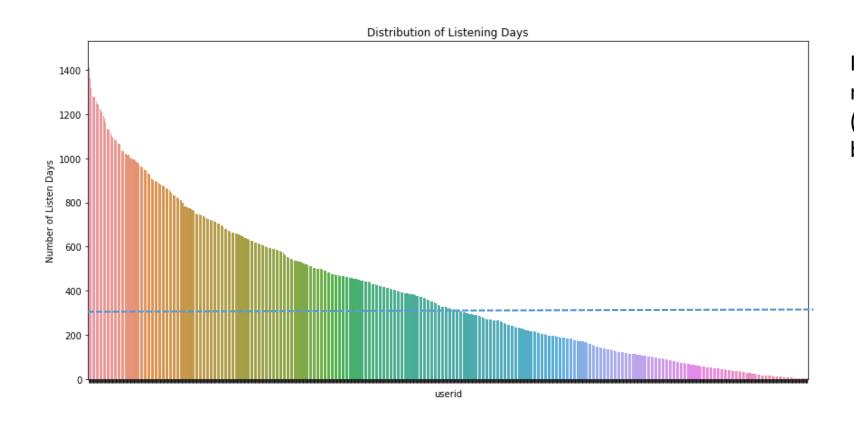
Last.fm Analysis

Listener Engagement & Listening Trend Analysis

By Kinjal Majumdar

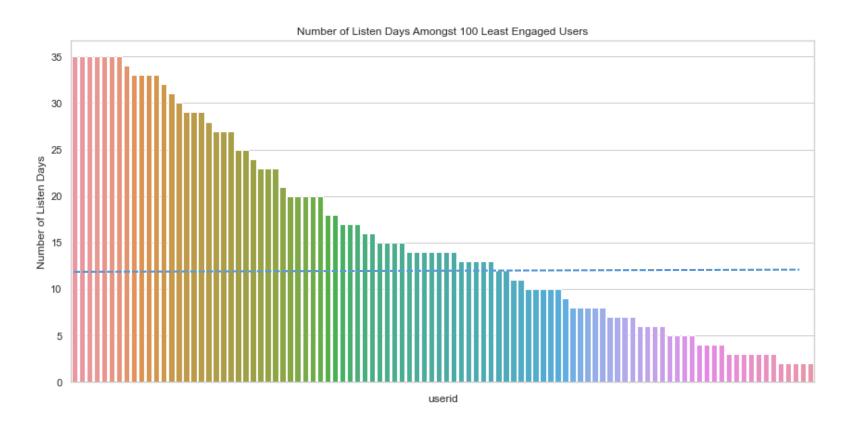
How Many Times Did Users Engage?



In terms of engagement, the median number of distinct days (session days) users tuned in before stopping entirely was

323 days

Encourage higher engagement – 100 least engaged users

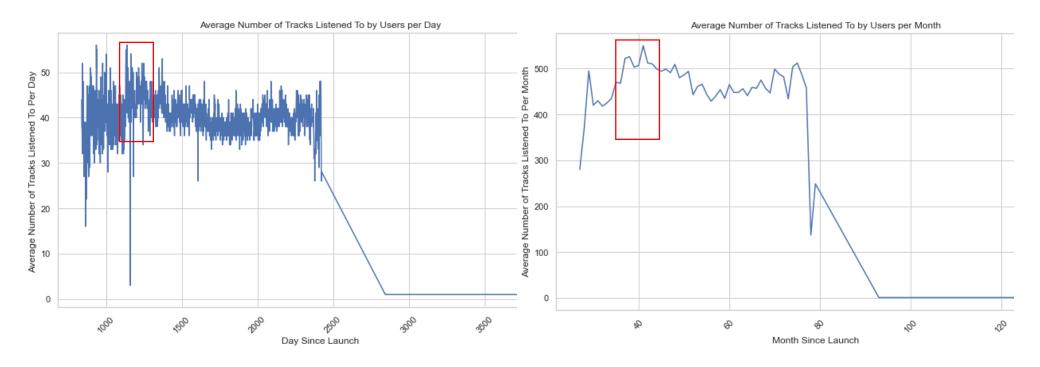


In terms of engagement, the median number of distinct days (session days) the **100 least engaged users** tuned in before stopping entirely was

12 days

This is a segment of users that can be encouraged to engage more with focused offerings

