



EMR Platform

Conception of a European, decentralised Copyright Platform for Music



Bundesministerium
der Justiz und
für Verbraucherschutz



Lehrstuhl für Wirtschaftsinformatik
Prozesse und Systeme
Universität Potsdam

Agenda

1. Status Quo in the Music Industry

Is there a Problem in the Music Industry?

2. Players and Personas

Who are the Players in the Music Industry?

3. Use-Cases

What are the Applications?

4. Concept (Requirements / Target Concept)

What needs to be considered? What could an EU-wide, decentralized solution look like?

5. Outlook

How would a decentralized Platform benefit the Music Industry?

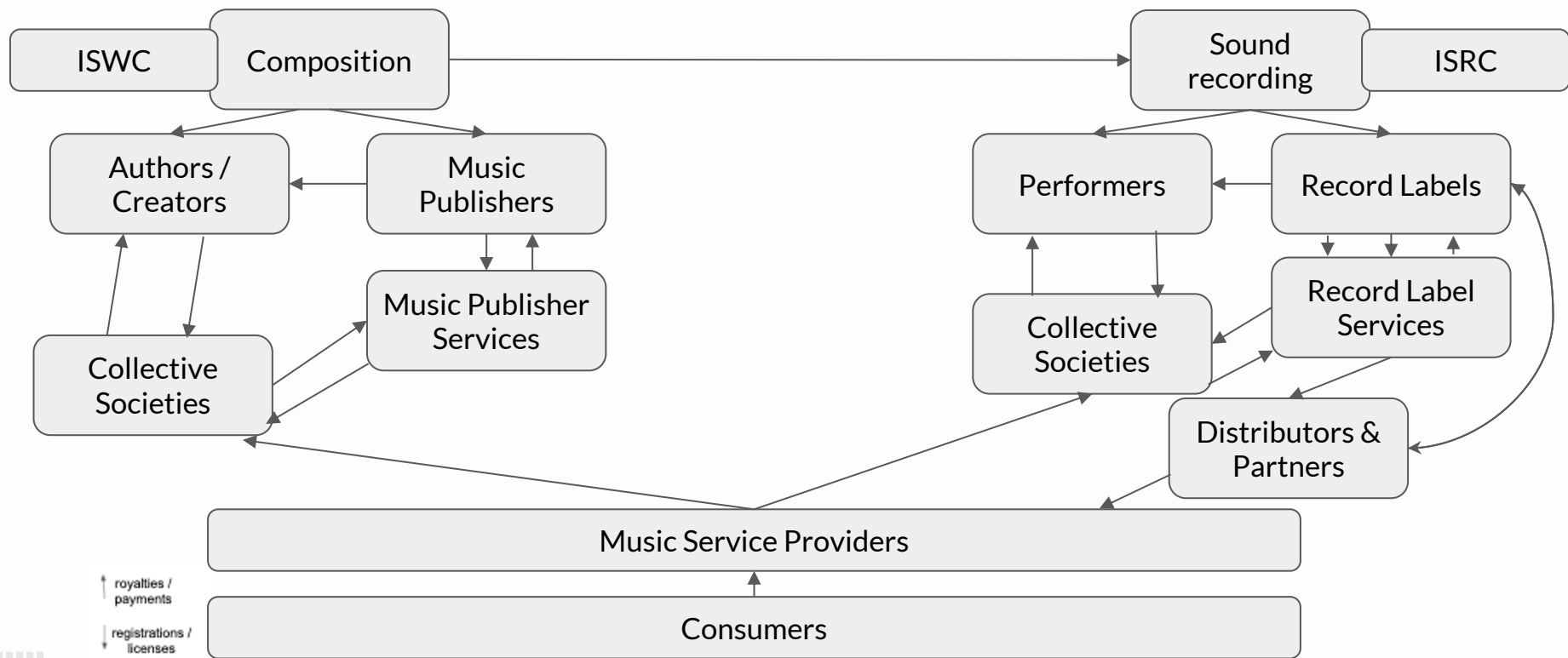


Status Quo in the Music Industry

Is there a Problem in the Music Industry?



