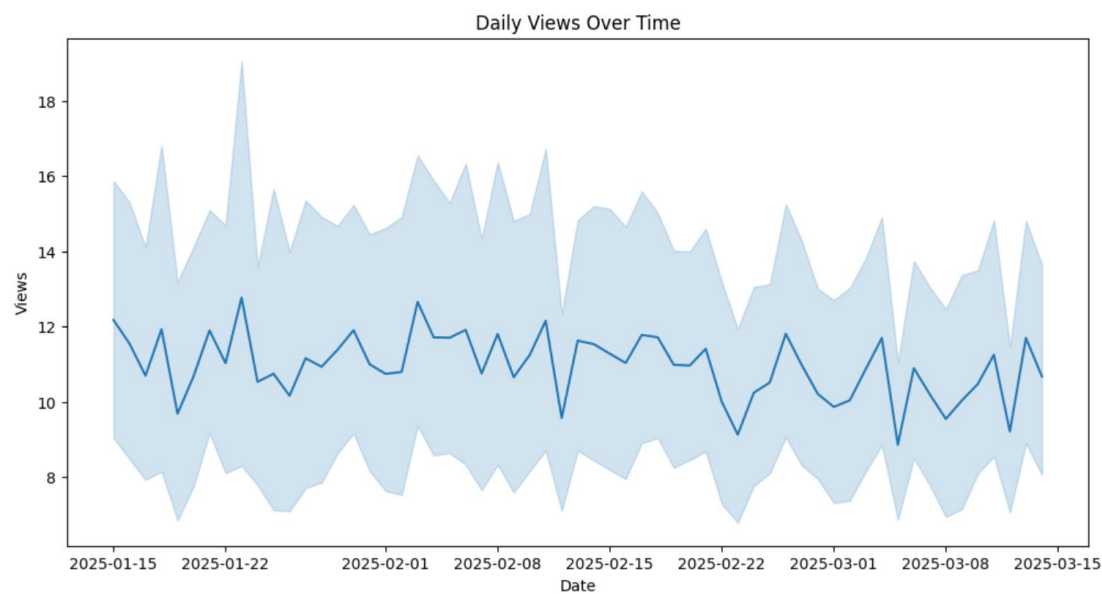
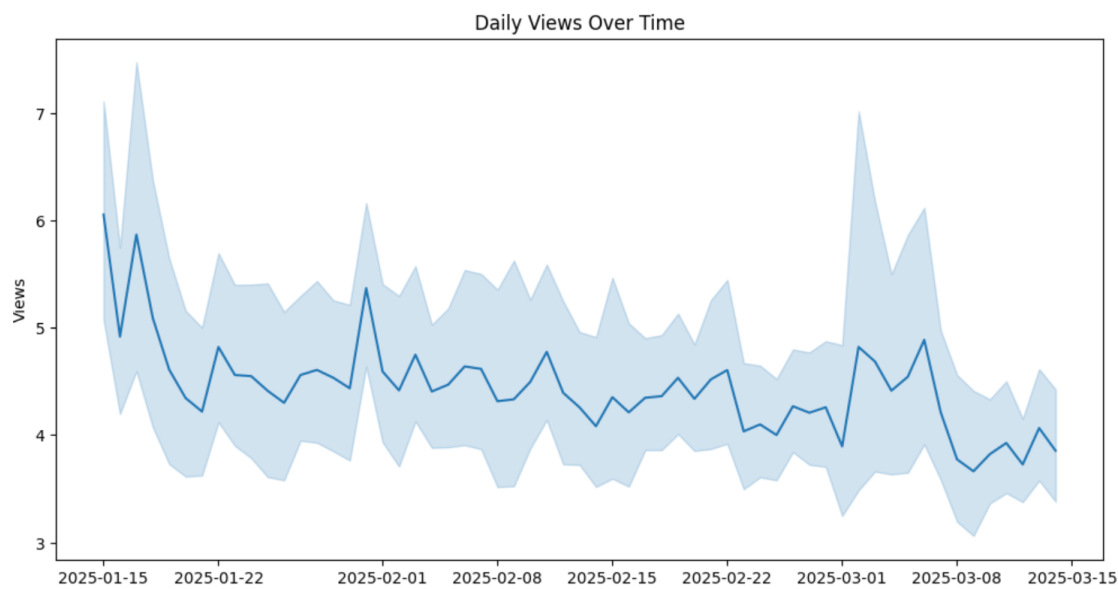


