



Time to First Purchase analysis

In the period from 01.11.2020 to 31.01.2021

Wroclaw, 10/09/2024

Time to First Purchase (TTP) approach

Option 1: Time from First Visit to Purchase in Calendar Time (TTP Calendar)

This approach measures the total time in days (or hours) from the user's very first visit to the website until they make their first purchase. It includes all the days between the first visit and purchase, even if the user was inactive during some of those days.

Option 2: Sum of Active Time on Website - Session Time (TTP Active)

This method measures the total time users actively spend on a site across all sessions before making their first purchase. Instead of including the entire calendar duration, this focuses only on the time they were actually engaged.

TTP approach pros and cons

Option 1: Time from First Visit to Purchase in Calendar Time (TTP Calendar)

Pros:

- **Captures user decision-making cycle:** This method is useful for understanding how long it takes for a user to make a purchase, accounting for all time they have to think, research, or compare products.
- **Useful for high-consideration products:** If you sell expensive or complex products, where users often take days or weeks to decide, this method helps measure the length of the decision-making process. Simple to calculate: You only need the first visit and first purchase timestamps.

Cons:

- **May overestimate engagement time:** Since it includes inactive periods when the user isn't engaging with the site, it can make TTP seem longer, even if the user only spends a few minutes actively browsing.

TTP approach pros and cons

Option 2: Sum of Active Time on Website - Session Time (TTP Active)

Pros:

- **Reflects actual user engagement:** This method shows how much active browsing time it takes for users to purchase. It can highlight how long they need to explore your site and products before converting.
- **Useful for optimization:** If you're focused on improving UX or reducing the time users need to browse before converting, this method is more precise for measuring active engagement time.

Cons:

- **Ignores passive decision time:** This approach might underestimate the overall decision-making process, especially for products with longer purchase cycles, where users might need time away from the site to think about their decision.

Overall performance

Time period of the analysis (UTC):

3 months from 01.11.2020 to 31.01.2021

Total number of converted users:

4 330

Total number of users who made first visit and first purchase in the given period

Total purchase revenue:

283 860 USD

Total revenue from first purchases made in the given period

Average Order Value:

66 USD

Average value of the first order in the given period

Total number of recurring users:

760

Number of users who made first visit and first purchase in the given period, that made at least 1 another purchase in the given period

Recurring Users Rate:

17,55%

Total number of recurring users by total number of converted users

Overall performance

MAX sessions per user:

12

Max number of sessions before making first purchase. User can have multiple sessions on different devices before making first purchase.

AVG sessions per user:

2,3

Before making first purchase

MAX purchases per user:

16

Together with the first purchase, made in the given period

AVG purchases per user:

1,3

Users who made first purchase may comeback to make another purchase

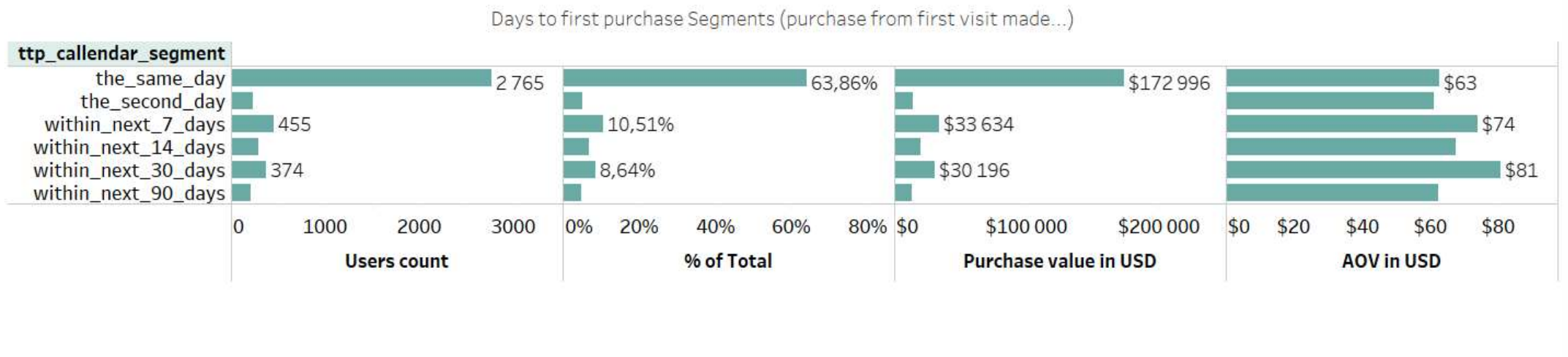
Time to First Purchase in days (TTP Calendar) overview

