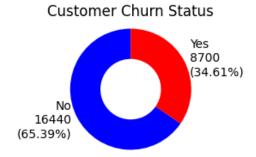
NETFLIX CHURN ANALYSIS: DETAILED INSIGHTS

Q1. What is the overall churn rate?

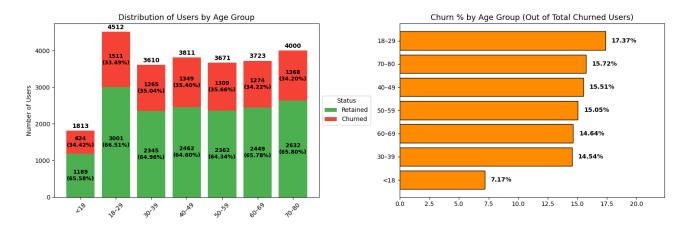
Ans)

Roughly 1 out of every 3 users (34.61%) have churned, which indicates that the business has lost a substantial portion of its user base and potentially its long-term revenue.



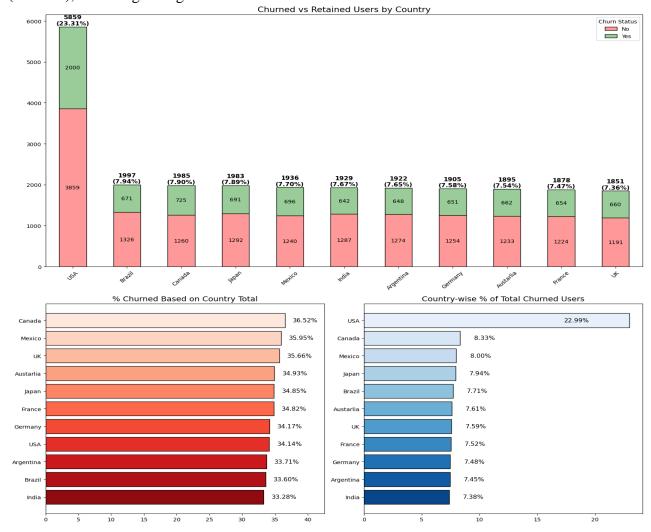
Q2. Which age groups have the highest user numbers and highest churn rate? Ans)

- The 18–29 age group has the largest user base (4,512 users) and also contributes the highest volume to overall churn (17.37%), making it the most impacted segment. Interestingly, it is followed by the oldest 70–80 age group, with the second largest user base (4,000 users) and churn share of 15.72%.
- While the 40–49 segment shows the highest churn rate within its own user base (35.40%), the churn rates across most age groups are relatively consistent, ranging from ~33.5% to 35%. The exception is the 18–29 group, which has the lowest within-group churn rate (33.49%) despite having the largest user base—indicating that its high churn volume is a result of the large user base, not weak retention.
- The <18 group, although has the smallest user base (1,813 users) and the lowest overall churn share (7.17%), exhibits a relatively high own-user churn rate of 34.42%— higher than that of the 18–29 group (33.49%) and even the older 60–69 (34.22%) and 70–80 (34.20%) groups—suggesting early drop-off among very young users despite their smaller presence.



Q3. Which countries show the highest and lowest churn? Ans)

- USA has the largest customer base (5,859), accounting for 23.31% of total users and contributing approximately 23% of total churn indicating that its high churn volume stems from scale, not poor retention. The user volume in every other country is approximately one-third or more of that of the USA.
- Canada, with only 1,985 users, shows the highest churn rate (36.52%) relative to its own user base compared to all other countries, placing USA at 8th in that regard a clear sign of user disengagement.
- UK has the smallest user base (1,851) among the 11 countries analyzed, yet records a high churn rate (35.66%), pointing to poor retention even in this limited segment.
- India, with a mid-sized customer volume (1929, 7.67% of total customers), stands out with the lowest overall churn (7.38%) and the lowest churn rate within its own base (33.28%), reflecting stronger retention than most other countries.