Licensing - a simplified overview



Complexity due to Fragmentation

The complexity and cost of music licensing stems from:



Major Sources of Complexity

- The fragmentation of copyright and the almost limitless divisibility of property in the context of copyright
- The separation between 'author's rights' (mechanical rights and performance rights) and 'performer's rights' (master's rights) and the lack of linkage between the ISRC and ISWC identifiers
- Different approaches by stakeholders in dealing with licensing, including different internal systems and data and the lack of standardization between individual internal systems



Data Management Initiatives

- Industry Identifiers ISWC & ISRC
 - International Standard Musical Work Code (ISWC)
 - International Standard Recording Code (ISRC)
- Global Repertoire Database (GRD)
 - Launched in 2008 by EU Commission as GRD working group
 - Project abandoned in 2014
 - Failure due to the various interest groups not reaching a point of agreement regarding who should control what
- New US database as part of the Music Modernization Act (MMA)
 - Launched in 2018
 - Also yet needs an authoritative and comprehensive database



Why a decentral approach makes sense

- Failure of previous centralized Approaches
 - A comprehensive database is needed but centralized approaches have been unsuccessful
- Existing Power Relations
 - Controversy about who would have control over the data and who would manage the catalogue would be circumvented
 - Power relations would no longer hinder participation in a common platform
- Platform Purpose
 - No provided data shall be saved on a central server
 - Sole platform purpose: Data exchange and data quality improvement



Players and Personas

Who are the Players in the Music Industry?



Actors in the in Music Industry





Aretha Artist

Tasks

- Producing and composing of songs
- Conducting Gigs

Skills

- Singing
- Playing Instruments
- Sound Comprehension

Affected Stakeholder

- Performer
- Composer
- Author
- Contributor



Data Knowledge
Level:

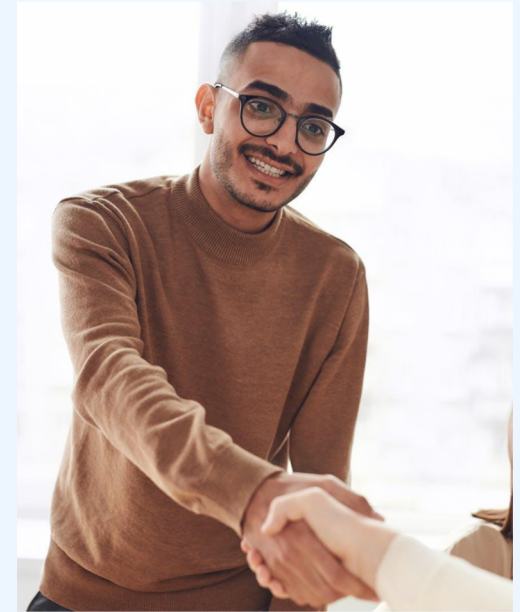
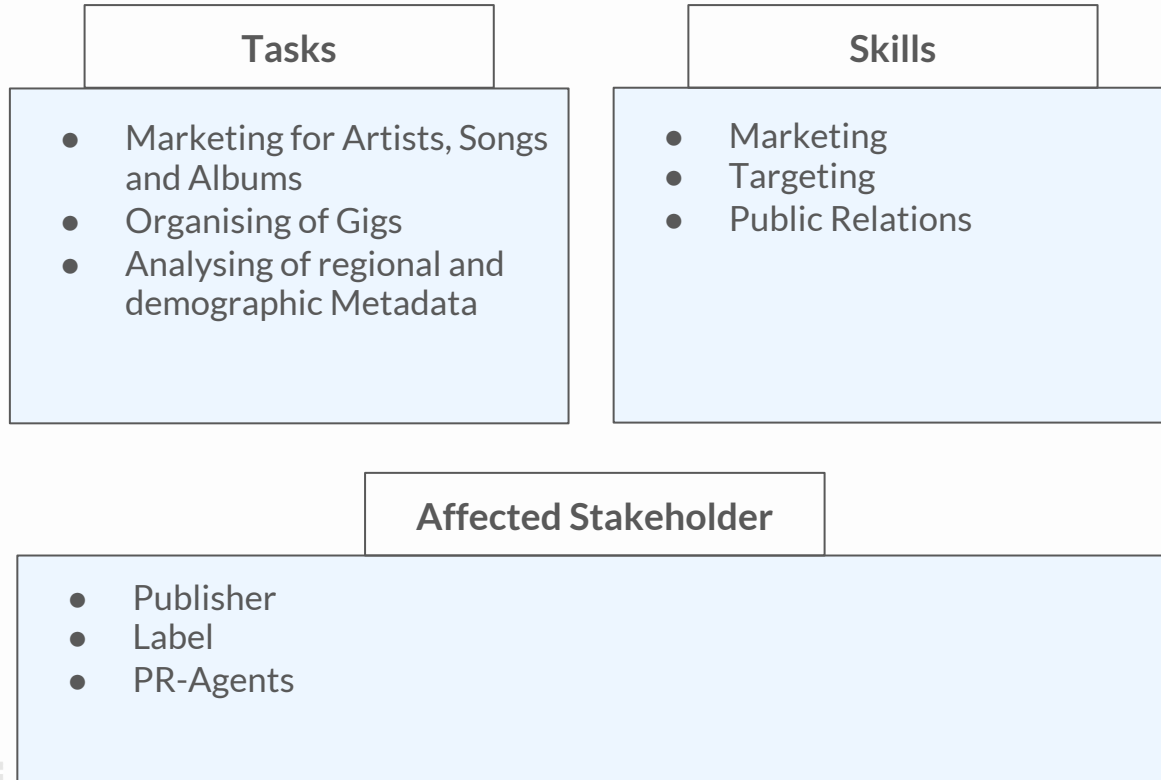
Low