MIN:	1 day	User made the purchase the very same day when he first visited the site. For calculation purposes the UTC time of first visit and first purchase, has been converted to the local time, to capture „the same day” for the user, not according to UTC time
MAX:	90 days	The dataset period is 3 months, so maximum possible TTP Calendar would be 90 days
AVG:	6 days	Average of days to first purchase is significantly higher than the median. This suggests that: there are relatively few high values compared to lower values (right-skewed distribution); presence of extreme upper bound outliers, that heavily influence the mean, pulling it upwards and causing it to be significantly higher than the median.
MEDIAN:	1 day	Median of 1 day from first visit to purchase suggests that at least half of the users made the first purchase on the same day of their first visit

Active Time to First Purchase in minutes (TTP Active) overview

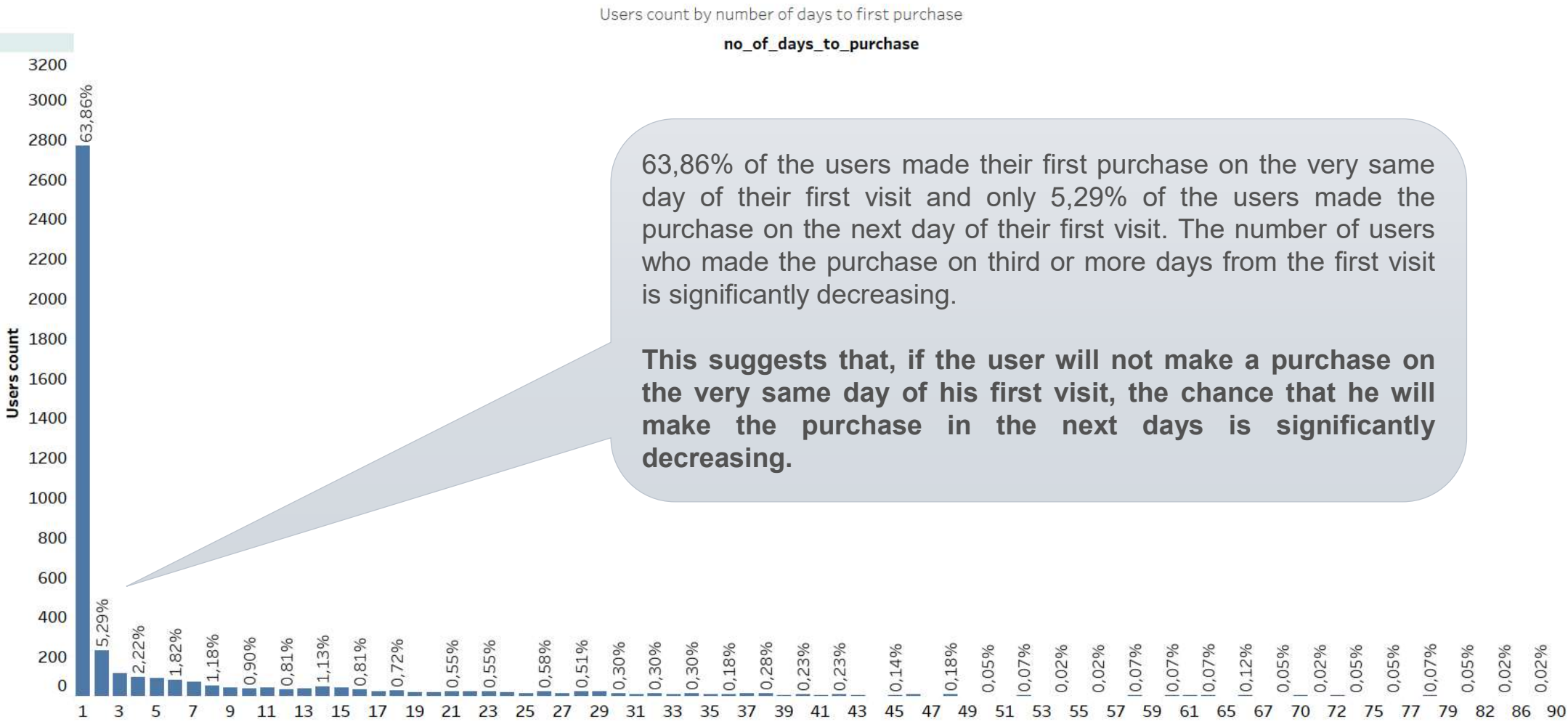
MIN:	1 min	Minimum total active time it took a user from his first visit to his first purchase was 1 minute
MAX:	380 min	Minimum total active time it took a user from his first visit to his first purchase was 380 minutes (6 hours 20 min)
AVG:	32 min	Average of total active time to first purchase is significantly higher than the median. This suggests that: there are relatively few high values compared to lower values (right-skewed distribution); presence of extreme upper bound outliers, that heavily influence the mean, pulling it upwards and causing it to be significantly higher than the median.
MEDIAN:	24 min	
		For at least half of the users total active time spent on the site from first visit to first purchase was up to 24 minutes

