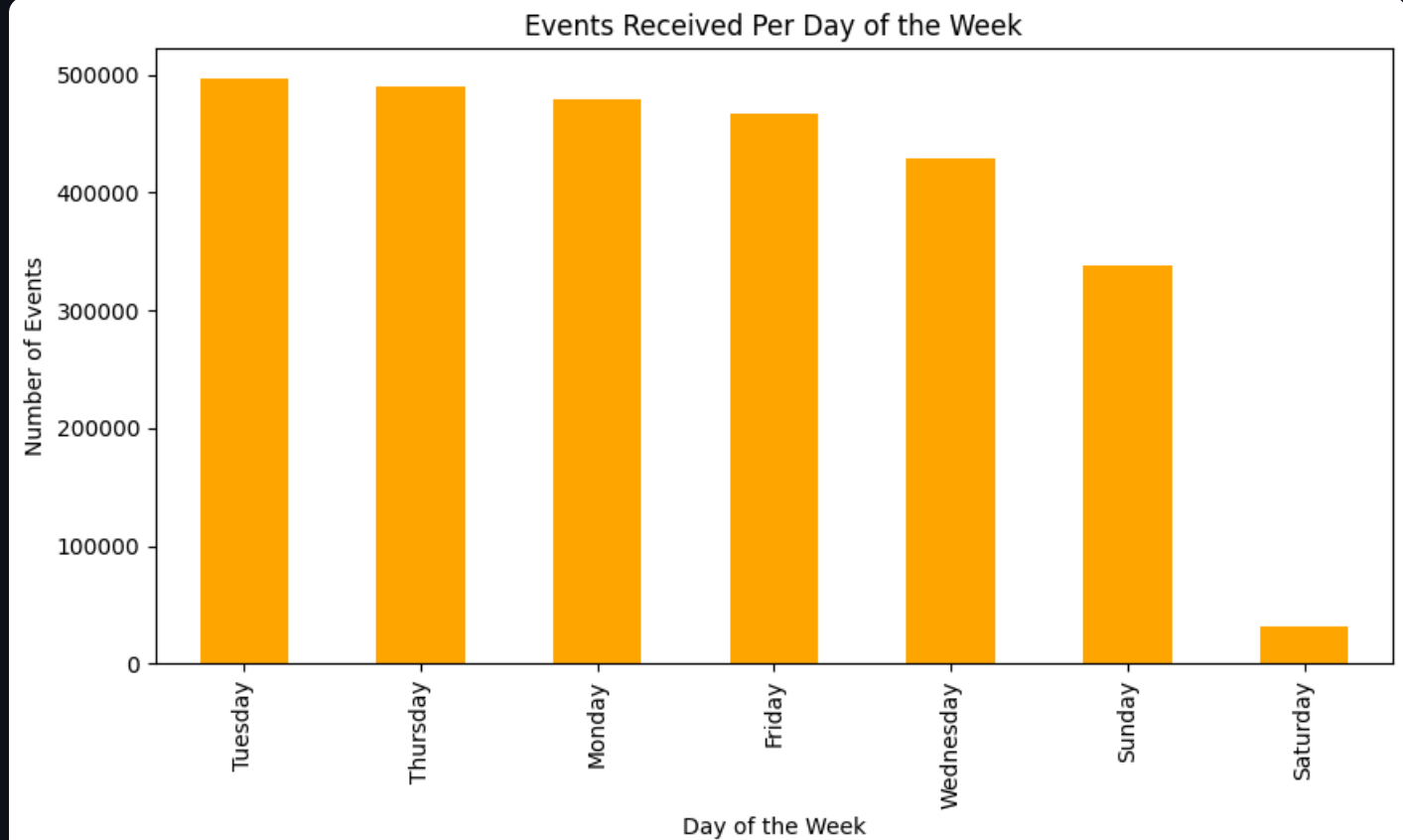
### Insight:

- **Peak engagement occurs around 8 PM**, when most events are recorded.
- However, users are primarily **browsing (widget:render, view events)** rather than interacting deeply.
- **Secondary activity peaks** exist in the late afternoon, but engagement drops significantly after 9 PM.