Data Quality
Importance



David Deal-Maker



Data Knowledge

Level:

Mid



Data Quality

Importance





Carla Collector

Tasks

- Cataloguing of Information and data
- Following music streams for clarifying royalty streams
- Reviewing song lists and licenses for events

Skills

- Organisation
- Legal Knowledge

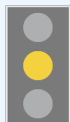
Affected Stakeholder

- CMOs
- Archives
- Libraries



Data Knowledge
Level:

Mid



Data Quality
Importance



Paul Provider

Tasks

- Providing Datasets
- Digitizing analogue data
- Consultation in processes and workflows

Skills

- Data
- Understanding of different Music Genres

Affected Stakeholder

- Data Provider
- Consultants



Data Knowledge

Level:

High

Data Quality

Importance

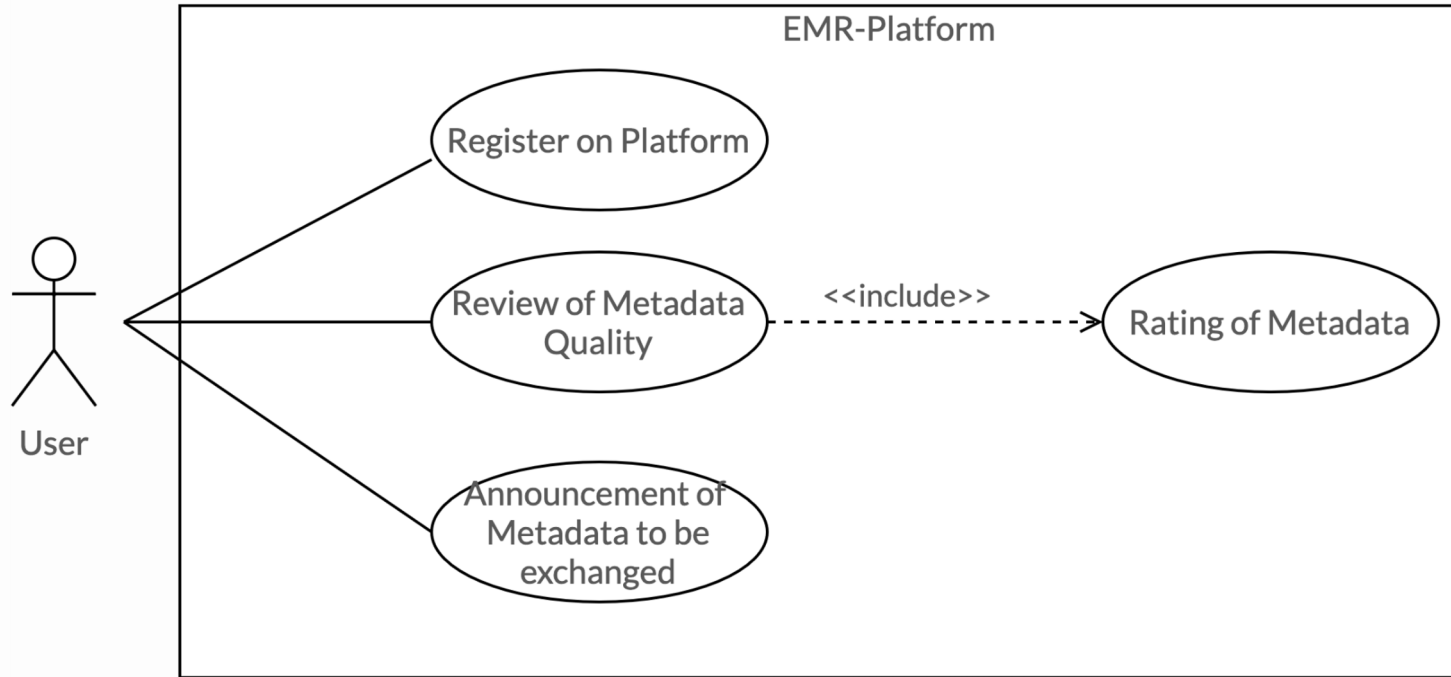


Use Cases

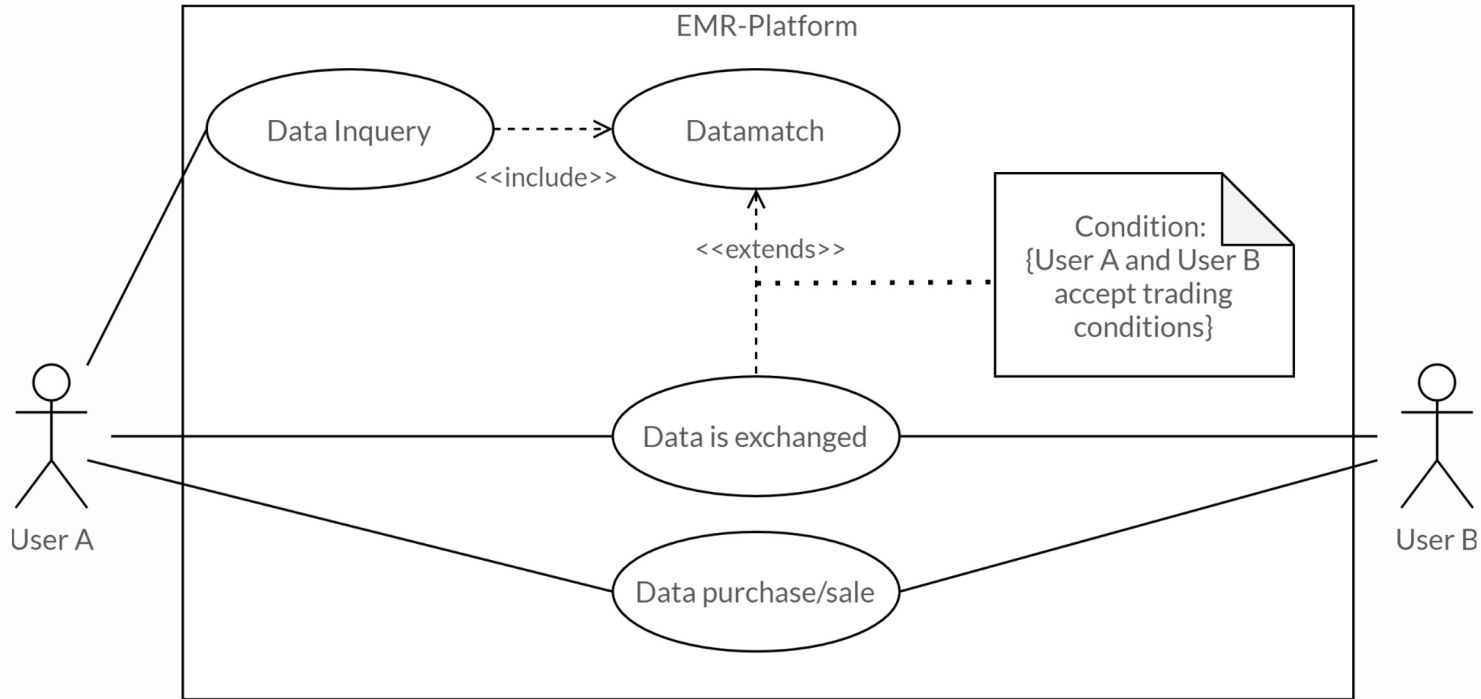
What are the Applications ?



