How Long Does It Take to Buy?

A Data-Driven Look at User Conversions

Overview of User Behaviour & Conversion Data

📌 **Timeline**: data collected over a 3-month period (Nov 1 – Jan 31)

📌 **Total number of converted users**: 4,419 (3,644 new, 775 returning)

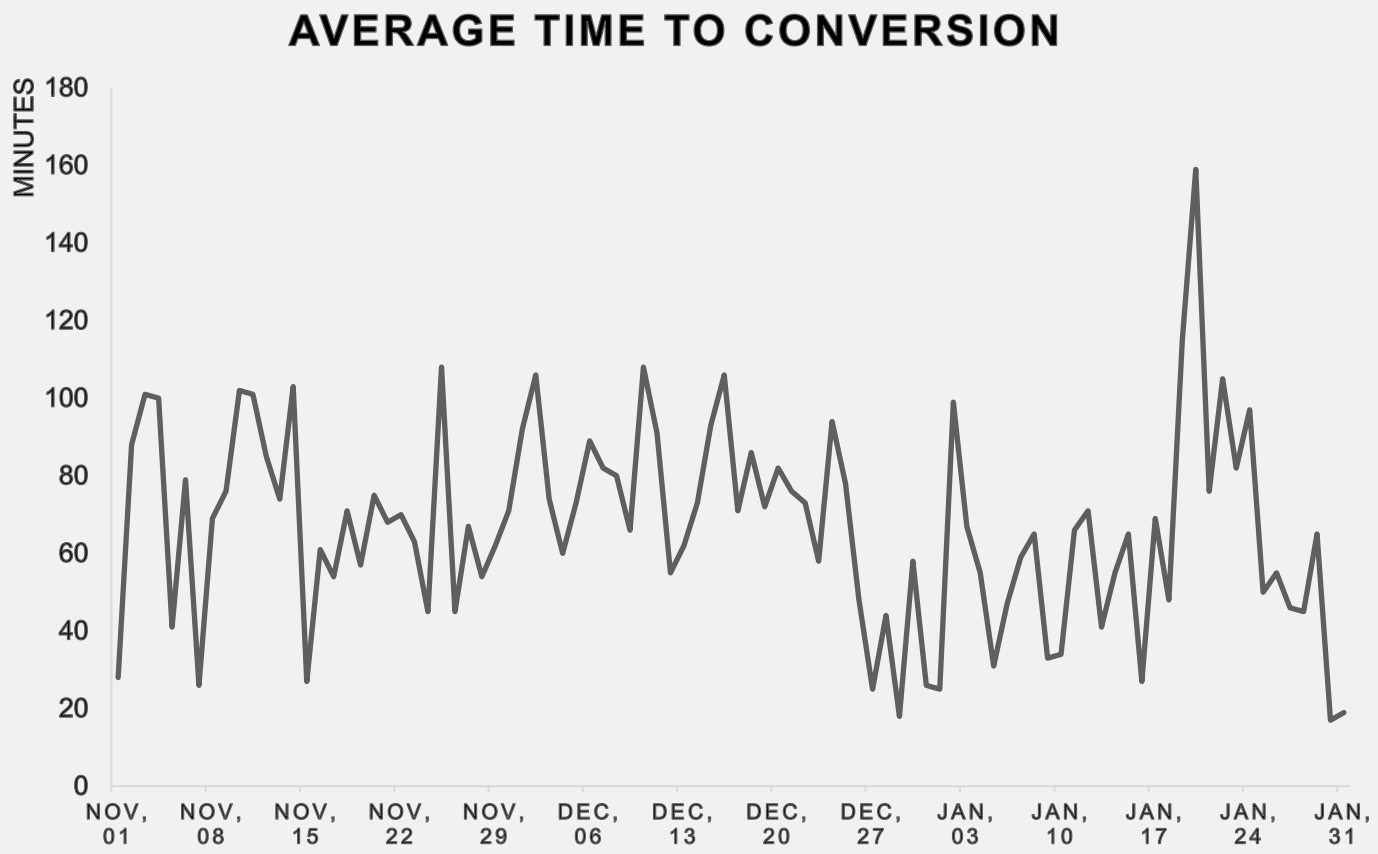
📌 **Total purchases**: 5,692 completed purchases over 3 months