### How to Improve Engagement During Peak Hours:

- Implement **calls to action (CTAs)** during **peak times** to convert passive browsing into meaningful actions.
- Optimize **platform performance** to handle increased load at 8 PM.
- Introduce **real-time engagement features** (e.g., **notifications, prompts, or personalized recommendations**) to encourage deeper interactions.

## User Engagement by Day of the Week



Platform Activity by Day

**Insight:**

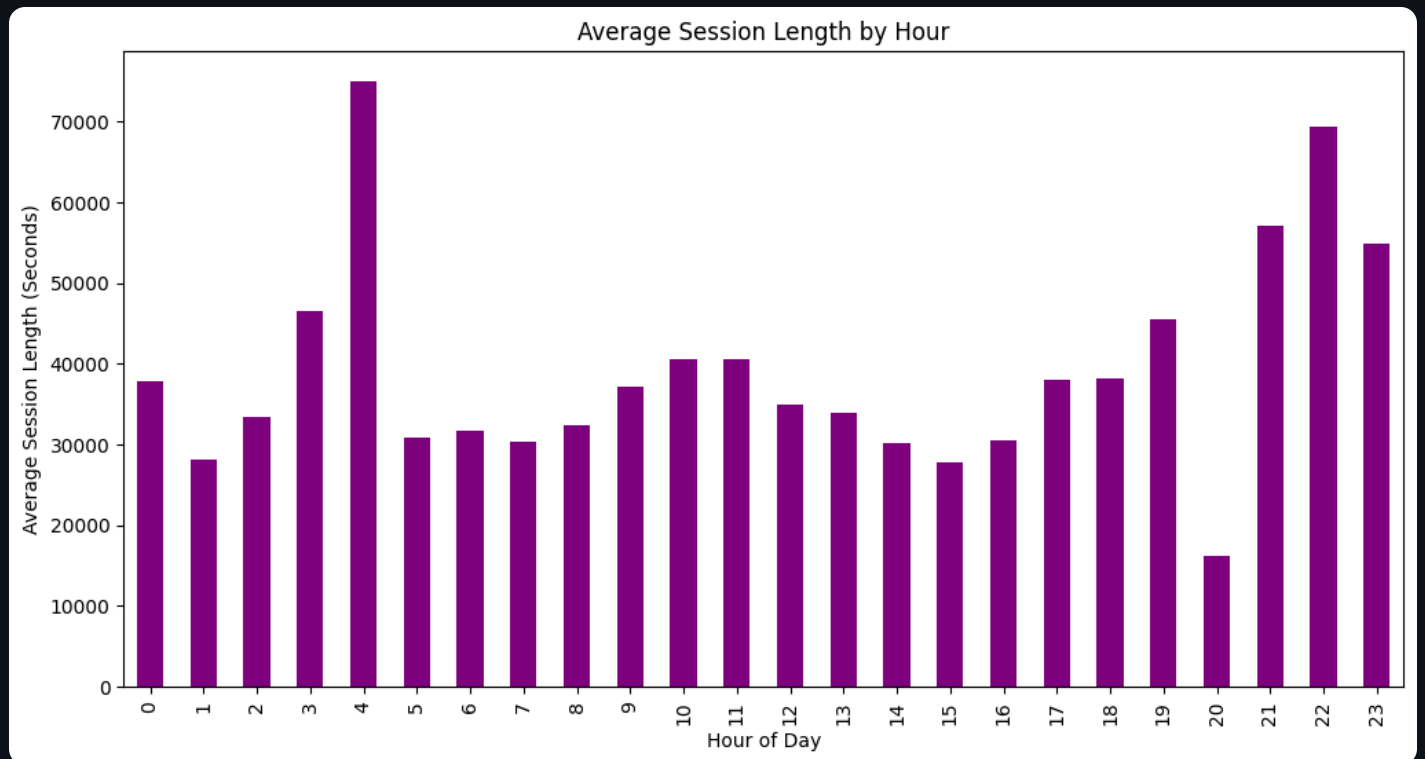
- **Tuesday is the peak engagement day**, making it the best time for **feature rollouts, marketing campaigns, and major platform updates**.
- **Monday to Thursday see consistently high engagement**, indicating strong usage during the workweek.
- **Weekend activity drops significantly**, especially on **Saturday (lowest engagement day)**, suggesting that users primarily interact with the platform for **work-related tasks**.