General functions of Platform



Interaction between Users



Target Concept

What needs to be considered?

What could an EU-wide, decentralized solution look like?

Prerequisites for the Platform

- Decentral Storage of Data
- **No** central repository
- **No** influence on current power structures of actors
- Platform should **not** lead to shift in power relations
- **No** monetary transactions



Requirements

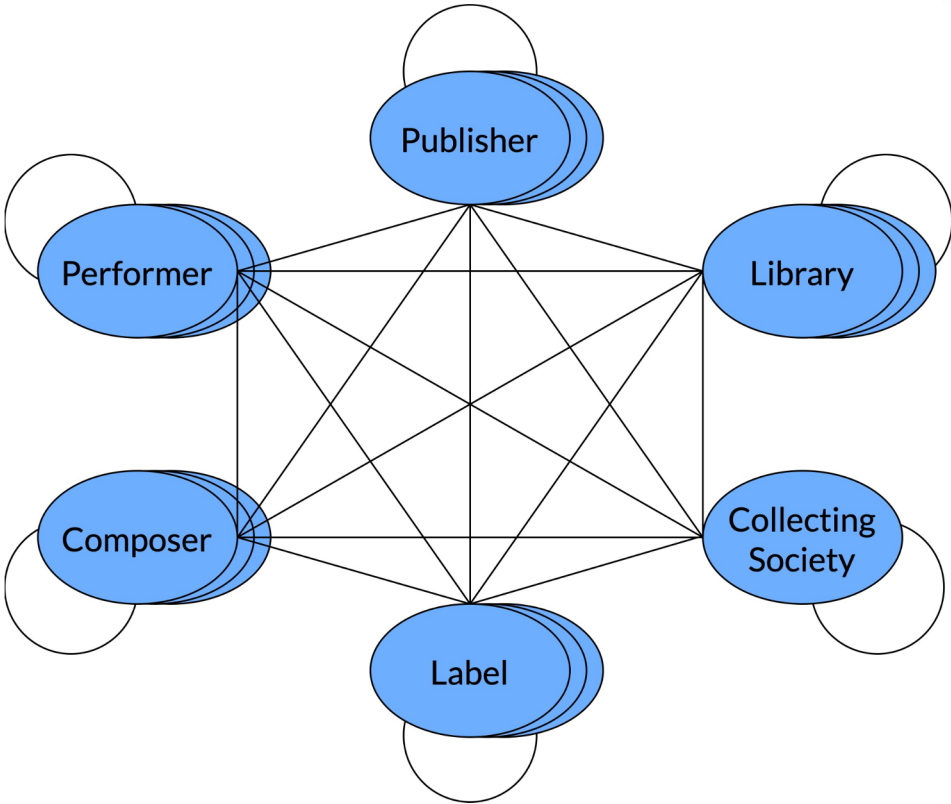
General

- ⤴ Mutual Recognition of Reciprocity
- ⤴ Ensuring the integrity of the Data
- ⤴ Education Program

