



Smart Data Service Engineering : Werkzeuge zur Konzeption und Evaluierung von Smart Services

mit „Service-Dominant Business Model Financial Validation: Cost-Benefit
Analysis with Business Processes and Service- Dominant Business Models“

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**Bitte Fragen zum Business Model Radar an
Dr.Egon Lüftenegger stellen**

**Bitte Fragen zum C-B Tracker Software
an Dr.Selver Softic
stellen**

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Dieser Vortrag basiert auf dem folgenden Konferenzbeitrag

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Service-Dominant Business Model Financial Validation: Cost-Benefit Analysis with Business Processes and Service-Dominant Business Models

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Abstract. In this paper, we present our software-supported method for analyzing the economic feasibility of business models. The method integrates the business models and business processes perspectives for analyzing how a company appropriates the financial cost and benefits. In this method, we use the Service-Dominant Business Model Radar to specify business models, then translate the specified business model into a business process for analyzing the financial feasibility of a business model. At the final step in our method, we use the generated business process in the previous step with a software-based tool, The Cost-Benefit Tracker, for analyzing the economic potential of the business model. We designed and developed the Cost-Benefit Tracker as a simple software-based BPMN 2.0 tool by integrating the concepts of the Service-Dominant Business Model Radar rightly. As a result, the software is simple and straightforward to use than enterprise BPMN 2.0 software. Hence, entrepreneurs can use the presented software-supported method to financially evaluate business model concepts specified with the Service-Dominant Business Model Radar.

Keywords. Service-Dominant Logic, Service-Dominant Business Model, Business Process, Digital Service Ecosystem, Value Network, Business Models

1 Introduction

Customers are moving from buying products towards integrated solutions (Vargo & Lusch, 2004). Furthermore, customers are moving from buying physical goods to digital services as solutions. Therefore, the business model design is shifting from a Goods-Dominant (G-D) perspective towards a Service-Dominant one by adopting a Service-Dominant (S-D) Logic (Lüftenegger, 2014). Under this new logic, the business model concept has been reframed as the Service-Dominant Business Model (Lüftenegger, 2014). The Service-Dominant Business Model takes the value network organizational structure approach of

the S-D Logic instead of the traditional value chain approach of the G-D Logic. This organizational structural change is required for designing solutions as value co-creation between business actors such as users and companies. The value co-creation takes place within a business ecosystem: the value network. Furthermore, the rise of digital services requires tools for modeling digital ecosystems as business models (Lüftenegger, Comuzzi & Grefen, 2013). A business engineering framework that combines business strategy, business models, business processes as service compositions, and business services was developed by adopting the Service-Dominant Logic (Lüftenegger, 2014). In prior works, strategy and business models' aspects of the framework were developed as management tools: The Service-Dominant Strategy Canvas (Lüftenegger, 2014; Lüftenegger, Comuzzi & Grefen, 2017) and the Service-Dominant Business Model Radar (Lüftenegger, 2014). In this research work, we present our software-supported method. Our contribution is twofold: First, our method facilitates the financial evaluation of business models by transforming business models into business processes. Second, we developed a software-based business process analysis tool that is highly integrated with the Service-Dominant Business Model Radar. This integration is needed for achieving a mechanism to evaluate business models designed or represented with the Service-Dominant Business Model Radar in terms of financial costs and benefits.

In Service-Dominant Business Models, value is co-created and shared between actors of a value network. By tracking costs and benefits in a business process, we can help entrepreneurs with our software-supported method to understand how the value is shared among the actors of the Service-Dominant Business Model. The value shared among the parties has been explored by using business model tools such as e3-value (Gordijn & Akkermans, 2001). However, a method that shows how the financial costs and benefits by integrating the business model level with the business process level has not been previously developed. Hence, the novelty of our approach. Our method is also

Das Konferenz-Paper ist verfügbar unter:

<https://bit.ly/2qCttaC>

Für Fragen stehen wir Ihnen gerne zur Verfügung :

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Wie bewerten wir finanziell
ein Geschäftsmodell,
das mit dem BMR
dargestellt wurde?

(How do we evaluate financially a business model
specified with the BMR?)

3 Schritte softwareunterstütztes Methode

1 Spezifizieren (Specify)

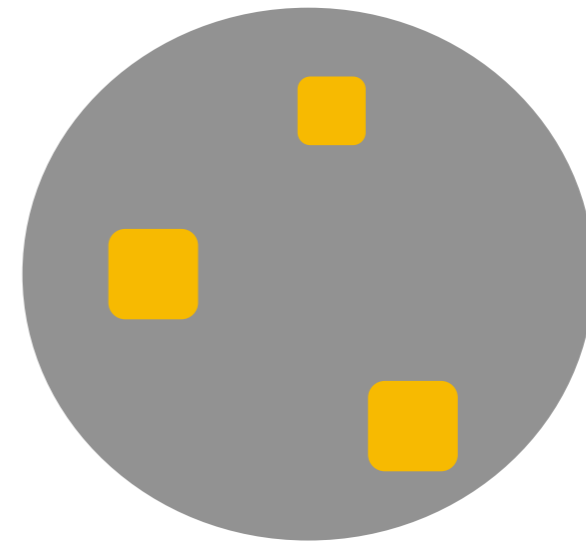
2 Transformieren (Evaluate)

3 Evaluieren (Evaluate)

1 Spezifizieren

mit dem Business Model Radar

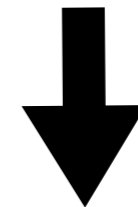
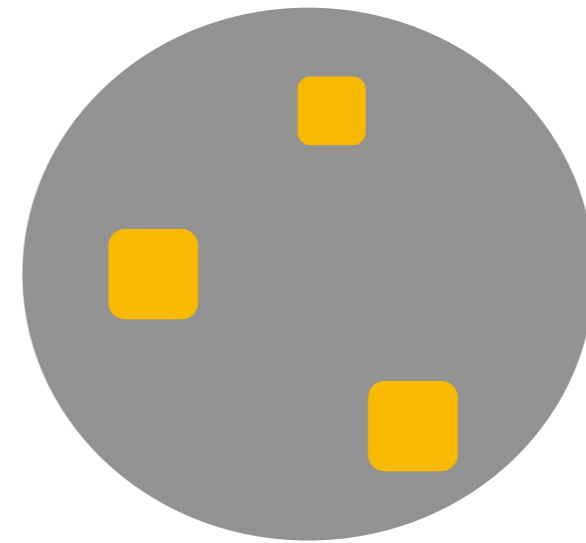
Businessmodell Radar Geschäftsmodell



2 Transformieren

des spezifizierten Geschäftsmodells in
einem BPMN 2.0 Kollaboration-Diagramm.