**How to Optimize Engagement Based on This Insight:**

- **Schedule important updates, campaigns, and releases on Tuesdays** to maximize visibility and interaction.
- **Prioritize workweek engagement strategies**, focusing on Monday-Thursday for key user interactions.
- **Reconsider weekend-focused efforts**, as engagement is significantly lower, especially on Saturdays.

## Session Duration Patterns: Active vs Passive

# Engagement



Session Length Trends Throughout the Day

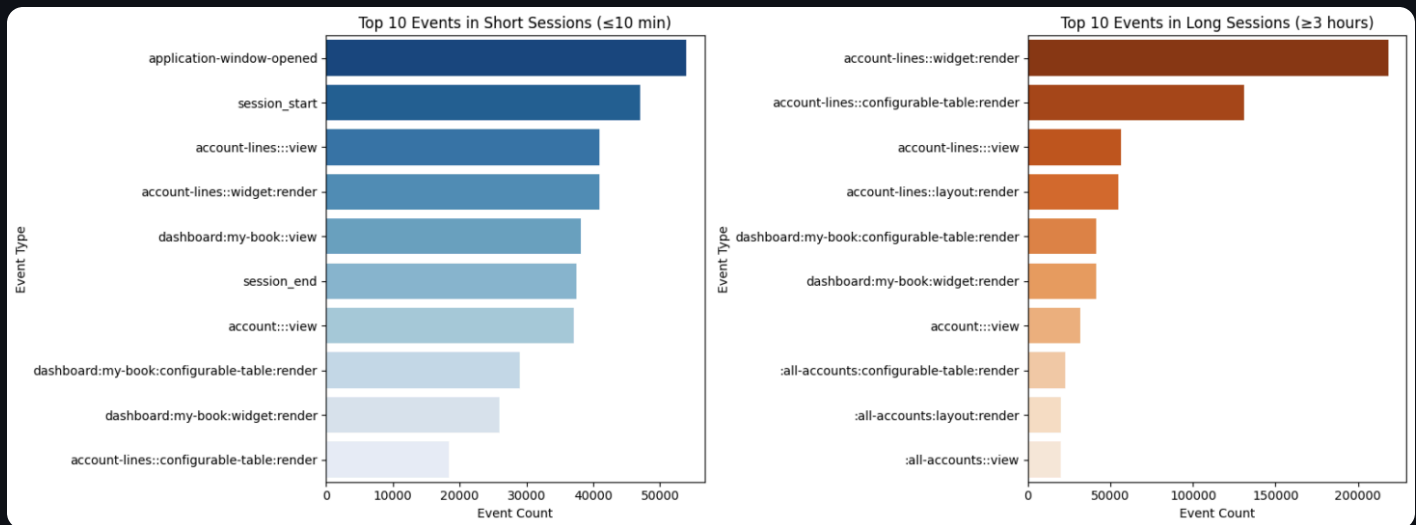
## Insight:

- Late-night and early-morning session spikes (4 AM, 10-11 PM) suggest passive or automated activity.
- Morning users (6 AM - 10 AM) engage for structured work tasks but don't stay logged in for extended periods.
- Afternoon sessions (12 PM - 4 PM) are shorter, indicating task-based interactions rather than prolonged engagement.
- Evening sessions (6 PM - 8 PM) show a dip, reinforcing the platform's work-centric nature.
- The late-night increase could be due to either night-owl users or automated non-human activity (batch processes, data retrieval, etc.).

## How to Optimize Session Management:

- Investigate whether long late-night sessions are real engagement or passive activity.
- Introduce session timeouts or idle detection to improve platform efficiency.
- Optimize platform performance for actual peak user activity rather than background processes.

