On the Feasibility of Opportunistic Ad Hoc Music Sharing

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→ Go back to share locally
Your music

Your music
Nice Story, but...

...what has this to do with the Nokia Mobile Data Challenge?
Proof of Concept:

Meet people often enough?
Meet people long enough?
Would people get new music?

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### Meetings

Distance $< 30$ meter (50 meter)  
Time $< 10$ min

<table>
<thead>
<tr>
<th>Maximal distance</th>
<th>Minimal duration</th>
<th>Total number of meetings</th>
<th>Mean meetings per user</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 meters</td>
<td>1 second</td>
<td>30556</td>
<td>804</td>
</tr>
<tr>
<td>50 meters</td>
<td>90 seconds</td>
<td>25925</td>
<td>682</td>
</tr>
<tr>
<td>50 meters</td>
<td>300 seconds</td>
<td>18618</td>
<td>490</td>
</tr>
<tr>
<td>30 meters</td>
<td>1 second</td>
<td>28804</td>
<td>758</td>
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<tr>
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<td>90 seconds</td>
<td>24390</td>
<td>642</td>
</tr>
<tr>
<td>30 meters</td>
<td>300 seconds</td>
<td>17562</td>
<td>462</td>
</tr>
</tbody>
</table>
Meetings
Sharing?

How to formulate requests?

• People may do not precisely know what they are looking for
• If request is too specific the probability of finding a match is small

→ define music taste
Jukefox
Confession

Used music of Jukefox user profiles instead of the actual logged music.

38 collections with 9 to 827 songs (mean: 264) instead of 15 collections with 1 to 964 (mean: 108)
Target Set

Music which matches my taste and is in the network of 9025 songs.

→ On average 480 songs per user
Sharing Summary

Overall 7828 songs would have been shared
Some songs shared up to 11 times
On average a user received 206 new songs
It works!
Thank you!
Questions and Comments?