TTP Calendar by Segment



- 62,86% of the users made the purchase on the very same day of their first visit
- This segment is also the most beneficial segment of users – constitutes the highest total purchase revenue
- In general the highest the average order value the longer it takes for a user to make the first purchase. The lowest average order value is for the users who made the purchase on the same day of their first visit

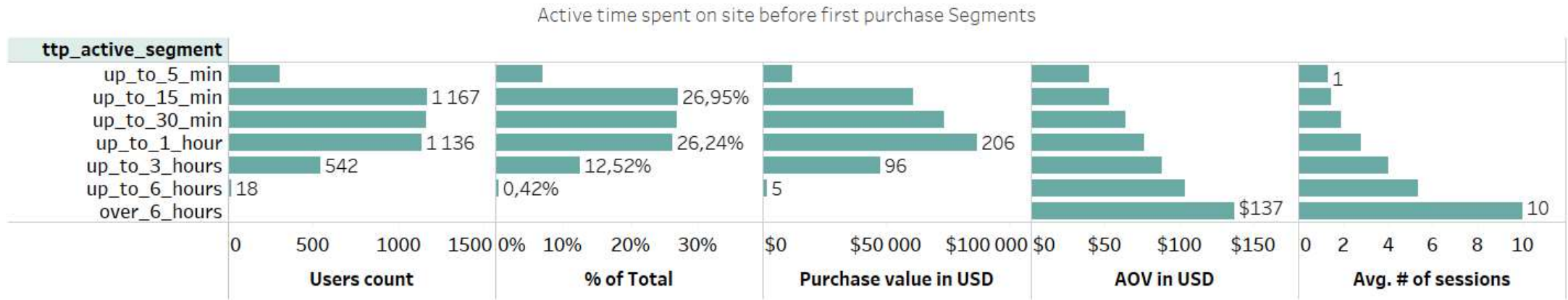
TTP Calendar distribution



63,86% of the users made their first purchase on the very same day of their first visit and only 5,29% of the users made the purchase on the next day of their first visit. The number of users who made the purchase on third or more days from the first visit is significantly decreasing.

This suggests that, if the user will not make a purchase on the very same day of his first visit, the chance that he will make the purchase in the next days is significantly decreasing.