📌 **Average time to convert**: 67 minutes

📌 **Conversion rate:** 1.6%

📌 **Device traffic split**: 58% desktop, 40% mobile, 2% tablet

Daily Trends in Conversion Time: Fluctuations & Patterns

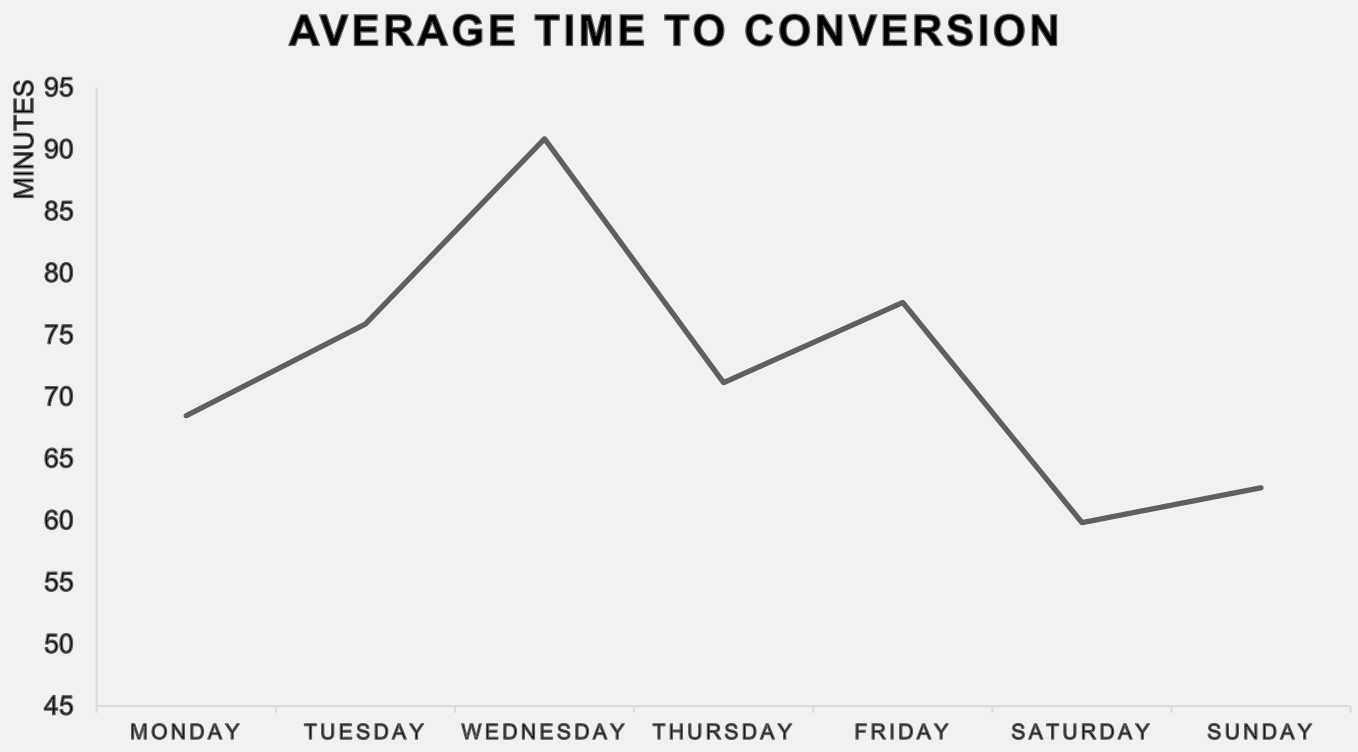


The **average time** to conversion **varies significantly** day-to-day, with noticeable spikes and dips.

A clear **downward trend** is observed towards the **end of January**, possibly indicating increased purchase urgency or optimised user experience.

To **reduce conversion time**, further analysis could explore **user behaviour patterns, session durations,** and **friction points** in the purchase process.