Businessmodell Radar Geschäftsmodell



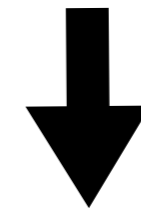
BPMN 2.0 Kollaboration-Diagramm



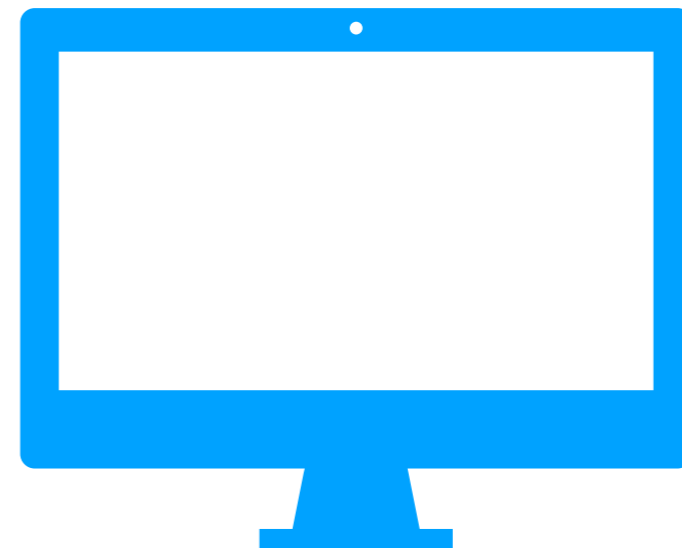
3 Evaluieren

mit der Software Tool

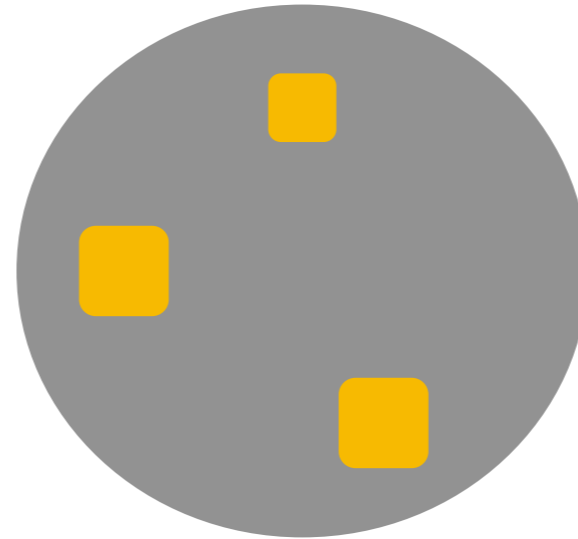
**BPMN 2.0 collaboration
diagram als Input**



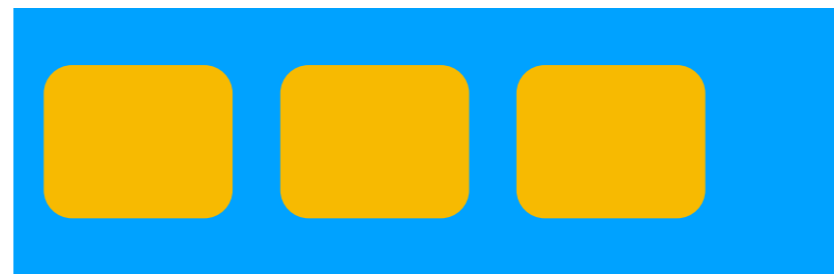
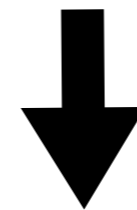
**Cost-Benefit Tracker
software**



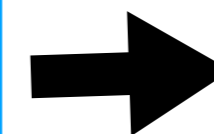
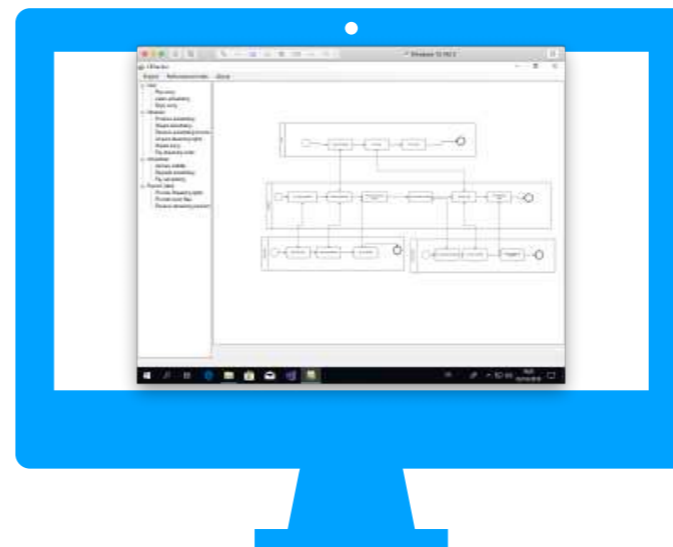
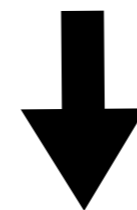
1 Spezifizieren