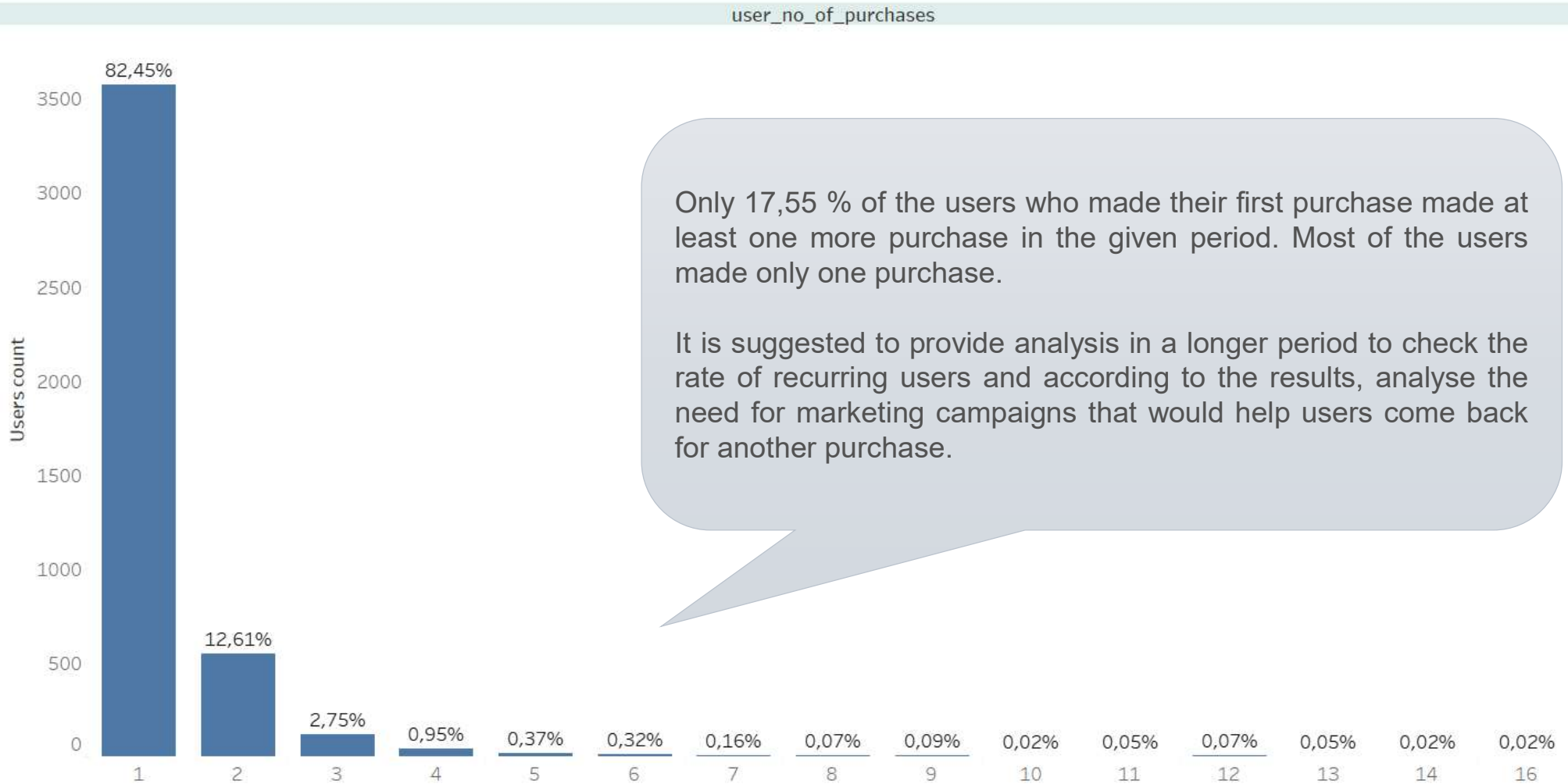
TTP Active by Segment



- 80% of users spend between over 5 minutes up to 1 hour of active time on the site from their first visit to their first purchase
- The higher the average order value the longer the active time the user needs on the site to make the first purchase and the higher the number of user sessions