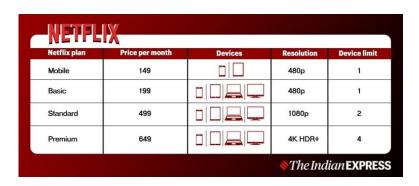


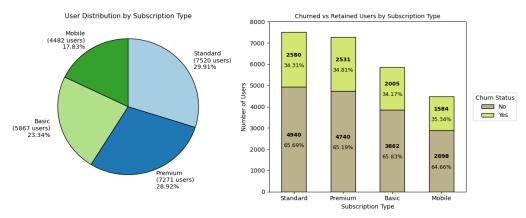
Q4. Is churn rate different across subscription types? Ans)

• The Standard plan is Netflix's most popular, offering HD resolution and two simultaneous streams—striking the best balance of price and features for most

households. Even though Premium plan provides the highest resolution and more streams but is less appealing to broader audience due to its higher cost. In contrast, Basic and Mobile plans are limited to standard definition (480p), one-device viewing, and in the case of Mobile, no casting to larger screens—thus compromising viewing quality and making them less flexible, enjoyable, and attractive compared to the higher-tier plans.

- Our dataset also displays that **Mobile plan** has the **smallest user base** (17.83%), while **Standard** (29.91%) and **Premium** (28.92%) dominate the platform.
- However, Mobile users have the highest churn rate within its own category (35.34%), followed by Premium (34.81%) and Standard (34.31%) plans —even though this rate isn't drastically higher than others, it still reflects the weakest retention among the four types.
- Despite having a smaller user base and an about 3000 user gap from the two other leading plans, the Mobile plan is losing users at nearly the same rate as Standard and Premium. This points to stronger loyalty or satisfaction for higher-tier plans and inefficiencies or discontent in the Mobile plan, possibly due to its limited features or poor experience. Many users may opt for the Mobile plan initially due to lower pricing but churn quickly, perhaps without upgrading, if expectations aren't met.
- The table below showcases details about the various subscription plan Netflix offers.

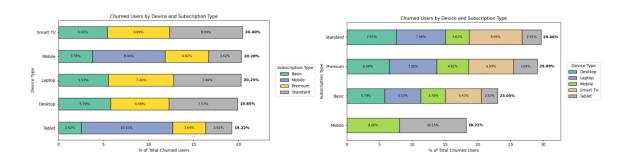




Q5. Which device-subscription combinations dominate churned user behaviour? Ans)

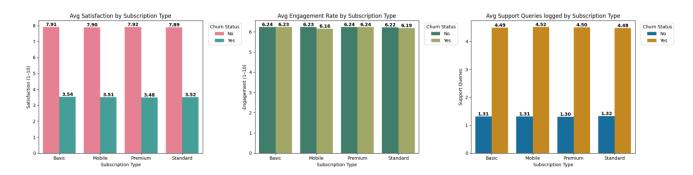
• Across all subscription categories, the Mobile plan shows the lowest churn rate (18.21%), with Tablet users alone contributing 10.15%, forming over 55% of total churn vs 8.06% from mobile phones, possibly due to sub-optimal app experience, unsuitable screen resolution or content not optimized for tablets.

- Nearly 59% of total churn comes from the Standard and Premium plans, with Standard edging slightly ahead of Premium —primarily a reflection of their large user bases rather than weak retention, whereas the Basic plan adds another 23.05% to it.
- Within devices, Smart TVs (20.40%), Laptops (20.25%), and Desktops (19.85%) are the top contributors across these three plans, highlighting that larger-screen devices dominate the churn landscape among higher-tier users.
- Churn on larger screens like Smart TVs, laptops, and desktops could be due to streaming/buffering issues, app crashes or lack of exclusive content—especially for higher-paying users who expect a premium experience. The platform's performance on big screens may feel subpar or outdated, driving frustration. For Basic plan users, churn might stem from fundamental performance issues or low streaming resolution even on stable large-screen devices. These are potential causes and need further investigation to validate.