## Daily Views Over Time

Online



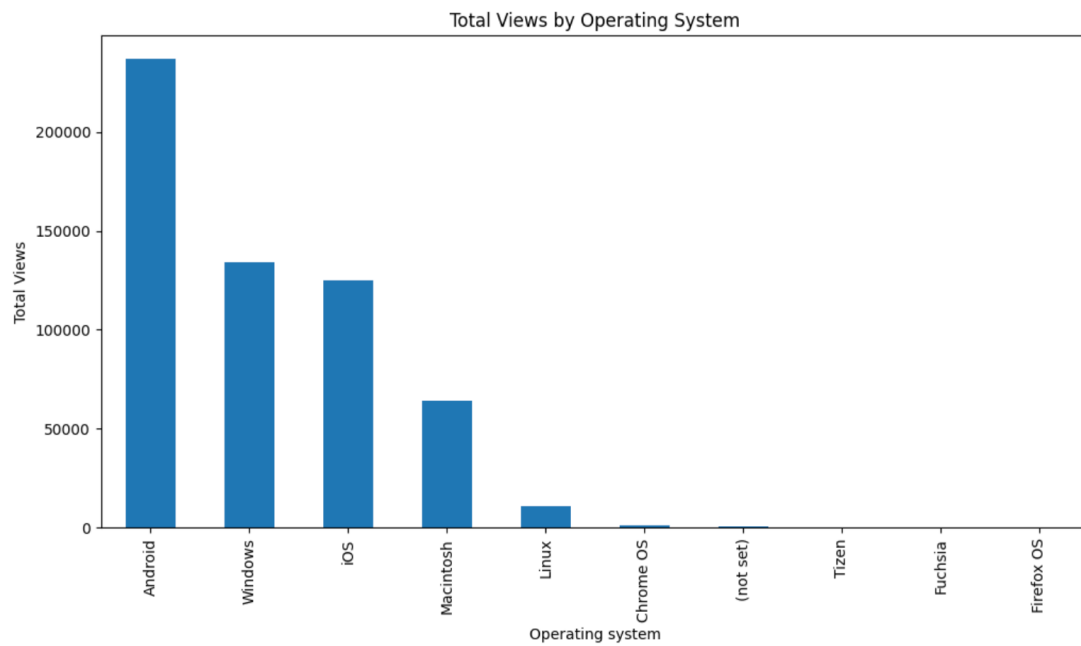
Business



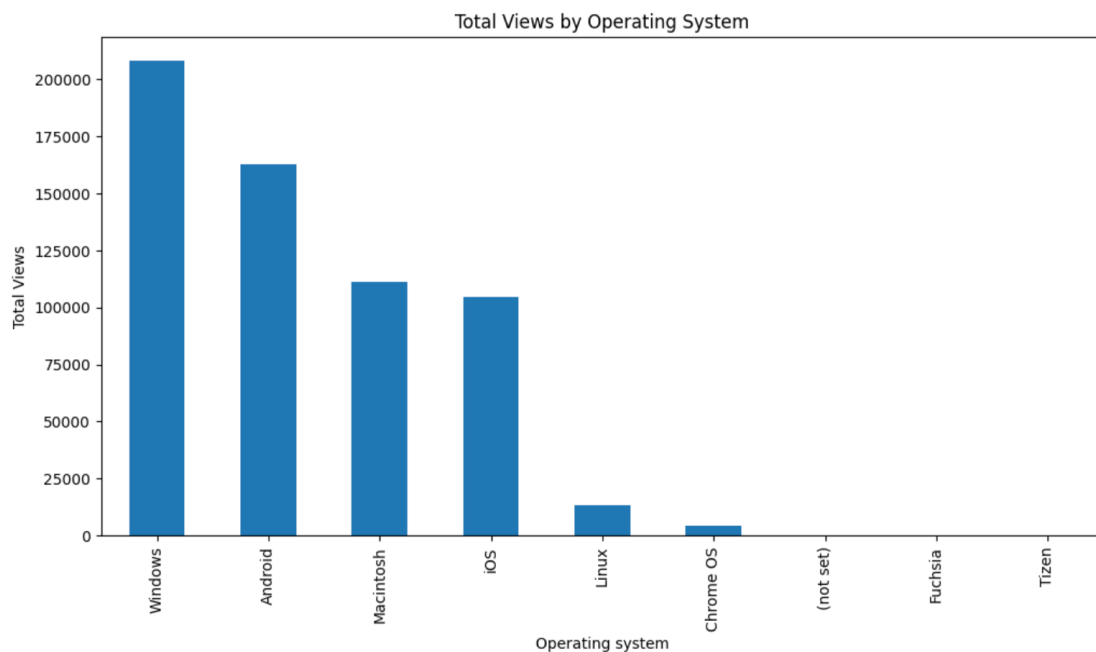
Online user engagement fluctuates with peaks and dips, suggesting seasonal patterns or event-driven traffic. In contrast, business platform usage is more consistent and aligns with a standard workweek, showing weekday highs and weekend lows. This indicates the online audience is more influenced by campaigns and promotions, while business users follow predictable professional cycles. Tailoring content and deployment schedules accordingly can improve reach and efficiency on both platforms.