Engagement – Average Number of Tracks Listened to per Day/Month



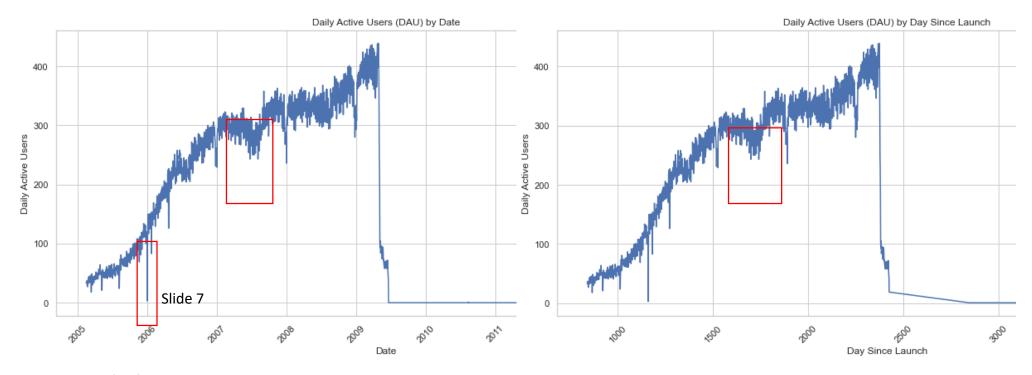
It seems like the average number of tracks listened to **peaked** at around 1200 days/40 months after launch.

There were significant low in engagement after the initial launch uptake at around 100 days/32 months after launch.

Potential reasons for increased engagement may be:

- New anticipated releases
- Improved programming
- Product improvements

Engagement – Daily Active Users

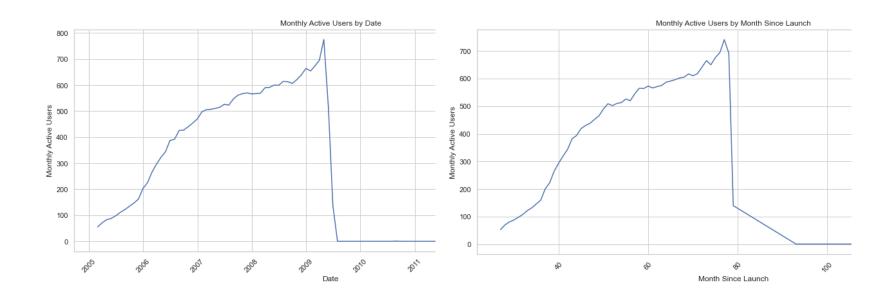


DAU settled at ~ 330 Active Users per Day.

In terms of active users, there was a downturn in daily active users mid way through 2007 at around the 1700 day since launch mark.

It would be valuable to take a look at what was going during this period that could have effected the number of active users.

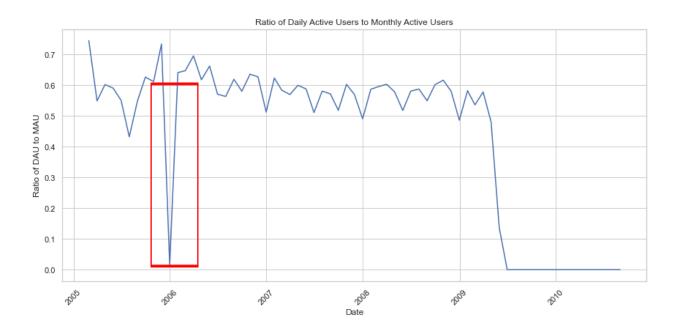
Engagement – Monthly Active Users



On a monthly level, the number of active users followed a healthy progression in the months since launch until the end of 2009 when we anticipate the service was discontinued.

MAU settled at ~600 Active Users per Month.

Engagement – Daily Active Users: Monthly Active Users Ratio



DAU: MAU ratio hovered at ~0.55.

This can be taken as a baseline for engagement and any significant fluctuations against this may be cause for deeper dives.

The significant downturn in the DAU:MAU ratio indicates that there may have been some factors during this early 2006 period which caused an interruption and subsequent drop-off in DAU. This is reflected in the DAU graph on slide 5 at the 2006 mark.

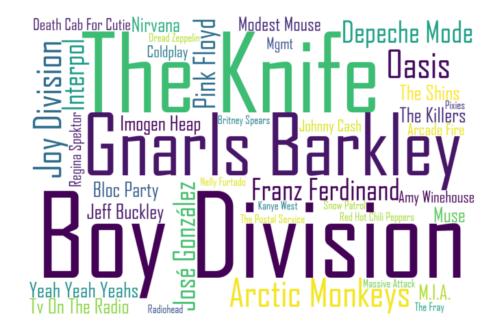
Although since we observed MAU followed a healthy progression, this **does not indicate of poor engagement health.** We can take a look at what happened in early 2006 that caused a disruption in DAU.