# Interaction Behavior: Short vs. Long Sessions



Event Distribution in Short vs. Long Sessions

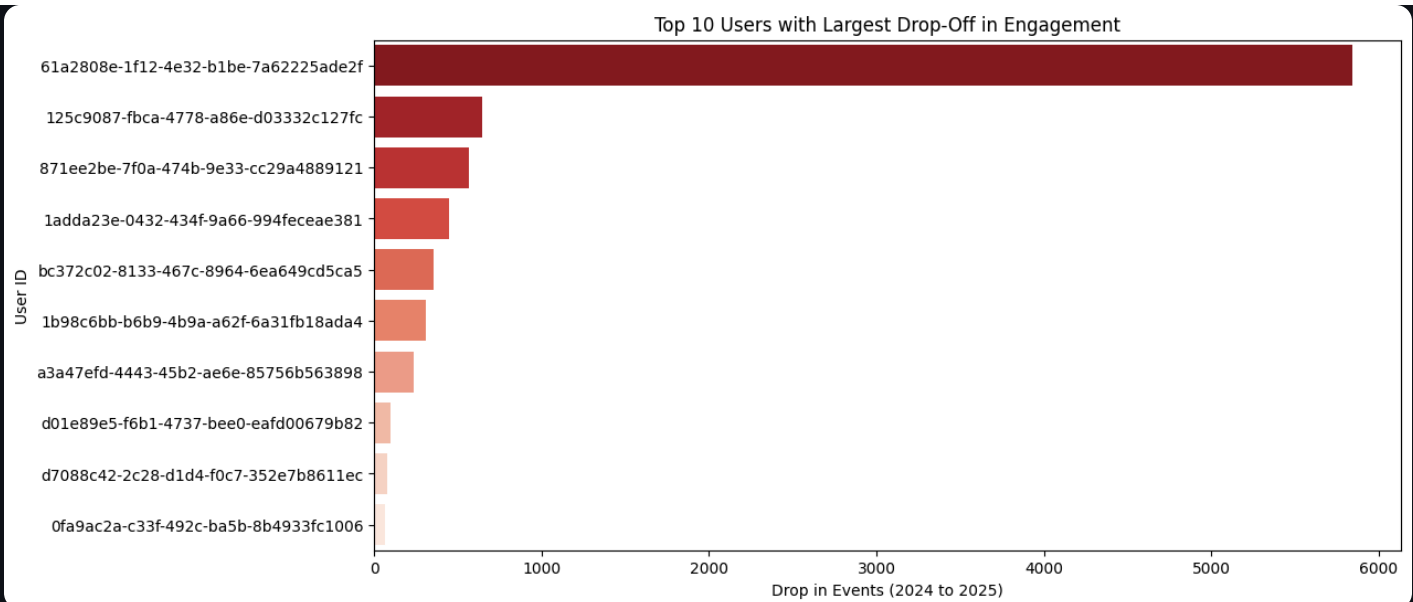
## Insight:

- **Short sessions are dominated by UI rendering & navigation**, with users checking dashboards but not engaging deeply.
- **Long sessions (3+ hours) also lack strong interaction events**, meaning users are either:
  - Leaving tabs open without active usage
  - Navigating inefficiently to complete tasks
  - Reviewing data without making edits, updates, or transactions
- **Few users engage in meaningful actions** (e.g., form submissions, data entry, transactions), regardless of session length.

## How to Improve Engagement:

- **Introduce engagement nudges** (e.g., "Need help finding something?").
- **Optimize workflows** to reduce unnecessary navigation and improve task efficiency.
- **Detect idle sessions** and prompt users with **actionable next steps** (e.g., "Complete your task now").
- **Analyze long-session behaviors** to determine if they are real engagement or passive/automated activity.

# User Retention & Drop-Off Analysis



Top 10 Users with Largest Drop-Off in Engagement

### Insight:

- Many users **significantly reduced their activity in 2025**, indicating lower retention.
- Example: User '61a2808e-1f12-4e32-b1be-7a62225ade2f' had 5,841 events in 2024 but 0 in 2025, showing complete disengagement.
- Drop-offs may be related to **workflow inefficiencies, frustration with session experiences, or changing business needs**.