## Views by Operating System

Online



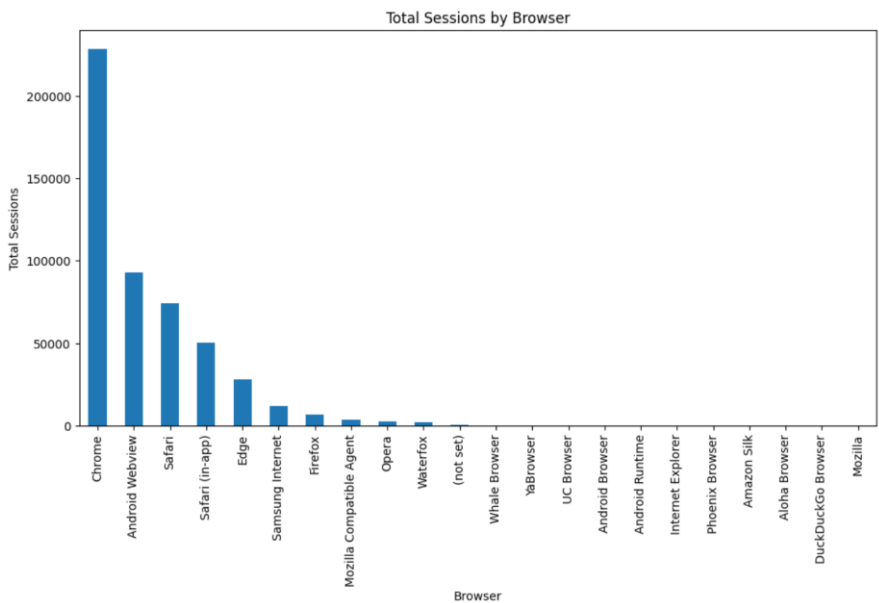
Business



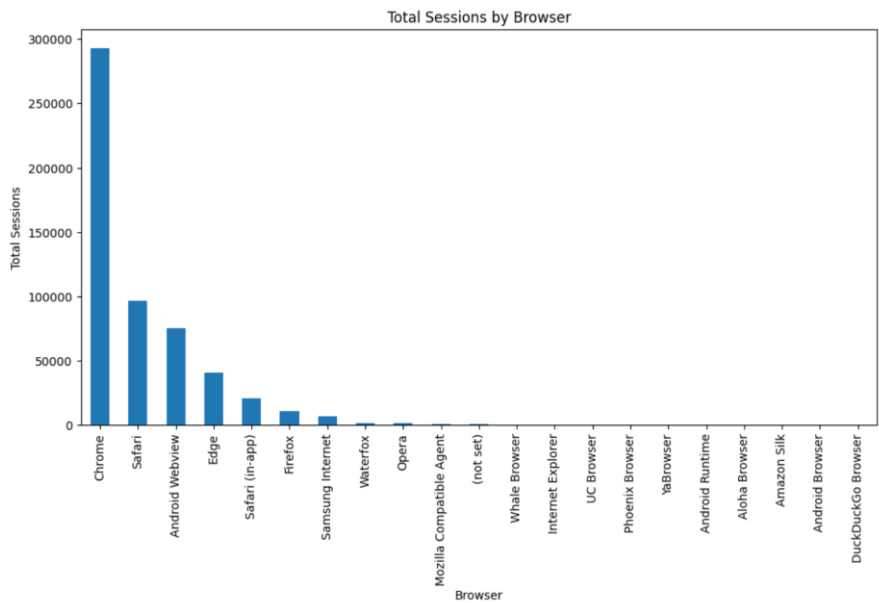
The online platform is predominantly accessed via mobile OS—Android and iOS—whereas the business platform is mainly used through desktop systems like Windows and macOS. This confirms a mobile-first behavior for online users and a desktop-first orientation for business users. Online optimizations should focus on mobile UX, touch interactions, and fast page loads. Business optimizations should favor desktop UI.