2 Transformieren



3 Evaluieren

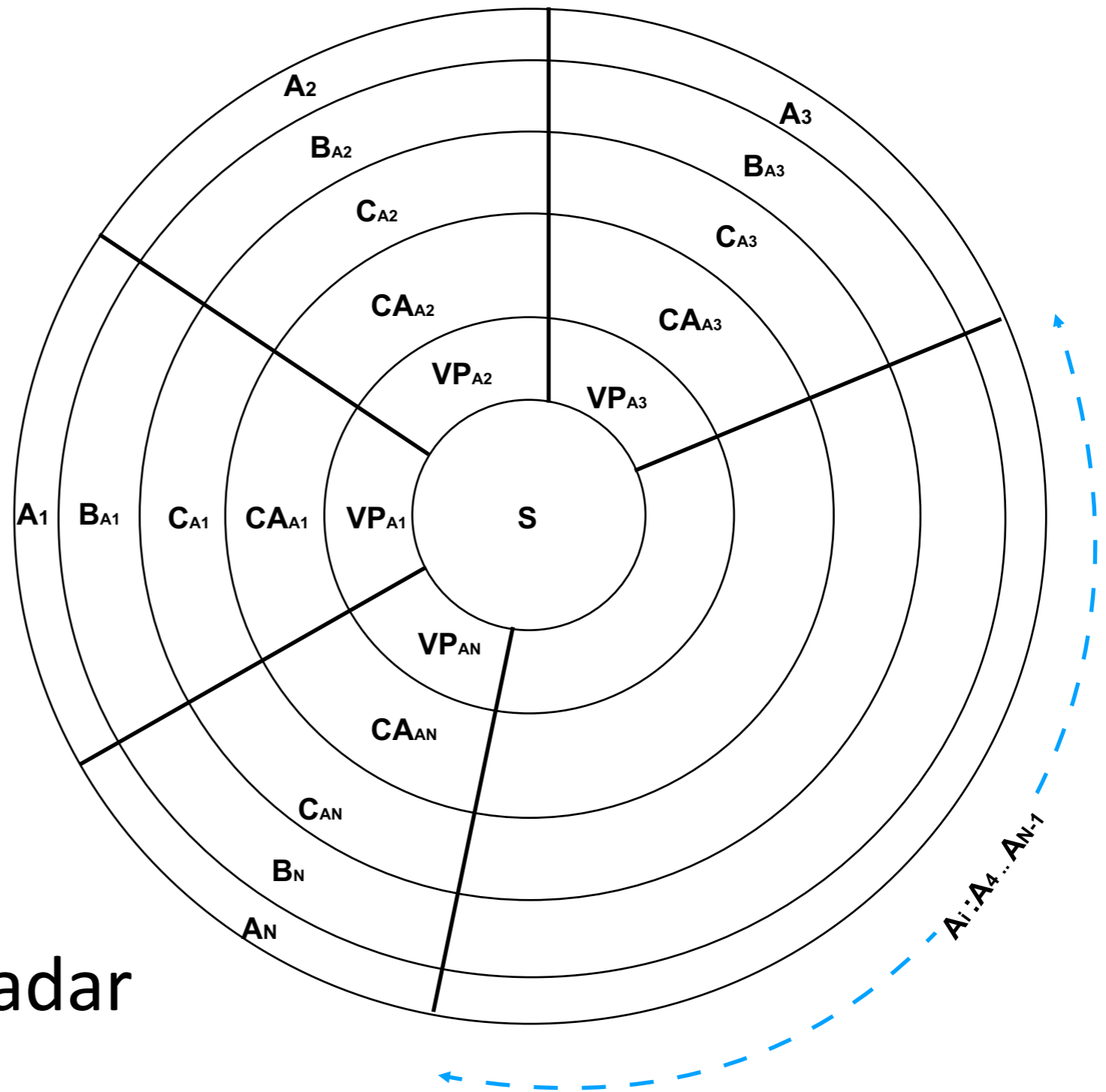


Kosten

Nutzen

Business Model Radar

1 Spezifizieren



Das Business Model Radar

mehr Informationen unter:

<https://bit.ly/36mqJNY>

Business Model Radar Ad-supported streaming



Beispiel aus:

Lüftenegger, E. , Softic,S. (2019). *Service-Dominant Business Model Financial Validation: Cost-Benefit Analysis with Business Processes and Service-Dominant Business Models*. Conference: Proceedings of 30th Central European Conference on Information and Intelligent Systems (CECIIS 2019) . Verfügbar unter: <https://bit.ly/2qCttaC>

Zitieren Sie das Business Model Radar als:

Lüftenegger, E. (2014). *Service-dominant business design* (Doctoral dissertation). Eindhoven University of Technology, Eindhoven, The Netherlands. <https://doi.org/10.6100/IR774591>

Was ist die Lösung, die wir gemeinsam schaffen?

(What is the solution that are we co-creating?)

Ad-supported Streaming

Welcher Akteur spielt die Rolle als zentrale Organisation

hinter dem Geschäftsmodell?

(Which Actor plays the role as the focal organisation behind the business model?)

Spotify

Welcher Akteur spielt die Rolle des Kunden?

(Which Actor plays the role as the Customer?)