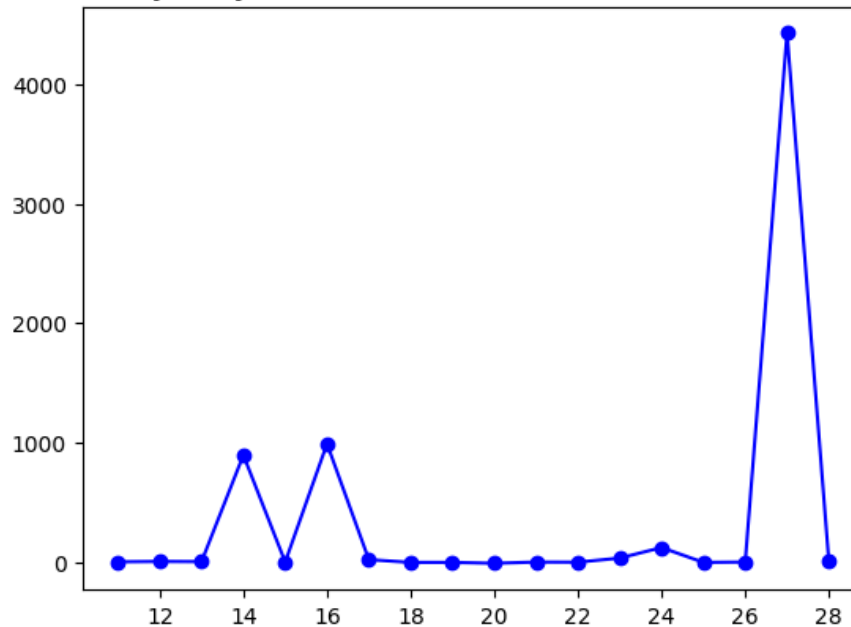
### How to Improve Retention:

- Investigate **session performance issues** to reduce potential UX bottlenecks.
- Track **user frustration signals** (e.g., increasing `session_end` usage) as early warnings of disengagement.
- **Engage at-risk users before they drop off**, using proactive outreach, recommendations, or UI nudges.
- **Improve onboarding & user education**, especially for those switching business units.

## Stickiness & User Retention Over 28 Days

### Total Time Spent Per Day (Days 11 to 28)

Total Time Spent Per Day (Days 11 to 28) between 2024-04-24 and 2024-07-10 (minutes)



Total Time Spent Per Day (Days 11-28)

### Insight:

- Time spent is generally **low and stable** until a **massive spike** around **Day 26**.
- Smaller fluctuations around **Days 14-16** suggest periodic bursts of engagement.
- The **spike at Day 26** is likely an **outlier or an external trigger** (e.g., event, update, or bot activity).