# Sessions by Browser

Online



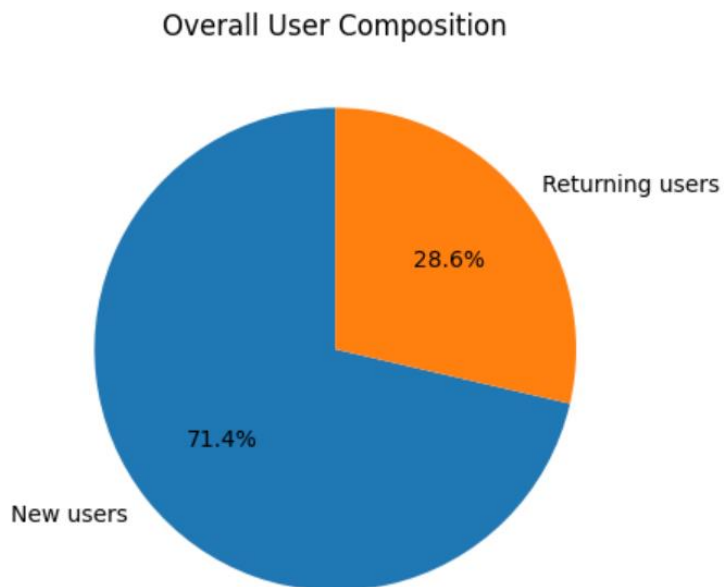
Business



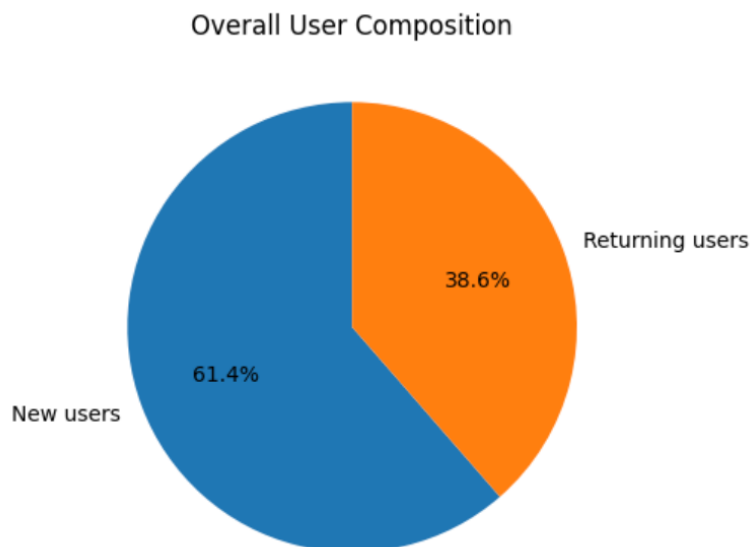
Online sessions are dominated by Chrome and Android WebView, confirming mobile browser reliance. Business sessions, however, show a more balanced browser distribution among Chrome, Edge, and Safari. This calls for robust browser testing and optimization across enterprise tools for business users, while for online users, mobile browser performance, compatibility, and UI consistency across Android platforms are essential.