Technical

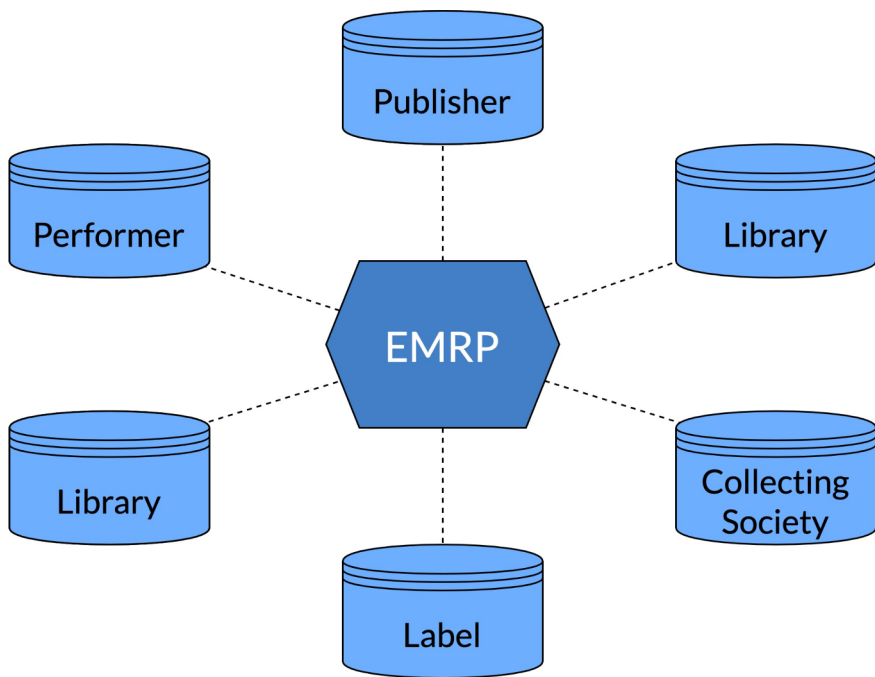
- ⤴ Data is distributed decentrally
- ⤴ Rating of the Data by Algorithm
- ⤴ Input form / XML Editor
- ⤴ Matching of Data





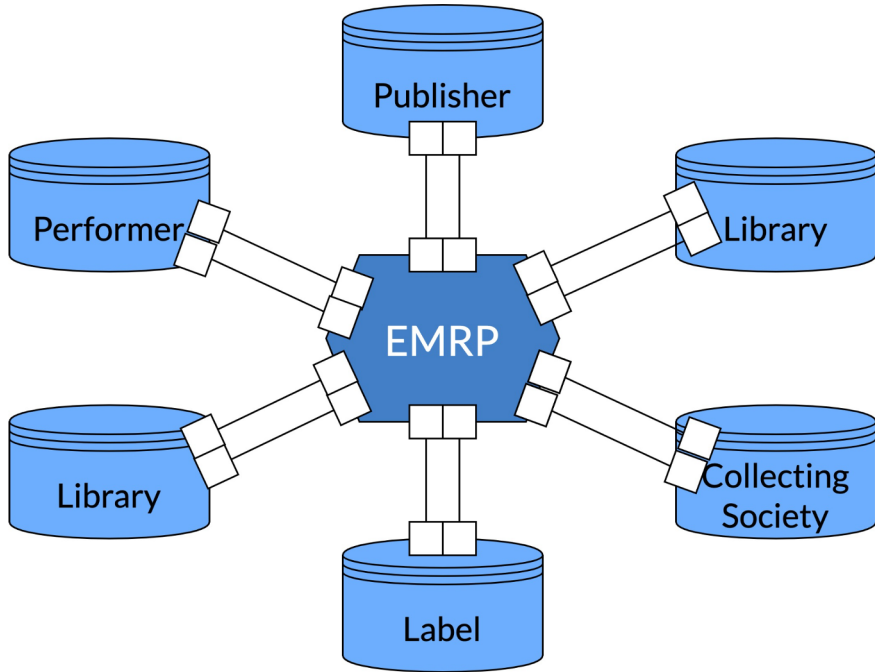
Reciprocity

- Users have a mutual need to exchange Metadata
- Users only provide Data when there is no direct Competition