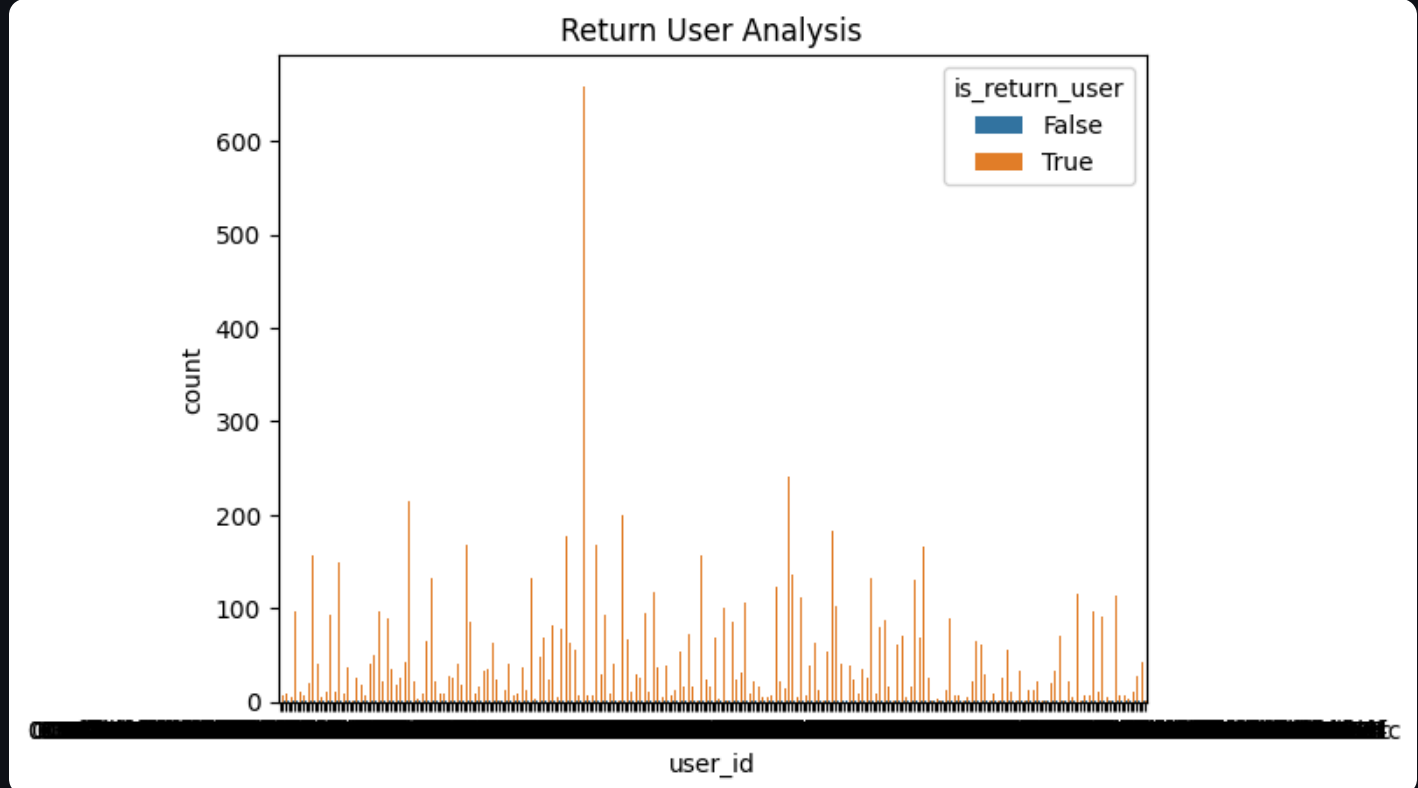
### Possible Causes:

- Users **spend limited time daily** but occasionally **engage deeply** on certain days.
- The **Day 26 spike** may be due to **abnormal session durations, automated scripts, or a one-time event**.

### Next Steps to Improve Engagement:

- Investigate **why engagement spiked at Day 26** (real user activity vs. technical artifact).
- Encourage **consistent engagement patterns** rather than one-time deep usage.
- Use **interactive features** (recommendations, tasks, notifications) to sustain user interaction.

## Return User Analysis



Return User Analysis: Returning vs. Non-Returning Users

#### Insight:

- A large portion of users return (orange bars), but there is also a significant number of one-time users (blue bars).
- A few users return at extremely high frequencies, while most return occasionally.
- Wide variation in return rates suggests different user segments:
  - Highly engaged users (frequent returns).
  - Casual users (occasional returns).
  - One-time visitors (do not return).