## User Composition (New vs Returning)

Online



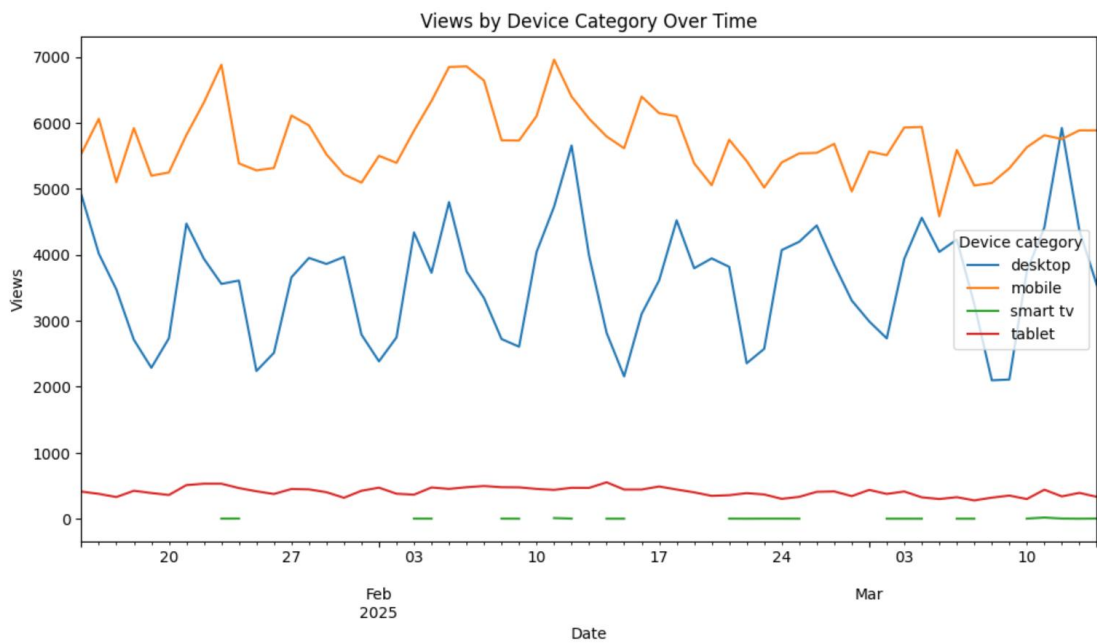
Business



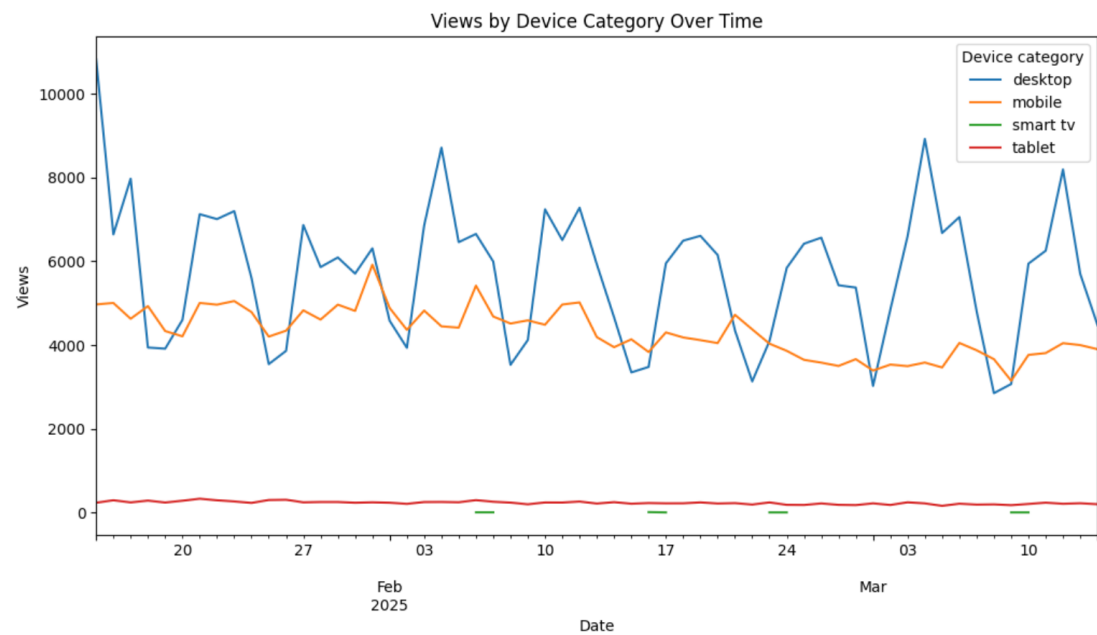
Online platforms attract a large number of new users, but struggle with retention, while business platforms demonstrate better user loyalty with a higher share of returning users. This suggests the online platform needs stronger retention strategies such as push notifications, loyalty programs, or content personalization, whereas the business side should maintain and deepen engagement through useful features, relevant content, and consistent updates.