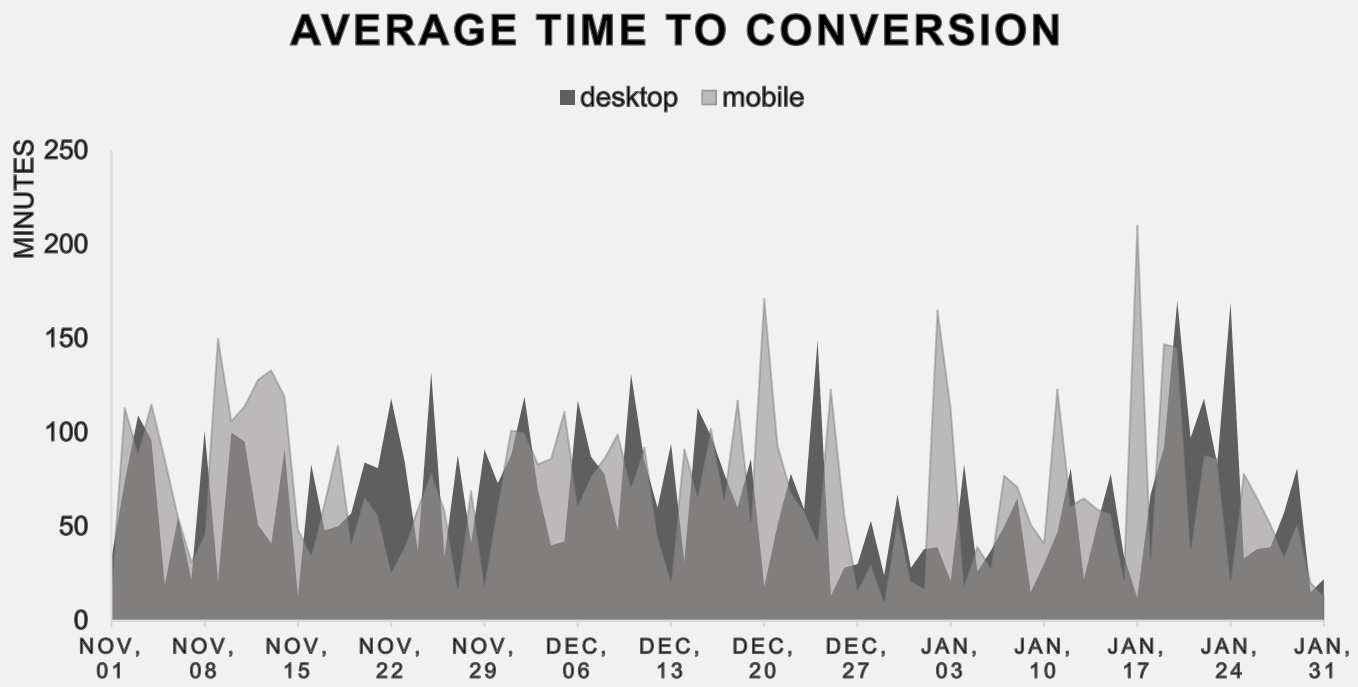
Conversion Time by Day of the Week: Midweek Slows, Weekends Accelerate



Conversion times **peak midweek**, especially on **Wednesdays**, and **decline towards the weekend**. This suggests users take more time to decide on purchases during workdays but act faster as the weekend approaches.

Focusing on **midweek engagement strategies** and **weekend promotions** could help **reduce conversion time** and **improve sales** performance.

