

# Digital Music Industry – Background Synthesis

Derek **Sellin**<sup>1,2</sup> – Timo **Seppälä**<sup>1,2</sup>

<sup>1</sup> The Research Institute of the Finnish Economy (ETLA)

<sup>2</sup> Aalto University, Department of Industrial Engineering and Management

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# Conclusions

Modernization of infrastructure and processes is needed, to enable fast, fair, and full payment of royalties.

Artists would benefit from a permanent public record of their “credits,” helping them gain additional visibility and credibility.

Much excitement exists around Blockchain technology as a solution to the woes of the industry, but opinions vary widely.

- Solutions will require business and process change, as well as collaboration.
- Technology solutions support business decisions, not the other way.

Any technical solution must:

- be more efficient than current system, or payments to creators will decrease.
- scale to handle the pace of releases and growth of per-stream consumption data.
- utilize common standards, enabling interoperability and selective sharing of data.
- recognize reality of lack of trust within the industry, or resistance by many to reveal data, even that which simply represents factual “musical historical events.”

# Background

- Theoretical background
  - Industry architecture literature, e.g.
    - Pisano & Teece (2007), “How to Capture Value from Innovation: Shaping Intellectual Property and Industry Architecture” *California Management Review*, Vol. 50 No. 1
  - Multi-sided platform literature, e.g.
    - Tilson et al. (2013), “Platform Complexity: Lessons from the Music Industry” *conference paper*
- Empirical background
  - Current state of infrastructure, processes, and data in the music industry

# Research Motivation

Consumption continues to increase, yet industry revenues are far below previous highs.

Approaches to addressing this discrepancy:

- Ensure all payments owed to creators are paid in a complete, timely, and transparent manner (solve the **black box** problem)
- Seek higher payment from digital service providers profiting from others' copyrights (solve the **value gap** problem)
- Drive higher industry revenues by delivering more value and increasing paying subscribers (enable **innovation**)

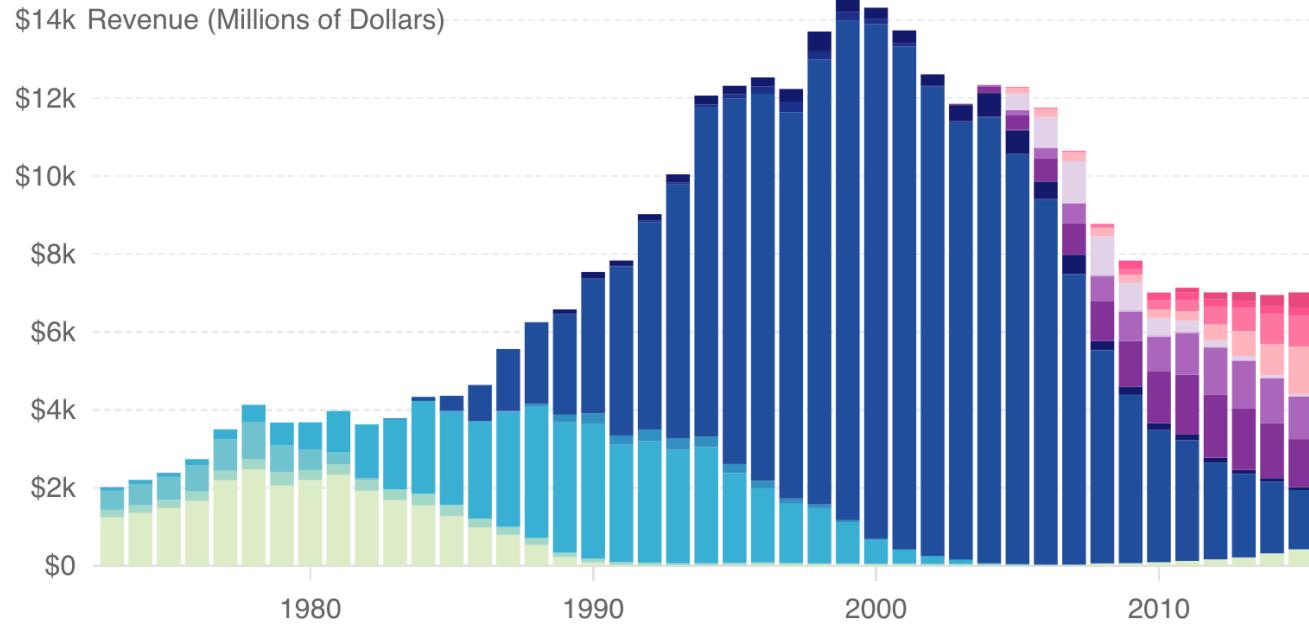
Scope of this paper:

