Streaming – a challenge for the future of music?

Musimorphose(s), Paris 11.11.15
Arnt Maasø, Univ. of Oslo
<arnt.maaso@media.uio.no>

≈

90% of artists were not streamed by any user

1/3 of streamed artists were streamed only once

Median = 3
Average = 278

Data: all streams 9 weeks 2012

1% of artists accounted for 77% of all streams

≈90% of artists were not streamed by any user

Share of streams by client

44% mobile
47% mobile
66% mobile

Data 9 weeks each year

2011
2012
2013
Searchers’ main device

Heavy searchers vs light searchers

- **Heavy searchers**:
  - 39% iOS
  - 33% Android
  - 17% Desktop
  - 11% Mixed devices
  *Top 15% users who search the most*

- **Light searchers**:  
  - 35% iOS
  - 19% Android
  - 10% Desktop
  - 16% Mixed devices
  *Bottom 15% users who search the least*

Avg. # of streams

Mobile skipping

- Stationary
- Mobile

Mobile skipping by hour:

- Skipping ratio

PC/Mac: 43%
Mobile: 54%
Other: 3%
**Album listening**

- Album listeners (top 20%)
- Non-album listeners (bottom 20%)

<table>
<thead>
<tr>
<th>Age groups</th>
<th>&lt;25</th>
<th>25-45</th>
<th>&gt;45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>5%</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>20-40</td>
<td>72%</td>
<td>61%</td>
<td>61%</td>
</tr>
</tbody>
</table>

- Data: 9 weeks 2012

**Average streams per track number**

- 3X more #1 track streams than #2 tracks
- 9X more #1 track streams than #10 tracks

- Track #1, 2 & 3 = 50% of all streams
- 58% more MOBILE users
- 52% more FEMALE users

**Average stream per album track number**

- For select genres without track #1 (normalized)

**All sorts of algorithms based on other users’ behavior**
Strong and weak social ties

Mark Granovetter (1973): The strength of weak ties
Bakshy et al. (2012): The Role of Social Networks in Information Diffusion

Structural diversity in social contagion (Ugander, et al. 2012): study of virality on Facebook. The size of the network not the most important, but structural diversity and information from different and multiple directions

Social influence & cumulative effects (Salganic & Watts 2006, 2008): of seeing other listeners’ download stats before listening + how ‘hits’ develop > confirms Mathew syndrome (rich-get-richer), also from ‘absent’ ties (e.g. song rank)

Social streaming: Music is personal, and streaming is personalized. Also: a few strong ties are very important for many (Hagen & Lüders).

Still, weak & absent ties important for certain usage (discovery, hits, virality, events)

EVENT-BASED LISTENING

Timeline with of editorial activity and creation dates of user-generated playlists

March 7: WiMP Main festival playlist released and promoted
July 12: WiMP Main playlist re-promoted for first time since March
August 2-3: 5 editorial playlists released for each festival day
August 6-7: All official playlists promoted
August 8-11: Festival days

Number of new festival playlists created by users

Jan Feb March April May June July Aug Sep 2012
Editorial playlist streams vs other festival streams

Non-editorial festival streams
Streams of main editorial playlist

Festival streams from 26. July to 1. September 2012

Big concerts drive big streams

Release of “Wrecking Ball” (2.3)

B: Bergen concert 23.7
R: Oslo concert 21.7
22.7 memorial

Comets and concerts… or
Clouds and concerts...

Streams of ‘memorial song’ after Oslo/Utøya terror
(‘My small country’)

Day of terror attack
One week after
The WiMP player Tuesday 26/7, four days after terror attack

Search & streaming patterns for ‘Mitt lille land’

- Google search
- Search in streaming service
- Streams

Curves are normalized

Source: google.com/trends (Norway) and streaming data from WiMP Music

- Long tradition for staging events in popular music (releases, tours, media appearances etc.)
- Large catalog enables event-based listening
  - a) ‘macro level’ event-based listening
  - b) ‘micro level’ event-based listening (cf. the google generation and searching on a whim)
- Many (unplanned) happenings become streaming events
- Event-based listening, an answer to the ‘burden of choice’
Life of playlists after creation date

- **Number of streams**
  - **1/5 first week**
  - **5 weeks**
  - **90% of streams after 20 weeks**
  - Days after release (average for 2.5M lists)

‘Olds favorites’ over again in % of streams

- **90% of users have <36% streams from same artists in '11 and '12**
- **50% of users have <13% streams from same artists in '11 and '12**

Percent of users

0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%
---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----

Percent of streams from same artist 9 w in 2012 and 2011

Unique and repeated songs (per user)

- **14% of songs account for 72% of all streams**
- **2.6% of streams where users has listened more than 10 times**

Sweeter and Concerts

PARETO & THE 1%
**LP/CD era:** 20% of releases (*roughly*) accounted for 80% of revenue

**iPods:** 23% of songs accounted for 80% of plays. 64% never played (Lamere 2006)

**Streaming:** 1% of artists account for ≈77% of revenue (Maasø 2014). Superstar economy or Blockbusters (Elberse 2013, Mulligan 2014).

From limited distribution and abundant attention, to abundant distribution and scarcity of attention

---

**Challenges (so far)**

- Listeners hear a lot of different music, but technological and social affordances, neophilia, event-based listening (and probably lots of other factors) funnel usage to the same few artists and genres.

- When people stream a little of many artists, and go on to new artists, it will be difficult to generate income over time for most artist (cf. ‘the long tail’)

---

**REVENUE MODEL**
Example

‘Pro rata share’ = personal streams divided by total sum of streams

Pro rata model

1000 streams
=1000/1100

100 streams
=100/1100

SUM: 1100 streams

‘Pro rata share’ = personal streams divided by total sum of streams

<table>
<thead>
<tr>
<th>Personal Streams</th>
<th>Pro Rata Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1000/1100</td>
</tr>
<tr>
<td>100</td>
<td>100/1100</td>
</tr>
</tbody>
</table>

$18,2 90,9% 9,1% $1,8
Long tail of heavy streamers

Pro rata model favors global blockbuster economy
- Pro rata model breaks the ‘direct line’ between artist and fan known from physical sales
- Liquidity challenge: payment after the fact + long ‘latency’, vs purchase of a physical album / file up front for future music listening
- The predicability challenge: income is influenced not only by how well it is received by a loyal listening group, but also by other events, other releases and other fans
- Sony/Spotify leak: a lot disappears on the way to artists with ‘Hollywood accounting’

Not for major labels, blockbuster artists and ‘legacy’ artist with strong fan base and back catalogue
- Not for the streaming audience (in the short term)
- But small labels and artists (cf. liquidity and predicability and developing talent and quality over time)
- Innovation (?) in musics which are not ‘streaming friendly’ (e.g., long songs and albums, less repeatable, less catchy on first listen etc.)
- Local music and local genres
- In the longer term, the listening public, if quality suffers for quantity
- Ultimately: Streaming as sustainable model – with growing lack of trust

CHALLENGE, FOR WHOM?
Streaming as economic platform?

Enable developers, artists, labels ++ to create new services and products that add value to music, AKA: open innovation

Oportunities?

APIs
Metadata
Simple interfaces & insight
Cooperation
Transparent, fair, predictable revenue model

Thanks to and from the stream team!