Free User

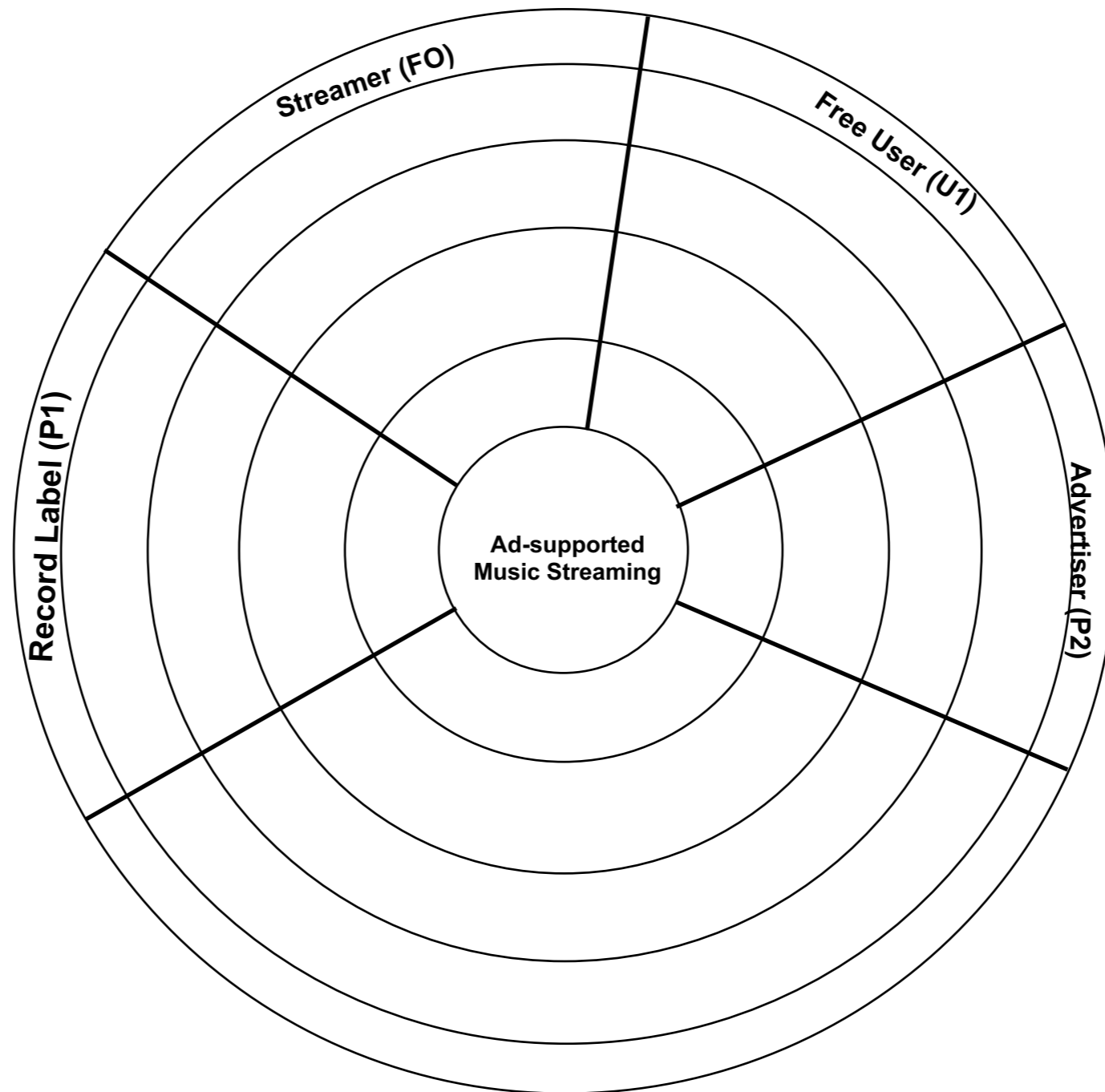
Welche Akteure spielen die Rolle als Partner?

(Which Actors plays the role as Partners?)

Advertisers and Record Labels

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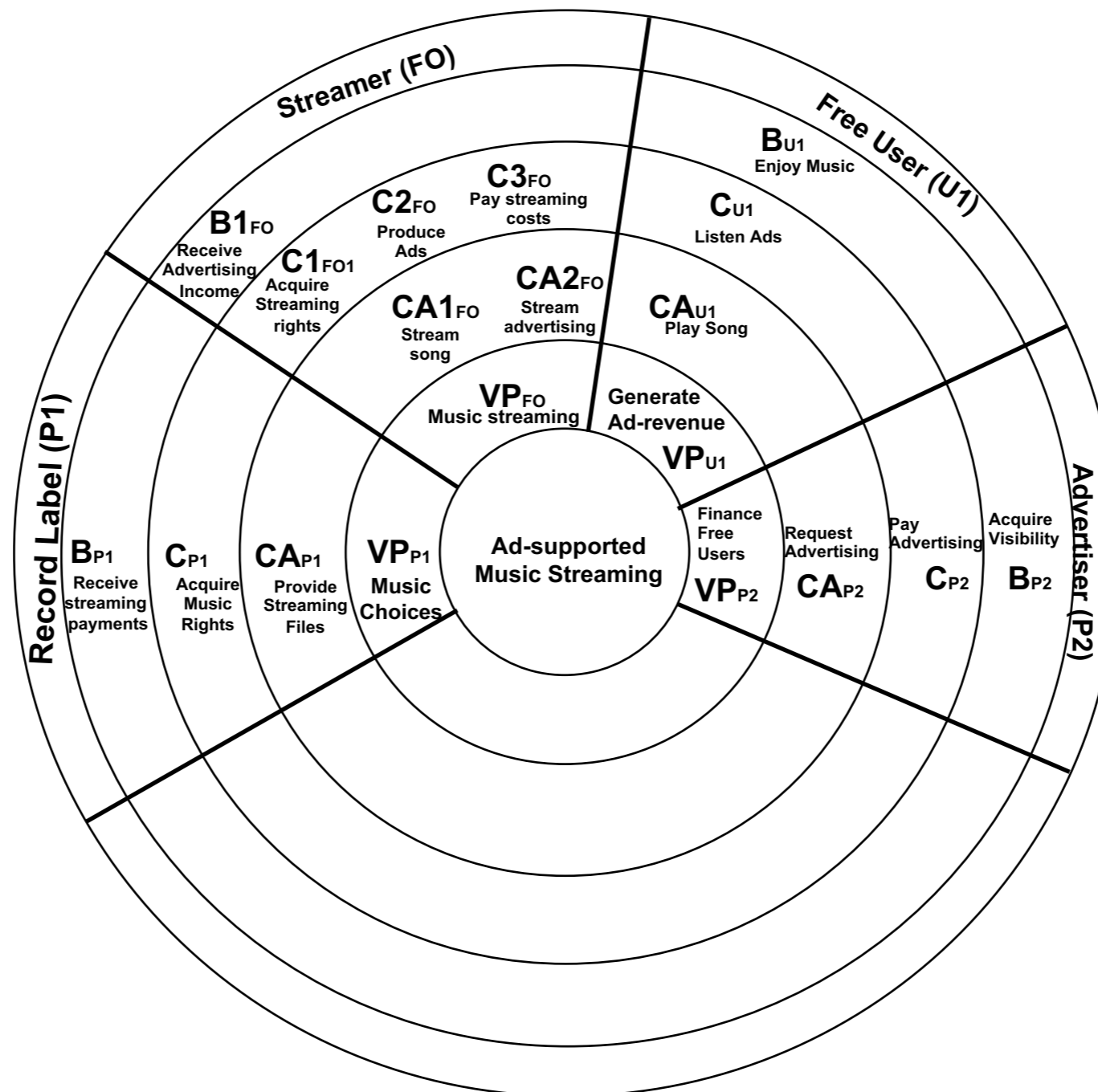
**Für jeden identifizierten Akteur?
(For each identified Actor?)**