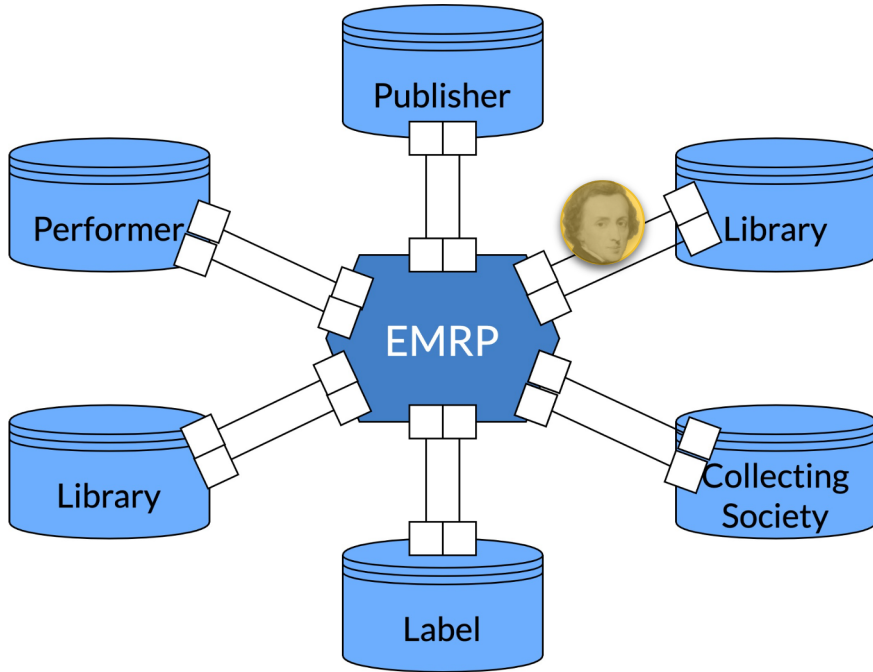
Propoal of a decentral Solution

- Introduction of an independent European Music Rights Platform (EMRP)
 - Platform connects Users and enables Data exchange
 - EMRP neither owns, nor saves Data in one Database, it just connects individual decentral Databases
-
- Simplified Data Exchange
 - Rating of Data Quality
 - Users can improve their Data Quality



Interfaces

- EMRP provides Interfaces to all individual Data Systems
- Interface of the respective System sends Data via Platform to other Users
- Users do NOT have direct access to Data Systems of other Users
- Data requests shall be addressed to EMRP
- EMRP "matches" Users for Data Exchange/Purchase



EMR Coin

- Artificial Currency Unit is introduced to enable Data Exchange
 - Data providing User receives EMR Coin
 - Data requesting User pays with EMR Coin
 - Data Quality is rated by Algorithm
 - Higher Data Quality increases the worth of the Trade
-
- Data exchange adds value for every User
 - Every Data exchange increases the industry-wide data quality

Why the use of a “currency unit”?

- Barter Trade vs Currency Use
 - A “currency unit” simplifies the exchange of goods - in this case the exchange of data and datasets, as the exchange does not only proceed as a two-way exchange between two users but in more complex ways
- Measure of Value
 - A “currency unit” enables an attribution of different values to the different datasets and the different dataset-qualities
 - It allows the conduct of an unequal trade by compensating users with a respective equivalent value
- No Monetary Influence on Platform
 - EMR Coins cannot be purchased financially, they are awarded by sharing data with other users
 - Monetary power relations are not depicted on the platform



Technical Requirements



Matching Algorithm

- Identifies and matches Data related to same item for the purpose of completion
- Matches users with the same information to trade



Rating Algorithm

- Evaluates the accuracy of a user's data set
- Higher rated data sets more valuable than lower rated data sets

Technical Requirements



Artist ID

- Key Variable
- Data Sets can be matched by Performer, Contributor or Composer
- Manual Errors will be eliminated



DDEX





- Platform can read DDEX
- Searching for DDEX is possible

Challenges

Issues

- Initialization Problem: Critical Mass must be reached
- Mutual Reciprocity is not necessarily guaranteed
- Data Quality of the various Stakeholders differs greatly
- Operation on the Platform is complex

Response

-  Promote via larger Partners (Labels, Associations, Conferences, etc.)
-  Identify where this is not respected and provide Incentives
-  Check Data Quality and evaluate accordingly
-  Upload Training videos and Materials to empower all Stakeholders



Challenges

Issues

- Data Quality on the Platform for certain Stakeholders is too poor for exchange
- Data could be blocked for certain Stakeholders, as distribution may not be desired

Response



Online Competitions to promote Data Quality



Discussion on why data exchange between certain Stakeholders does not take place

Incentives



Marketing

- Campaign for Importance
- Scoreboard with largest Data exchange by Stakeholder; Winner receives social recognition
- Data Fundraising campaigns



Comprehension

- Enabling Education via the Platform
- Explanatory Videos



Outlook

How would a decentralized Platform benefit the Music Industry?