- Transparency and black boxes → infrastructure, processes, and (meta)data

Reserved future research:

- Value gap: fair valuation of music
- Innovation: strategies for driving industry growth

# Recorded Music Revenue (US)



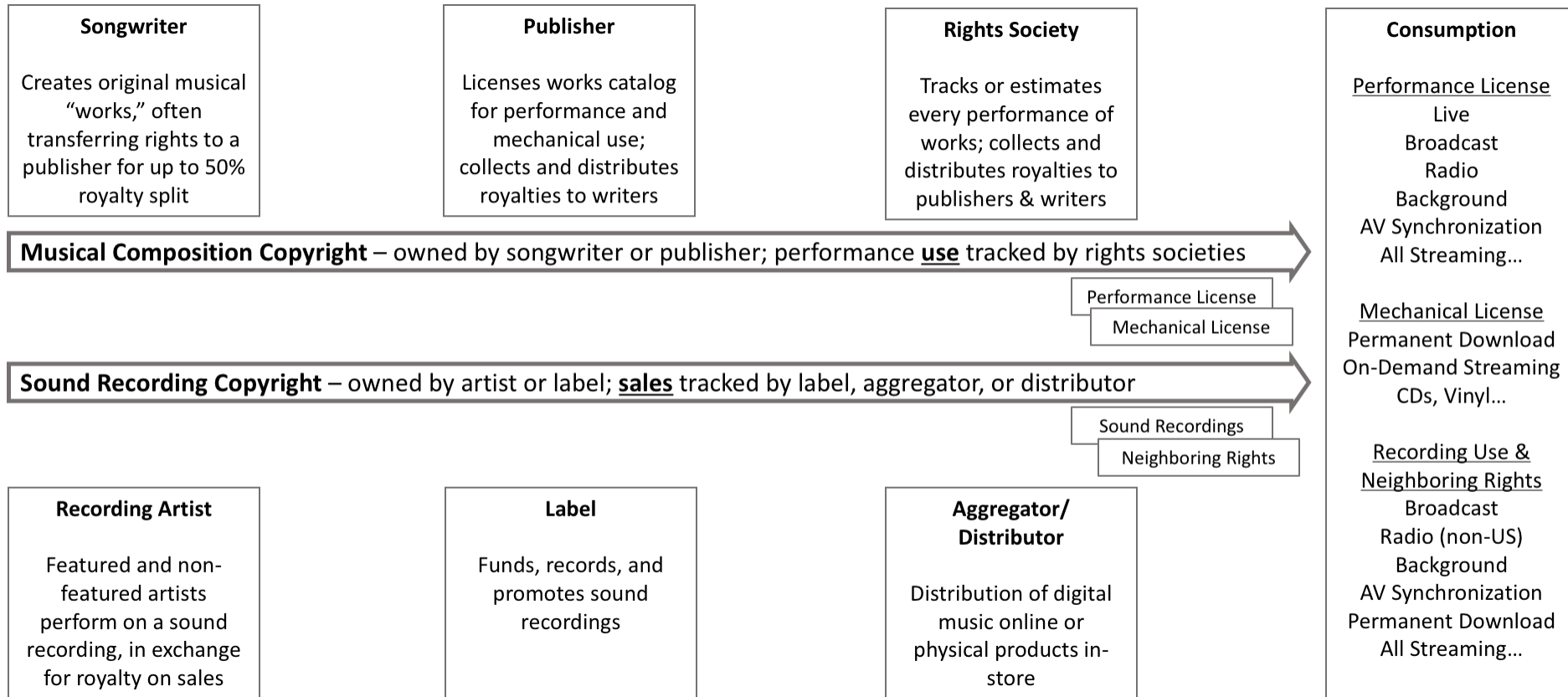
Source: RIAA US Sales Database

# Black Boxes

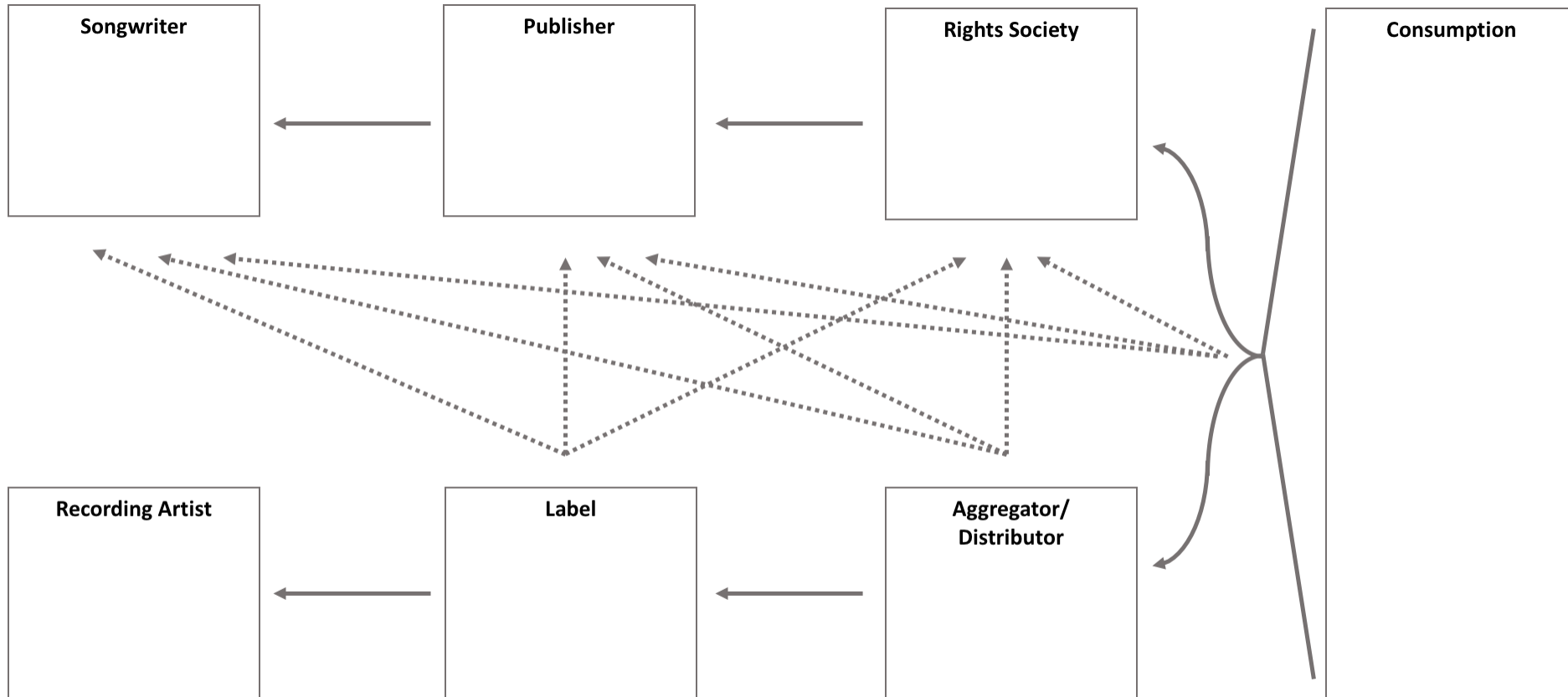
**Black boxes** materialize for many reasons, including:

- inability to identify rights holders despite payment for the use of their compositions.
- the lengthy time required for filing domestic and international copyrights, often begun only when a recording is actually released.
- multiple claims for the same rights exceeding 100% of ownership, resulting in indefinite disputes.
- international collaborations with less than all creators asserting their rights.
- international legal inconsistencies regarding what type of performances result in payments (e.g. terrestrial radio).
- the slow and often manual processes to report usage and clear payments under international reciprocal agreements.