**Was ist das Value Proposition (VP)
und Co-creation Aktivitäten (CA)
Kosten (C) und Nutzen (B) des
Akteurs?**

(What is the Actor's Value Proposition (VP), Co-creation Activities (CA) Costs (C) and Benefits (B) ?)

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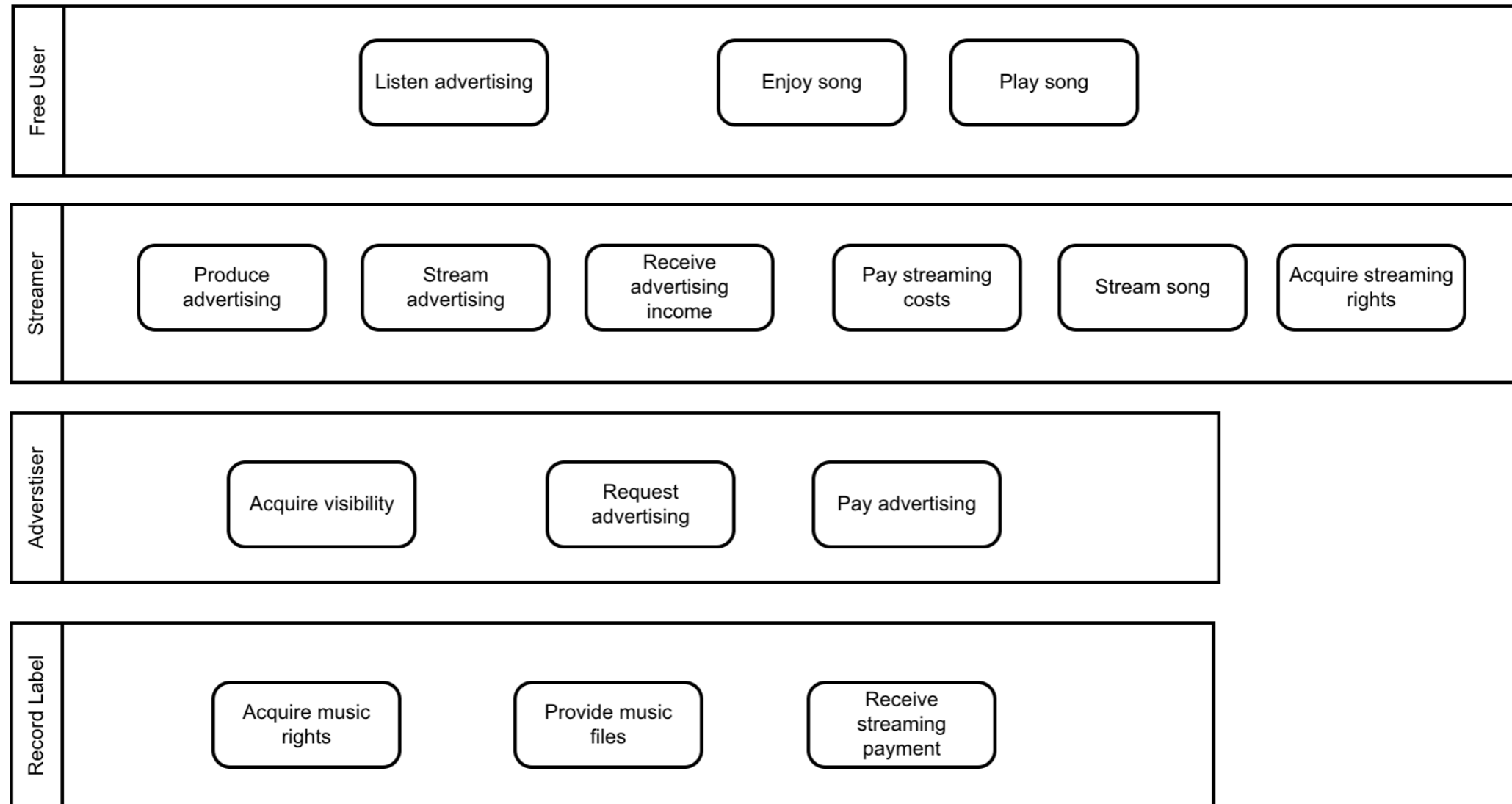