### Views by Device Category Over Time

Online



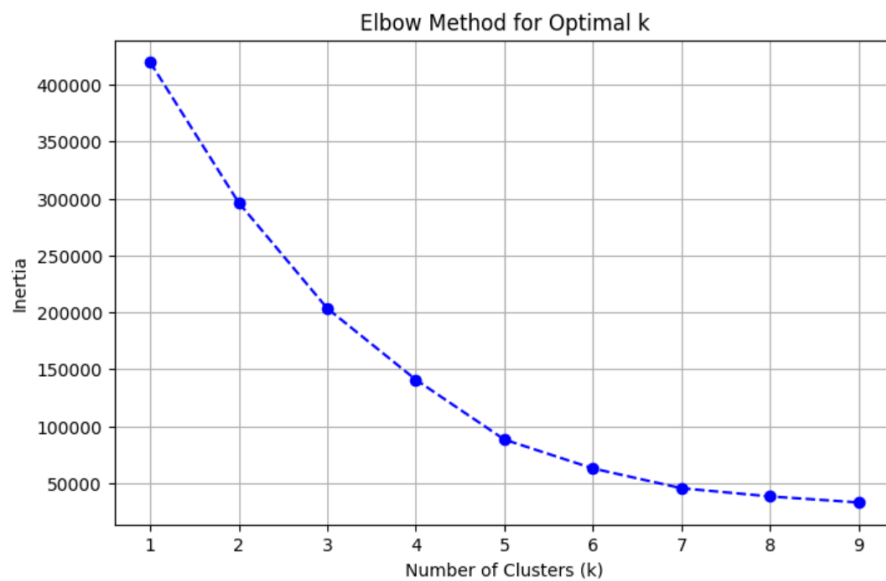
Business



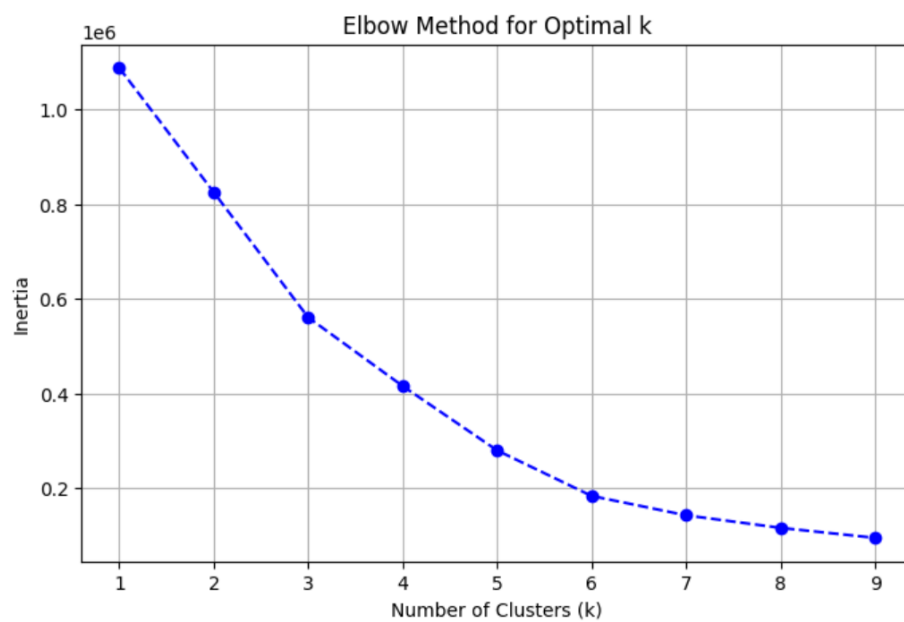
Online users primarily access the platform through phones and tablets, underscoring mobile dominance. Business users, on the other hand, rely almost entirely on desktops. This confirms the need for a mobile-first design strategy online, and a robust desktop-first experience for the business platform. UI/UX decisions should be platform-aware to maximize usability and engagement for both segments.

## Elbow Method for Optimal K (K-means Clustering)

Online



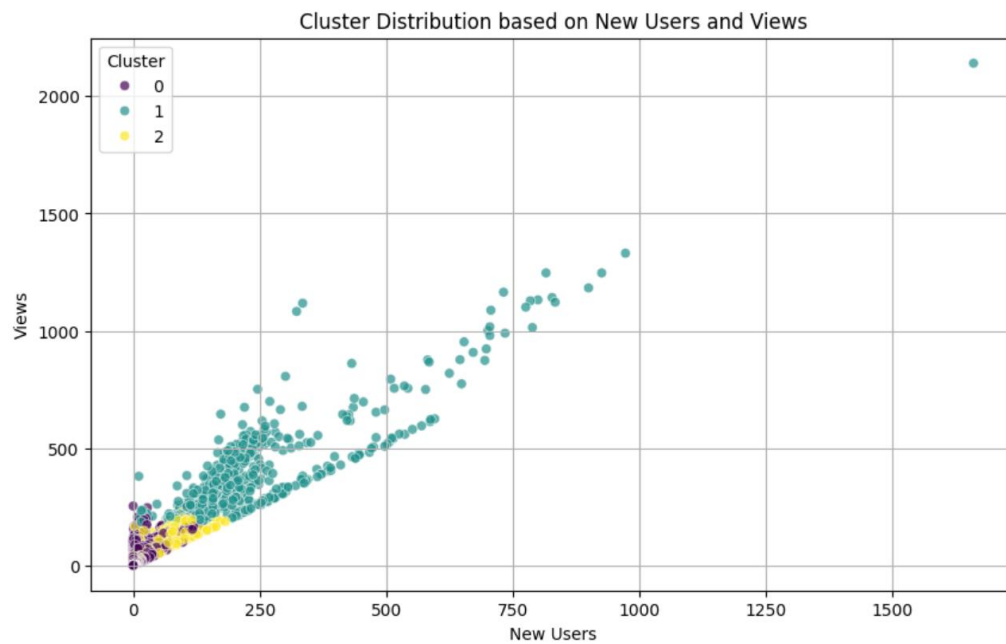
Business



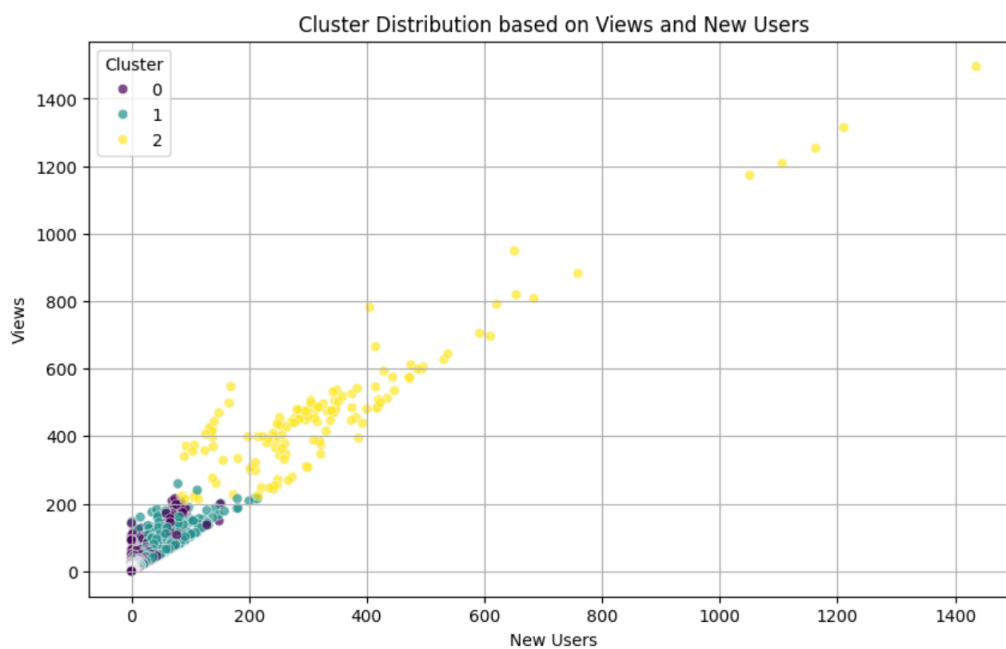
Clustering analysis for both platforms suggests the presence of three natural user segments. These clusters likely represent casual, regular, and highly active users. Recognizing these groups allows for personalized messaging, tiered reward systems, or UI variants. Both platforms can benefit from user-specific experiences to increase engagement and retention across all types of visitors.