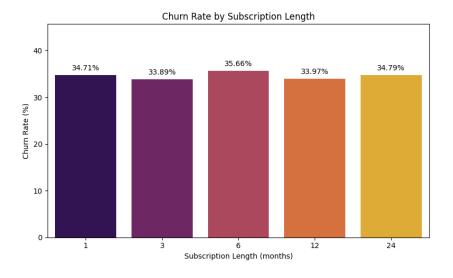
Q6. How do satisfaction, engagement, and support interactions vary between churned and retained users across subscription plans? Ans)

- Churned users are more than 55% less satisfied than retained users across all plans (3.5 vs 7.9 on average out of 10), showing that low satisfaction is a primary churn trigger, especially prominent in Premium plan users registering the lowest satisfaction score (3.48), despite paying the most. This reveals a mismatch between expectations and delivered value, suggesting price sensitivity and unmet feature expectations could be primary churn triggers in this segment.
- Engagement is not a reliable churn indicator as engagement rates between churned and retained users (~6.20–6.23) are nearly identical across all subscription types, suggesting usage alone doesn't guarantee retention if overall experience is disappointing.
- Churners on the Mobile plan exhibit the lowest engagement (6.16 vs 6.23, 6.19, and 6.24), likely due to screen fatigue, reduced cinematic experience, and casual on-the-go viewing during commutes or breaks.
- Churned users log ~4.5 support queries on average—about 3.5x more than non-churned users (~1.3)—with the Mobile segment showing a marginally higher count (4.52), clearly linking **unresolved issues or frustration** resulting from poor customer experience with churn.
- Marginally high engagement but low satisfaction among churned Premium users could suggest a somewhat gap in perceived value for money—which means they're using the service but don't feel it's worth the high cost.



Q7. Does longer subscription length reduce churn? Ans)

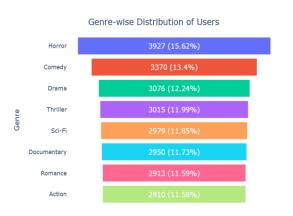
- Churn remains fairly consistent across all engagement spans, fluctuating between ~34% to ~36%, indicating that **longer customer tenure does not guarantee less churn**.
- Even users with 24 months of continuous usage churn almost at similar rates as short-term users proving retention is experience-driven, not duration-driven and tenure length alone is not a reliable predictor of churn.
- Interestingly, churn is the highest—though not by a significant margin among users who have been around for 6 months (35.66%) compared to newer users, those at the 1-month (34.71%) or 3-month (33.89%) mark, possibly due to accumulated dissatisfaction or expectations not being met over time.
- The 6-month mark might represent a **critical turning point** where long-term engagement starts fading, and users start to reassess the value they're getting from the service.

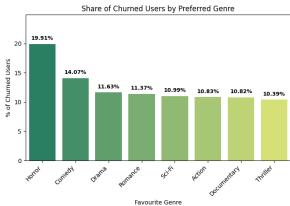


Q8. How does churn vary by genre? Ans)

Horror (15.62%), Comedy (13.40%), and Drama (12.24%) are the most watched and also top churned genres — together accounting for 45.61% of total churn, suggesting that while these genres attract the largest audience, they also see the highest drop-offs. This could be due to factors like content fatigue, repetitive storytelling, declining content quality or disappointment from overhyped content, making it difficult to hold viewers' interest for long.