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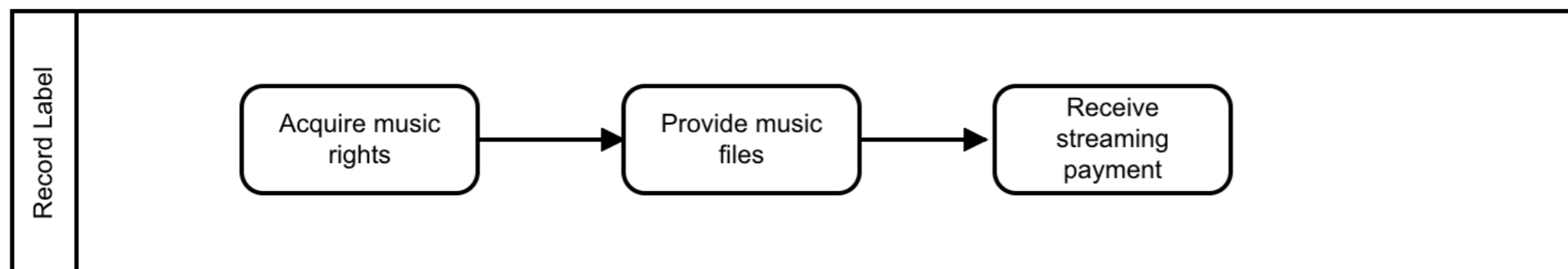
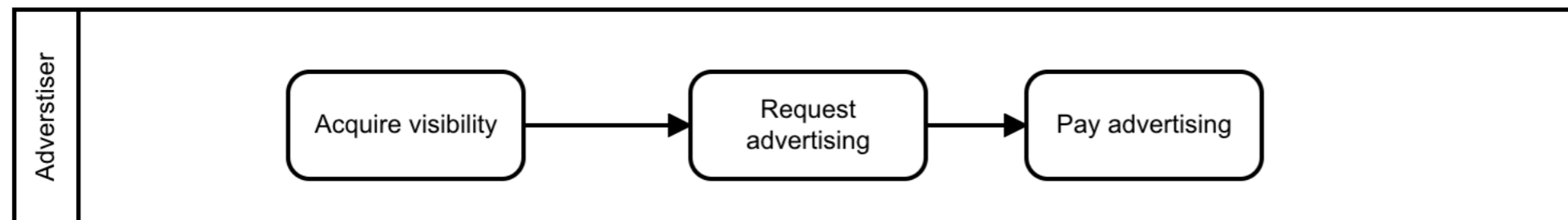
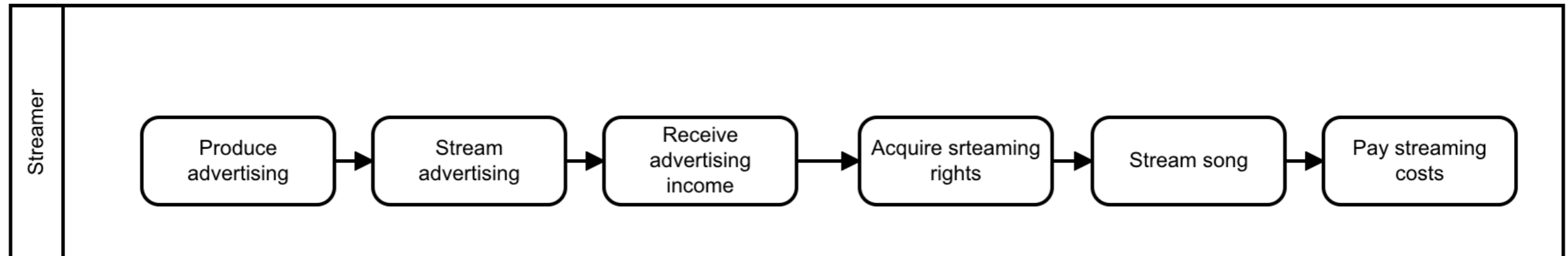
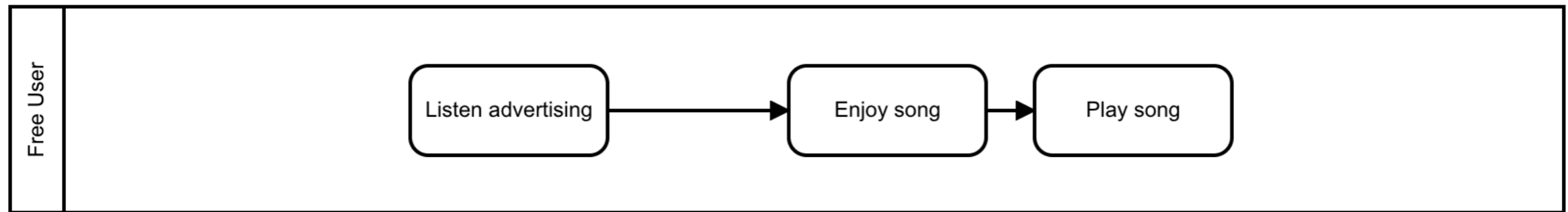
2 Transformieren