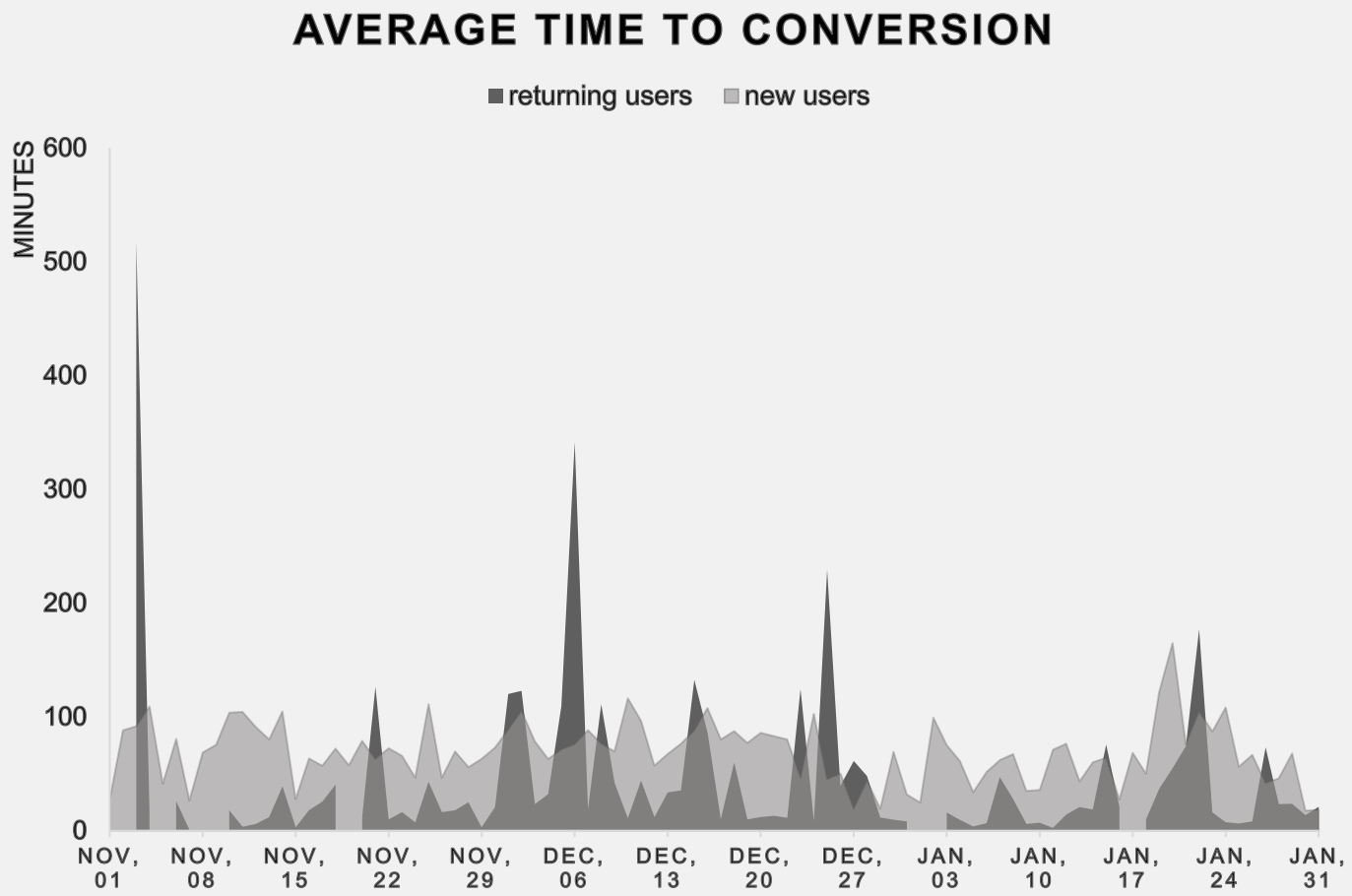
Desktop vs Mobile: No Significant Difference in Conversion Time



A/B testing indicates that the **difference in conversion time** between desktop and mobile users is **not statistically significant**. Both user groups exhibit **similar behaviour** in terms of time taken to complete a purchase.

Since device type does not impact conversion time, **optimising the experience for both platforms equally** is crucial.

New vs Returning Users: Significant Difference in Conversion Time



Returning users convert much faster than new users. Despite a large difference in sample sizes, A/B testing – both on raw and adjusted data – confirms this **result is statistically significant**.

The **presence of extreme outliers** suggests that some users take an unusually long time to convert. This may indicate **users leaving tabs open, hesitation, browsing passively, or comparison shopping before** making a decision.

Key Takeaways and Further Analysis

Key Findings

📌 **Conversion time fluctuates daily**, with no completely stable pattern.
📌 **Midweek peaks in conversion time** suggest slower decision-making on weekdays.
📌 **Returning users convert significantly faster** than new users, confirmed by A/B testing.

Additional Insights

📌 **No significant difference** in conversion time between desktop and mobile users.
📌 **Outliers in new users' data** suggest passive browsing or tab idling.
📌 **Optimising user experience** can help reduce conversion time across segments.

Drawbacks of the Analysis

📌 **User intent is not captured**, making it unclear why conversion time varies.
📌 **No distinction between product types**, which may impact conversion behaviour.
📌 **Sample imbalance –** far more new users than returning users.

Further Steps & Improvements

📌 **Analyse session behaviour** to understand user engagement before purchase.
📌 **Segment by product category** to see how pricing or type affects conversion.
📌 **Investigate cart abandonment** and ways to encourage quicker decisions.