## K-means Clustering (New Users vs Views)

Online



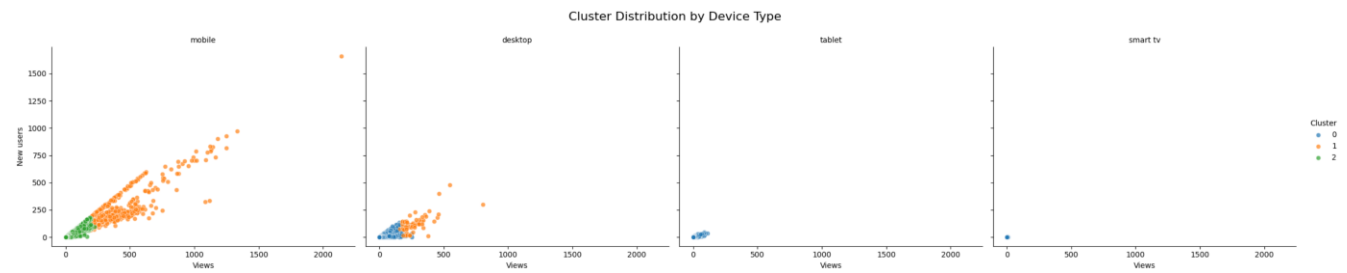
Business



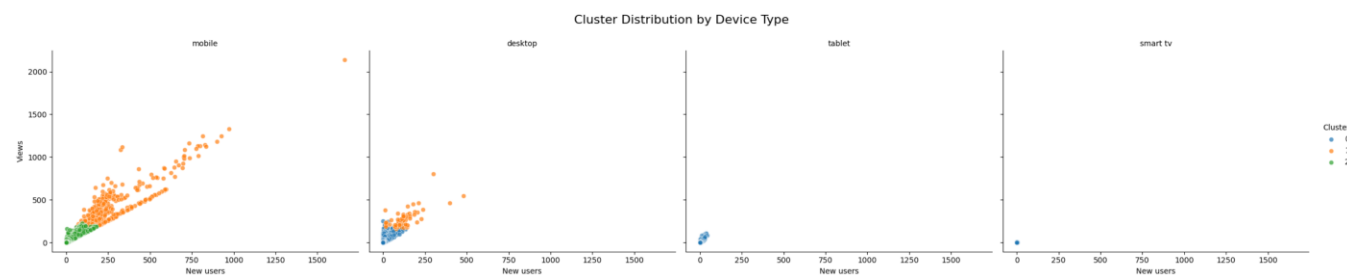
The scatterplot shows how online and business users segment into different clusters based on their engagement and user type. Online clusters may include spikes in new users with low return, while business users may show fewer new entries but more consistent engagement. This distinction should shape how each platform targets and nurtures different segments.