Beispiel aus:

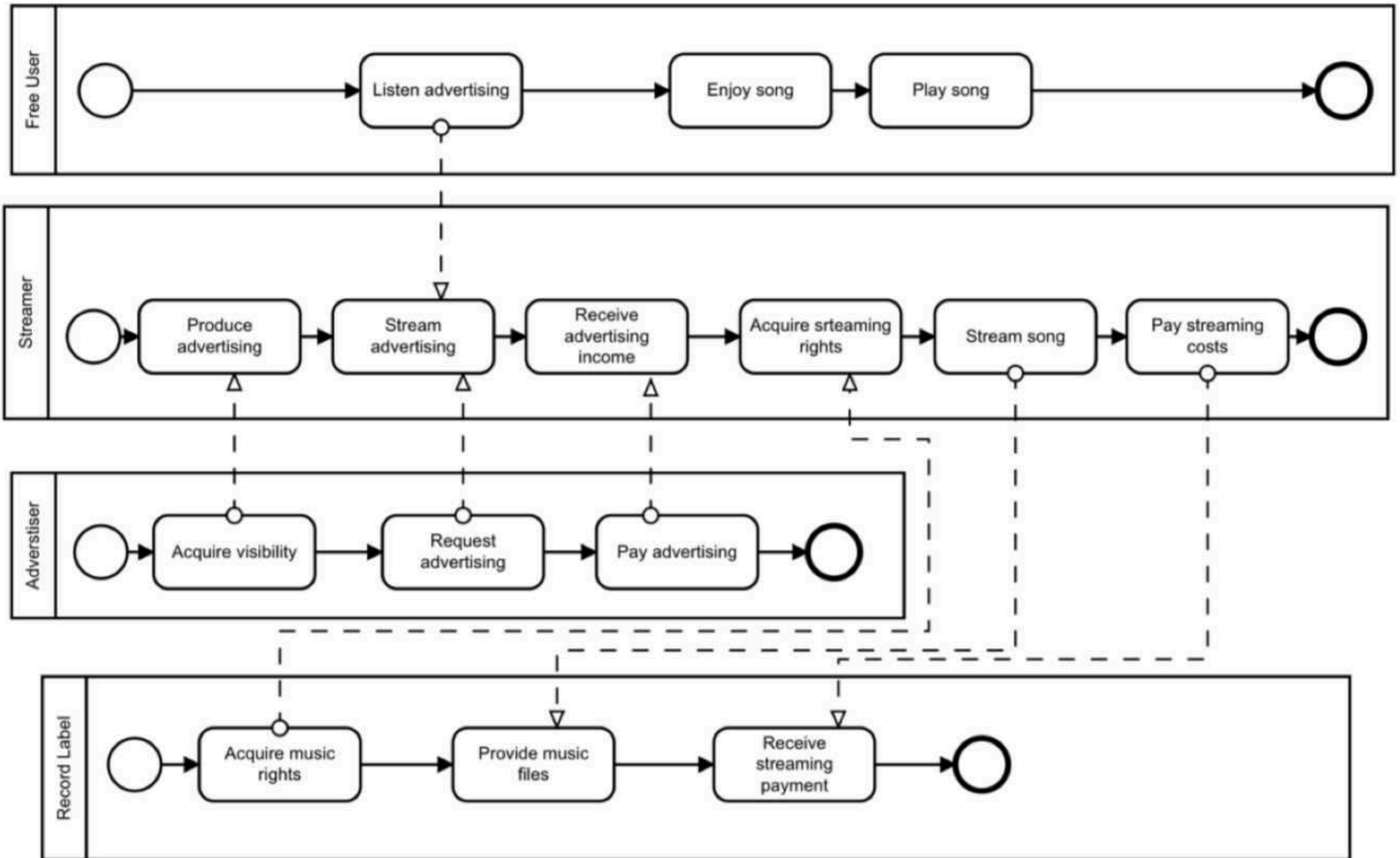
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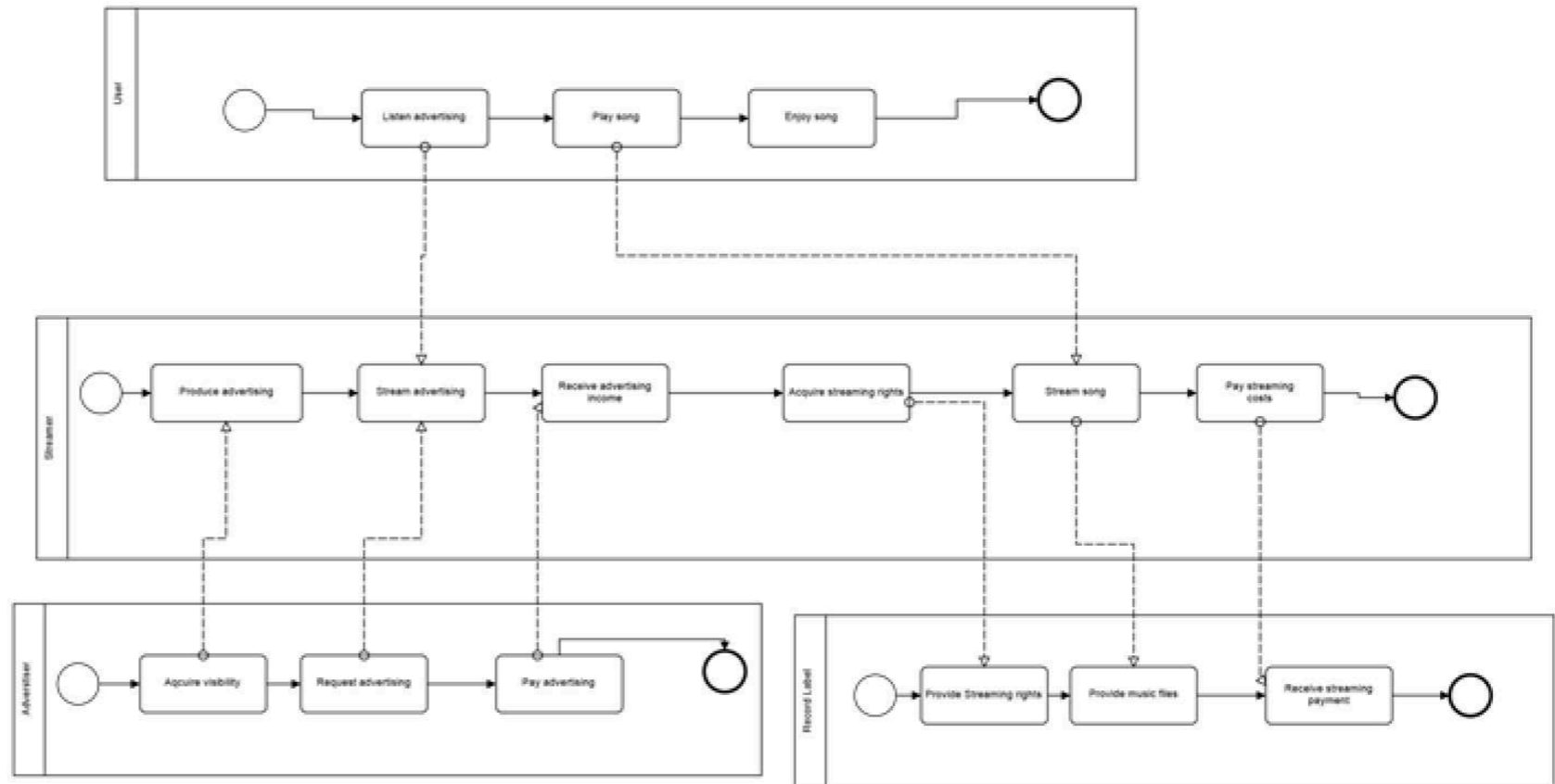