Benefits of the Main Stakeholders

Performer

- Understanding the rights
- Little effort
- Understanding where music is played

Publisher

- Distribution
- Targeting

Collecting Management Organisation

- Improvement of Data Quality
- Understanding where music is played

Label

- Simplification Label-Copy
- Targeting

Composer

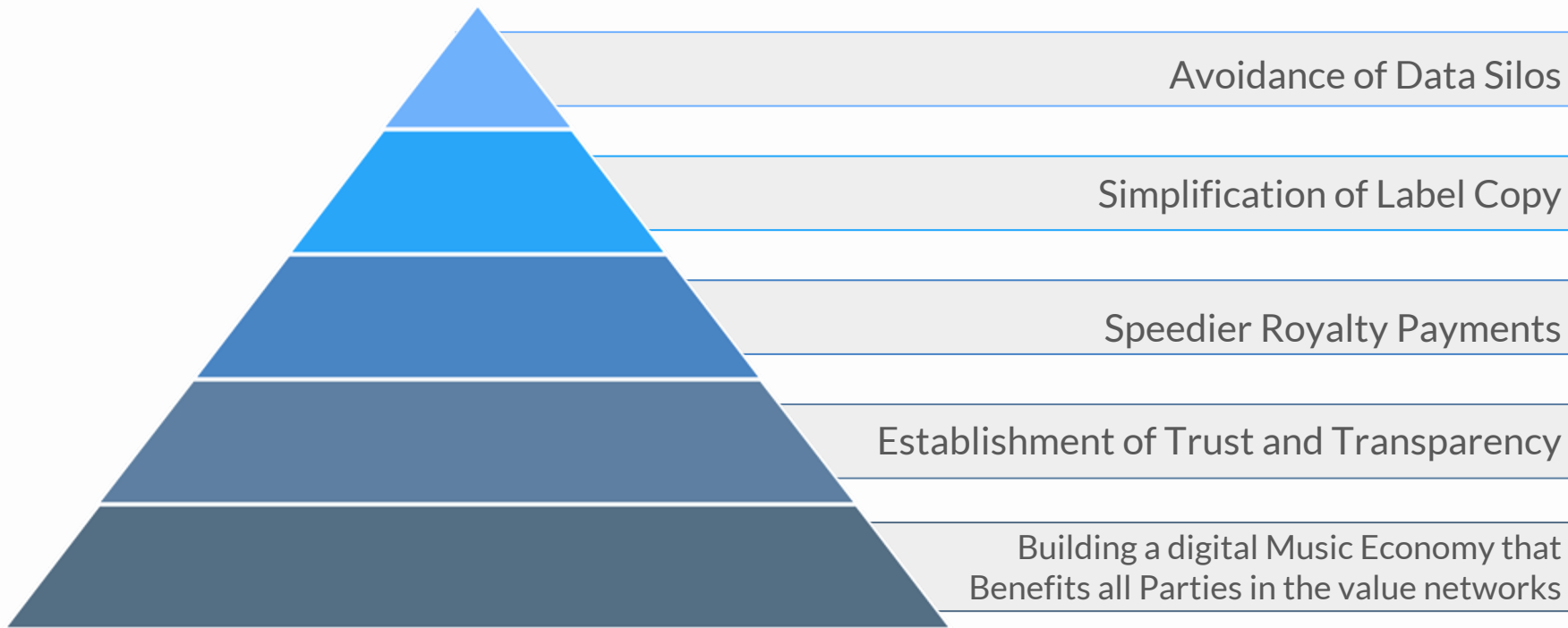
- Little effort with sampling Rights

Library

- Digitization
- Better Catalog



Industry wide Benefits



Questions for Discussion

- Evaluation Criteria of Metadata Rating Algorithm
- Conditions of matching Algorithm
- Consider which anonymity Levels are available (Anonymous, Stakeholder-Type, Name)



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EMR Platform
Project



Lehrstuhl für Wirtschaftsinformatik
Prozesse und Systeme
Universität Potsdam



Chair of Business Informatics
Processes and Systems
University of Potsdam

Adrian Abendroth, Céline Breuckmann,
Alexander Guttenberger, Daniel Sezari

Univ.-Prof. Dr.-Ing. habil. Norbert Gronau
Lehrstuhlinhaber | Chairholder

Mail
Germany
Visitors
14482 Potsdam
Tel

August-Bebel-Str. 89 | 14482 Potsdam |

Digitalvilla am Hedy-Lamarr-Platz,

+49 331 977 3322

E-Mail
Web

ngronau@lswi.de
lswi.de

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