Top Songs and Artists



The top 5 played songs were:

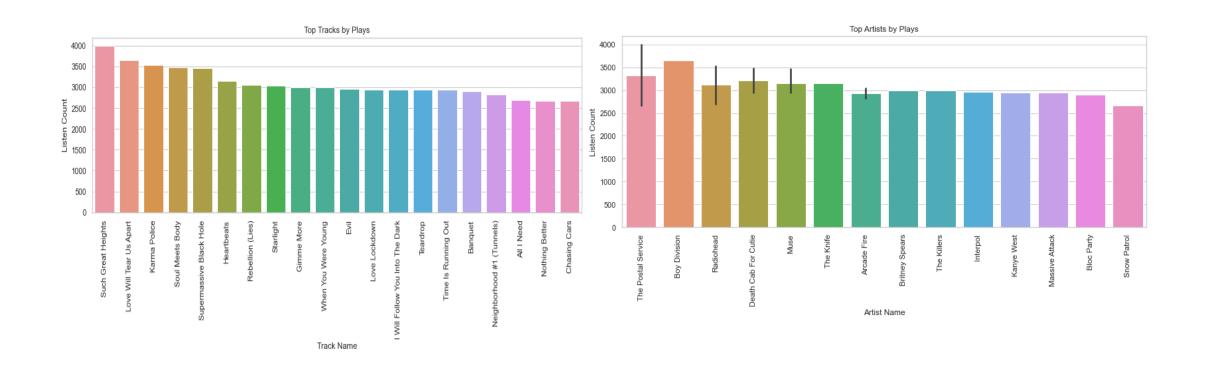
- Such Great Heights
- Love Will Tear Us Apart
- Karma Police
- Soul Meets Body
- Supermassive Black Hole



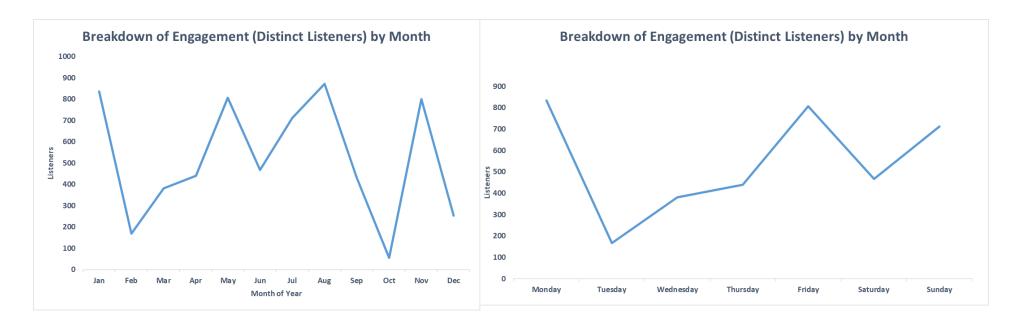
The top 5 played artists were:

- Boy Division
- The Postal Service
- Gnarls Barkley
- The Knife
- Arctic Monkeys

Top Songs and Artists – Listen Counts



Month-wise and Day-wise Engagement Trends



The months of January, and the period between **April to August saw the highest levels** of engagement. **February, October and December saw the lowest levels** of engagement.

As expected, the most active periods in terms of engagement during the week are during the weekend starting on Friday, and carrying on till Monday.

Recommendations:

- Investigate periods where there were downturn in engagements with deep dive analyses.
- Spur higher engagement during plateau periods by creating engagement campaigns such as contests and Artist Q&A's.
- Focus on lower Listen Day users with tailored incentives to engage more.
- Setup periodic live sessions/interviews with most listened to Artists to spur higher DAU and MAU.
- Considering the mid-year slump in engagement, we can look at incentivizing listening, through loyalty programs or points collected for activities completed in each session. Such as: Listen to 5 artists, Listen to 3 different songs, Listen to 1 new genre etc.
- We can also re-examine when artists release their music and see if there is a downturn in new content that correlates to the mid year down turn in engagement. If this is the case, we can stagger our release calendar to distribute appealing content throughout
 the year.
- If we know that listeners engage on the weekend, we can devise tailored content for them which releases mid-week, prompting them to engage mid-week. This will help bump overall mid-week engagement levels.
- The highest levels of engagement coincide with periods in the fiscal year which are generally busier. This could entail that the
 holiday periods such as Thanksgiving during October and Christmas during December might mean people are more engaged with
 family and friend commitments and therefore spending time engaging with last.fm. A deep dive on this would help us ascertain
 whether we need incentives to spike engagement during these months in the year.