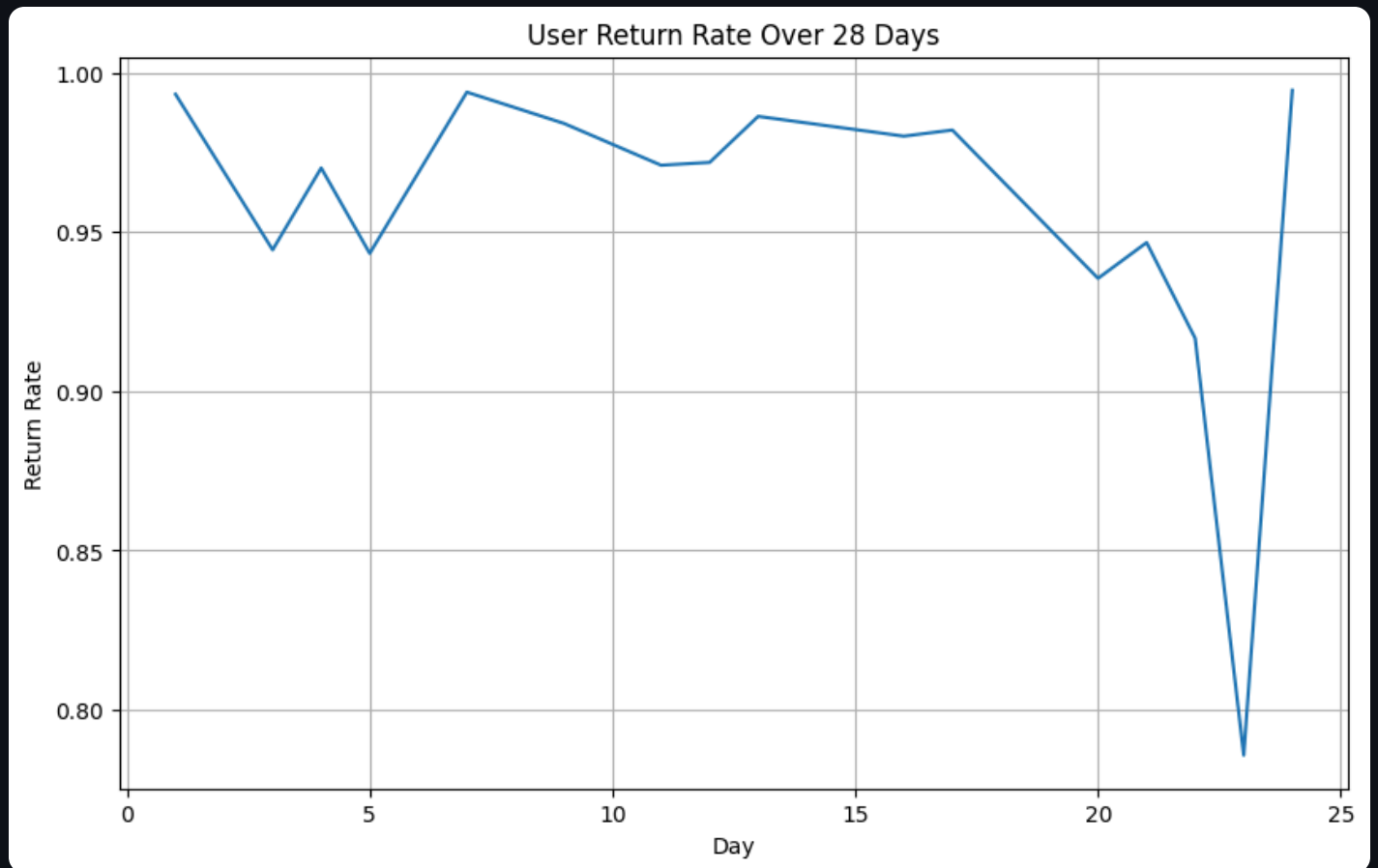
#### Possible Causes:

- Some users may be exploring the platform briefly before dropping off.
- Frequent returners may be power users, admins, or users with complex workflows.
- Non-returners may have faced usability issues or not found enough value.

#### Next Steps to Improve Retention:

- Identify top returners and analyze their behaviors to replicate their engagement patterns.
- Investigate why one-time users drop off (feedback surveys, exit interviews).
- Offer personalized re-engagement strategies (reminders, tutorials, targeted content) to casual users.

# User Return Rate Over 28 Days



User Return Rate Over 28 Days

## Insight:

- Return rate remains high early on (~95-100%) but drops significantly around Day 20.
- A steep decline between Days 20-23 suggests many users disengage at this point.
- The spike at the end suggests a possible **data anomaly** or a sudden event that brought users back.

## Possible Causes:

- Users may **complete their primary tasks** within the first 20 days, leading to lower return rates after.
- **Lack of engagement triggers** (e.g., reminders, follow-ups) may cause users to drop off.
- A **sudden return spike** could indicate a **campaign, update, or forced login event**.

## Next Steps to Improve Stickiness:

- Implement **re-engagement strategies** around Days 15-20 (emails, notifications, reminders).
- Analyze what **caused the return spike at the end** to replicate that effect.
- Encourage **long-term usage patterns** by introducing **continuous engagement features**.