Recurring users

Users count by number of purchases per user



First visit and first purchase day by days of week

First visit day by days of week

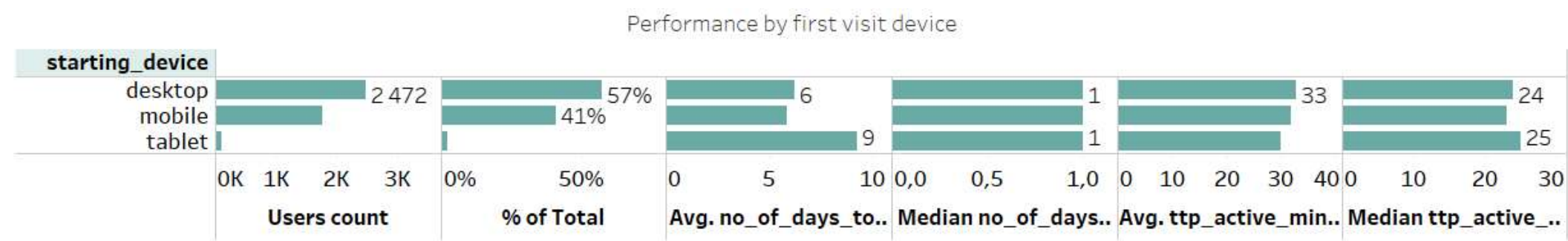


First purchase day by days of week



- The highest number of users made their first visit (that ended with a purchase) on Tuesday (19,97%). Given that most users made purchase on the same day of first visit, Tuesday is also the most purchases made day of week.
- We can also notice higher number of purchases made on Fridays (16,40%)
- Users are less active in terms of first visit and first purchase over weekends

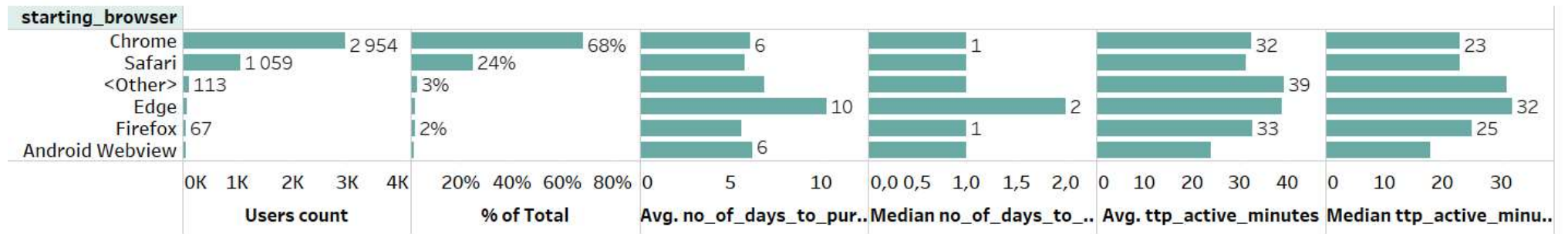
First visit device



- 57% of users who made their first purchase in the given period started their first visit on desktop,
- 41% used mobile,
- 2 % started their first session using tablet