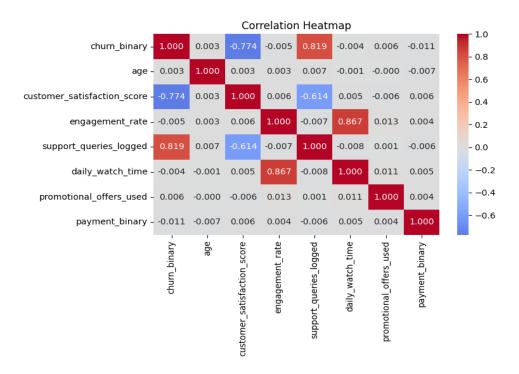
- Despite a sizable user base (11.99%), Thriller contributes the lowest to churn (10.39%) out of all the genres. This relative retention strength may indicate stronger audience loyalty, potentially due to its binge-worthy suspense-driven content flow which keeps users engaged.
- Moreover, genres like Documentary, Romance, Action and Sci-Fi have comparatively lower user proportions (all around 11.5–11.8%) and also maintain a slightly lower churn shares ranging from 10.8% to 11% approx., except for Romance genre with a bit higher churn rate of 11.37%.





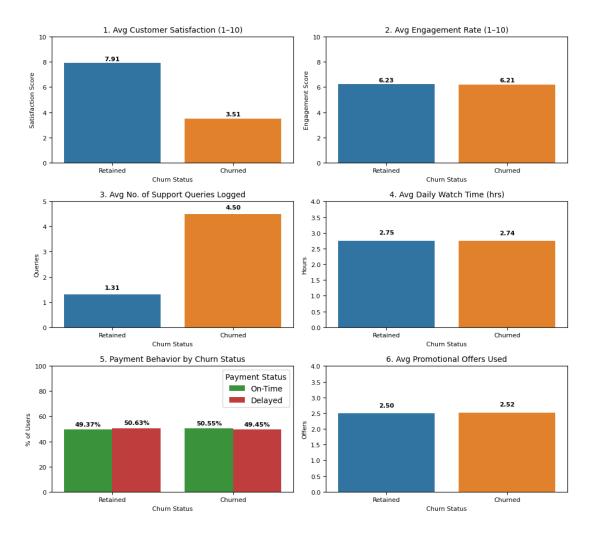
Q9. Which factors are most strongly correlated with customer churn behaviour? Ans)

- There's a strong positive correlation (r = +0.82) between support queries logged and churn. This signals that users facing frequent issues are 82% more likely to churn—pointing toward service friction as a major churn driver.
- On the other hand, customer satisfaction score shows a moderately strong negative correlation (r = -0.614) with no. of customer support queries contacted by users and thereby a strong negative correlation (r = -0.77) with churn. This means as no. of unresolved issues faced by a customer increase, their satisfaction with the service of the platform drops, for which churn likelihood rises significantly.
- Furthermore, we can see despite a high alignment exists between daily watch time and engagement (r = +0.87), neither has a meaningful link with churn ($r \approx 0$).



Q10. What key behavioural differences exist between churned and retained users? Ans)

- Since satisfaction, engagement, and support interactions align with the patterns discussed in Q6 across all subscription plans, the focus here shifts to other behavioural variables.
- The extremely weak correlation of Engagement Score (6.23 vs 6.21) and Daily Watch Time (2.75 vs 2.74 hrs) with churn explains the <0.05% difference between churned and retained users, indicating users often churn despite similar usage.
- Both churned and retained users show almost identical promotional offer usage (2.50 vs 2.52), thus proving its poor association with churn.
- A slightly higher proportion of retained users tend to delay payments (50.63%) compared to churned users (49.45%), with just over a 1% difference.



Q11. What % of retained users are currently at high risk of churning? Ans)

As of June 10, 2025, **10.25%** of retained (16440) users are at high churn risk due to inactivity for over 45 days, indicating disengagement. Another 3.73% are flagged for potential churn based on moderate satisfaction (scores 3–7) and above-median support query usage, a behavioural signal of rising dissatisfaction.

Total retained users: 16440

1. % of users at risk due to inactivity (45+ days, on or before): 10.25%2. % of users at risk due to behavioural issues: 3.73%