## Cluster Distribution by Device Category

Online



Business

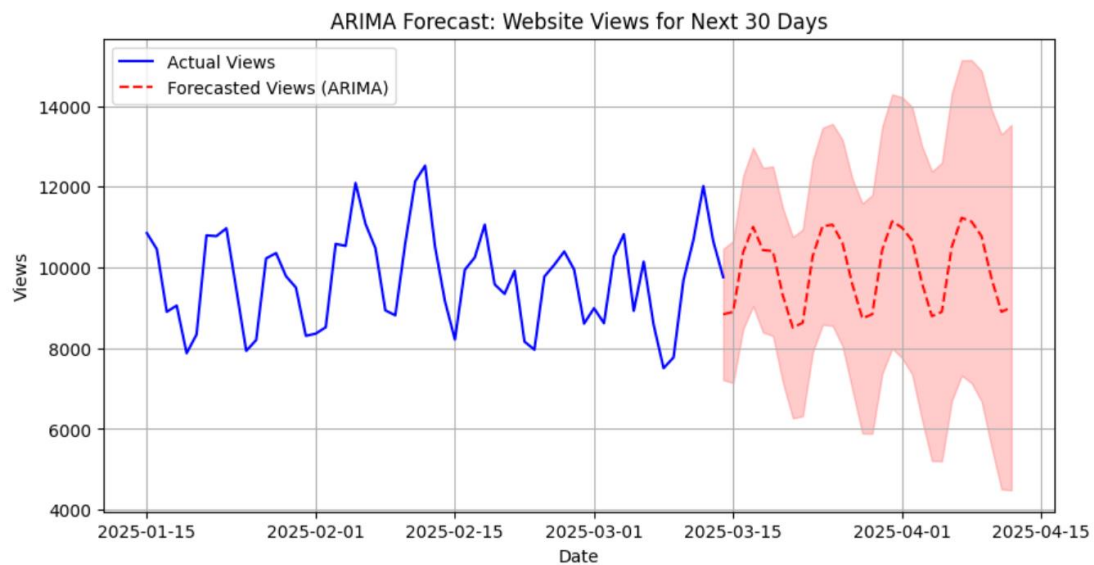


Cluster behavior varies by device type across both platforms. For example, tablet users might engage less frequently but for longer periods, while mobile users are quick and frequent. These insights open doors to customizing experiences and messaging based on device behavior — like offering bite-sized content for mobile or productivity tools for desktops and tablets.

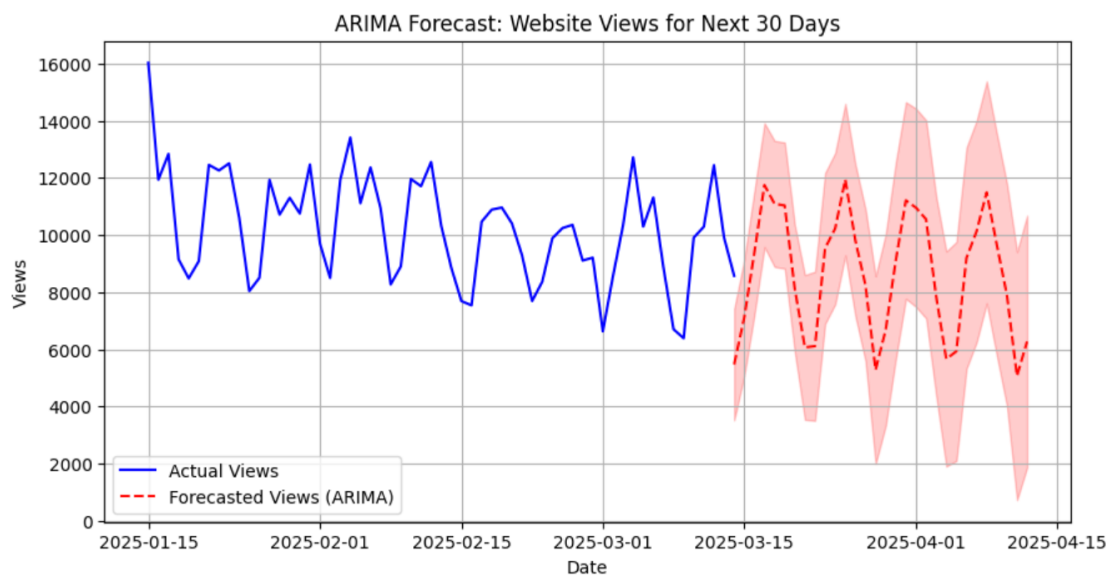


## ARIMA Forecast – Views Next 30 Days

Online



Business



The online platform's view forecast shows more volatility, while the business platform has steadier predictions, mirroring their time-series behavior. These forecasts are essential for planning: online teams can align campaigns with forecasted spikes, while business teams can scale resources around workweek activity. Predictive analytics should guide everything from server provisioning to content publishing windows.

## **Overall Summary & Recommendations**

This exploratory analysis offers detailed insights into user behavior across online and business technology platforms. Time-based trends indicate that online usage is event-driven with weekend dips, while business traffic aligns with the workweek. Operating system and browser analysis show that online users are overwhelmingly mobile-first, especially on Android and iOS via Chrome and WebView, while business users engage primarily via Windows on desktop.

User composition charts show that the online platform has a majority of new users, pointing to successful reach but limited retention. Conversely, business users are more loyal, with a higher return rate. Device usage confirms the online space is mobile-centric, while business remains desktop-driven. These patterns should influence design and content strategies: optimize for speed and mobile usability online, and for desktop workflows in business.

Clustering reveals three distinct user behavior profiles, helping to target specific segments more effectively. Forecasting models like ARIMA provide clear projections that can inform content publishing schedules, server scaling, and campaign planning. Together, these insights provide actionable opportunities.

## **Recommendations to Boost Interaction & Retention**

Prioritize mobile-first UX for the online platform.

Launch loyalty or referral programs to convert new users into repeat visitors.

Time campaigns for the business audience during workweek peaks.

Use clustering results to customize messaging and UI for each user segment.

Monitor forecasted view patterns to align marketing and staffing resources.