# Generalized Value Web



# Simplified Revenue Flow



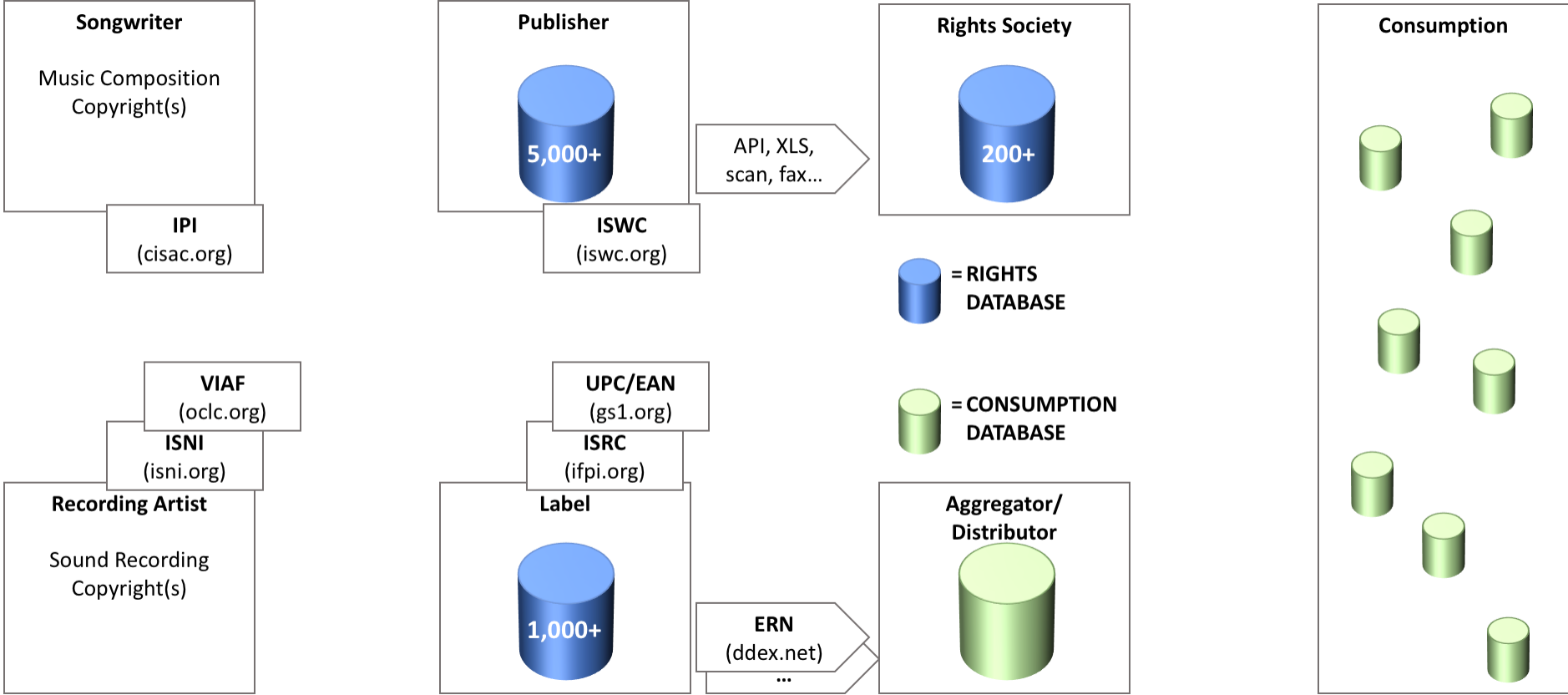


# Implications of Complexity

For academic purposes, a simplified model is required

- Endless permutations: royalties take many paths through the ecosystem
- Dynamic situation: royalty amounts and splits are subject to negotiation, renegotiation, legislative changes, new business models
- Regional variance: no single model can capture all practices in one market, let alone across the globe

# Incompatible DBs, Multiple ID and Metadata Standards



# Infrastructure Deficiencies

In its current state the industry lacks:

- Systematic adherence to rich metadata standards
- Efficient processes for sharing rights data
- Scalable systems for the growing pace of digital music releases and detailed per-stream reporting
- Willingness to share rights and reporting data openly with others in the industry

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# Follow-Up Research (Ongoing)

## *Forecasting the industry architecture of music as a platform business*

### **Objective:**

- clarify the fundamental problems themselves: infrastructure? (meta)data? assets?
- develop a well-informed vision of the upcoming supply chain transformation(s)
- identify technical and business implications of future architecture

### **Method:** Delphi forecasting process

- panel interviews with 20-30 visionaries, thought leaders, and industry heavyweights
- a second round of interviews to review and refine the resulting model

**Scope:** entire value web (creators and their agents, collective rights societies, distributors, aggregators, Digital Service Providers (DSPs), and other tech players)

### **Outcome:**

- future industry architecture model, supported by survey of industries addressing similar challenges with new processes and technologies
- technical and strategic implications of this new industry architecture

# Follow-Up Research (Future)

## Econometric modeling

- Size the opportunity: estimate the relative values of **black boxes** vs. the **value gap**.
- Outside-in analysis of major streaming providers to identify **technology layers** in current music platform business: how are they positioned in this stack?
- Estimate the financial benefit or detriment (**value redistribution**), to all parties, of the forecasted supply chain transformation.
- Identify **value creation** and **value capture** opportunities within the technology layers of the forecasted industry architecture.

# Inputs? Questions?

Comments, remarks, and discussion are more than welcome:

Derek Sellin  
derek.sellin@aalto.fi  
+358 40 725 6067  
twitter.com/dereksellin

Timo Seppälä  
timo.seppala@etla.fi  
+358 46 851 0500  
twitter.com/timoiseppala