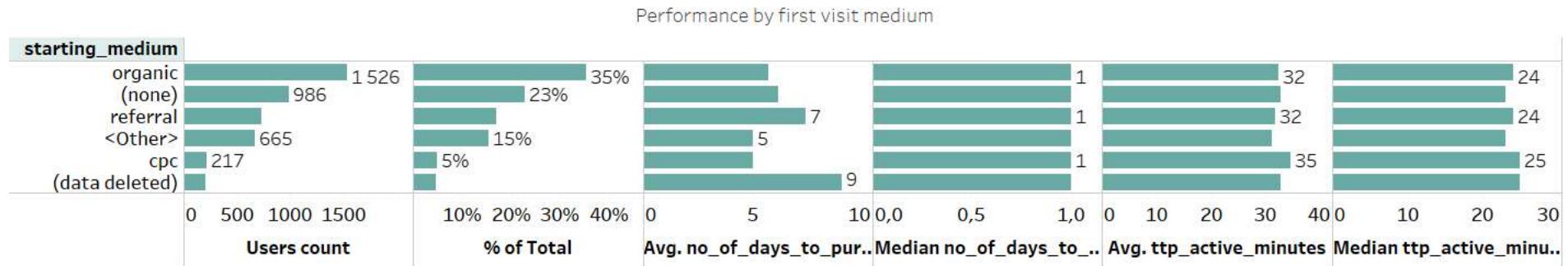
First visit browser

Performance by first visit browser



- 68% of users who made their first purchase in the given period started their first visit on Chrome,
- Another most popular browser in Safari – 24%

First visit medium (traffic source)



- 35% of users who made first purchase in the given time, came to the website from organic traffic

This refers to unpaid search engine results, such as users who found the site via a search engine (e.g., Google, Bing) but clicked on a non-paid listing. This tracks users who discovered the site through natural search engine rankings without any paid promotion.

- 23% came from (none)

This typically refers to direct traffic, meaning users who came to a site by typing the URL directly into their browser or by using a bookmark. It might also include traffic where the referrer information was not passed along.

- 17% from referral

This refers to users who came to a website by clicking a link from another website. This is typically used for traffic from non-search engine sources, like blogs, partner sites, or affiliate links. Useful for understanding how external websites are driving traffic to a site.

- 15% other or unknown sources

- 5% from Cost-per-click (CPC)

This refers to paid search traffic, typically from pay-per-click (PPC) ads.

Conclusions

- **High Conversion Rate on First Day:** A significant portion of users (62.86%) make their first purchase on the same day as their first visit, contributing the most to total revenue. Users who take longer to make a purchase tend to spend more on average but are fewer in number.
- **Decreasing Purchase Likelihood Over Time:** The likelihood of a purchase drops drastically after the first day, with only 5.29% making a purchase the next day and even fewer (less than 10%) doing so after that. This highlights the importance of engaging users immediately.
- **Active Time and Order Value Correlation:** Users who spend more active time and have multiple sessions tend to make higher-value purchases. Those making same-day purchases have a lower average order value but convert quickly.
- **Low Repeat Purchase Rate:** Only 17.55% of users make a repeat purchase in the analyzed period, indicating that most users only make a single purchase, suggesting room for improvement in customer retention.
- **Tuesdays and Fridays seem to be Key Purchase Days:** A higher percentage of purchases occurs on Tuesdays and Fridays, with users being less active over weekends. Tuesday is the peak day for first visits and first purchases.

Recommendations

- ✓ **Same-Day Purchase Campaigns:** Focus on engaging users on their first visit with time-sensitive promotions, such as "Today Only" or limited-time offers. This can increase same-day conversions, which are already significant.
- ✓ **Increase Retention Campaigns:** Develop campaigns aimed at encouraging users to make repeat purchases. Consider loyalty programs or email marketing to re-engage users who have already made one purchase.
- ✓ **Target Tuesday and Friday for Promotions:** Given the significant purchase activity on these days, test the statistical significance of the trend and, if valid, run special campaigns on Tuesdays and Fridays to boost sales.
- ✓ **Optimize for Quick Purchases on Lower-Value Items:** Given that lower-value products are easier to sell quickly, consider optimizing the user journey for these items, potentially through streamlined checkout processes or targeted ads.
- ✓ **Leverage Organic and Referral Traffic:** Since organic search and referral traffic are key drivers, focus on enhancing SEO (Search Engine Optimization) strategies to improve website's visibility in search engine results. Form partnerships with referral sources to further capitalize on these traffic segments.

Thank you

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