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3 Evaluieren

- User
 - ... Play song
 - ... Listen advertising
 - ... Enjoy song
- Streamer
 - ... Produce advertising
 - ... Stream advertising
 - ... Receive advertising income
 - ... Acquire streaming rights
 - ... Stream song
 - ... Pay streaming costs
- Advertiser
 - ... Acquire visibility
 - ... Request advertising
 - ... Pay advertising
- Record Label
 - ... Provide Streaming rights
 - ... Provide music files
 - ... Receive streaming payment



Kosten (Costs)

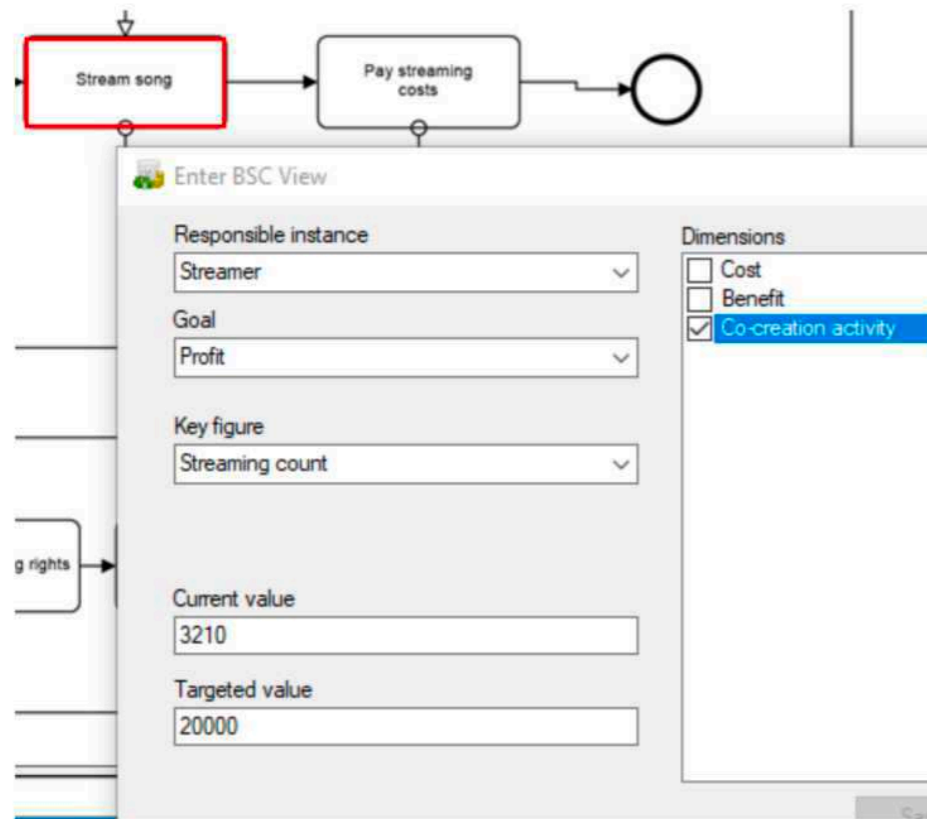


Figure 10. Cost-Benefit Tracking for “Stream song” Task in BPMN 2.0 diagram

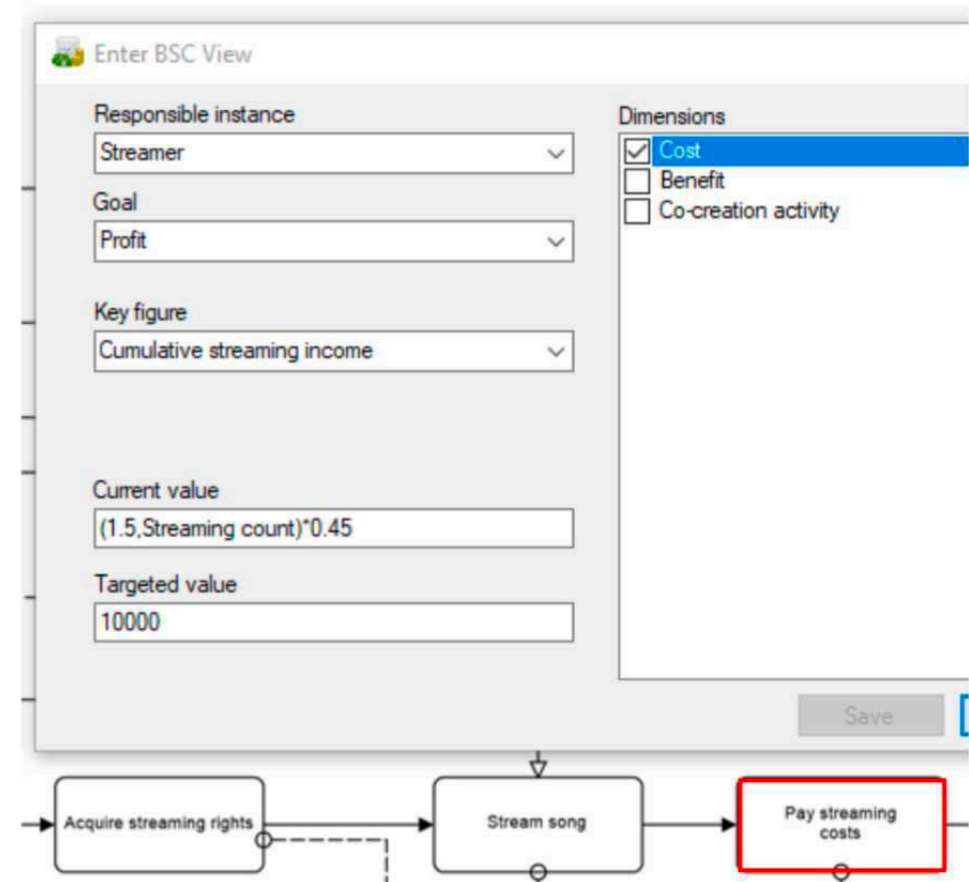


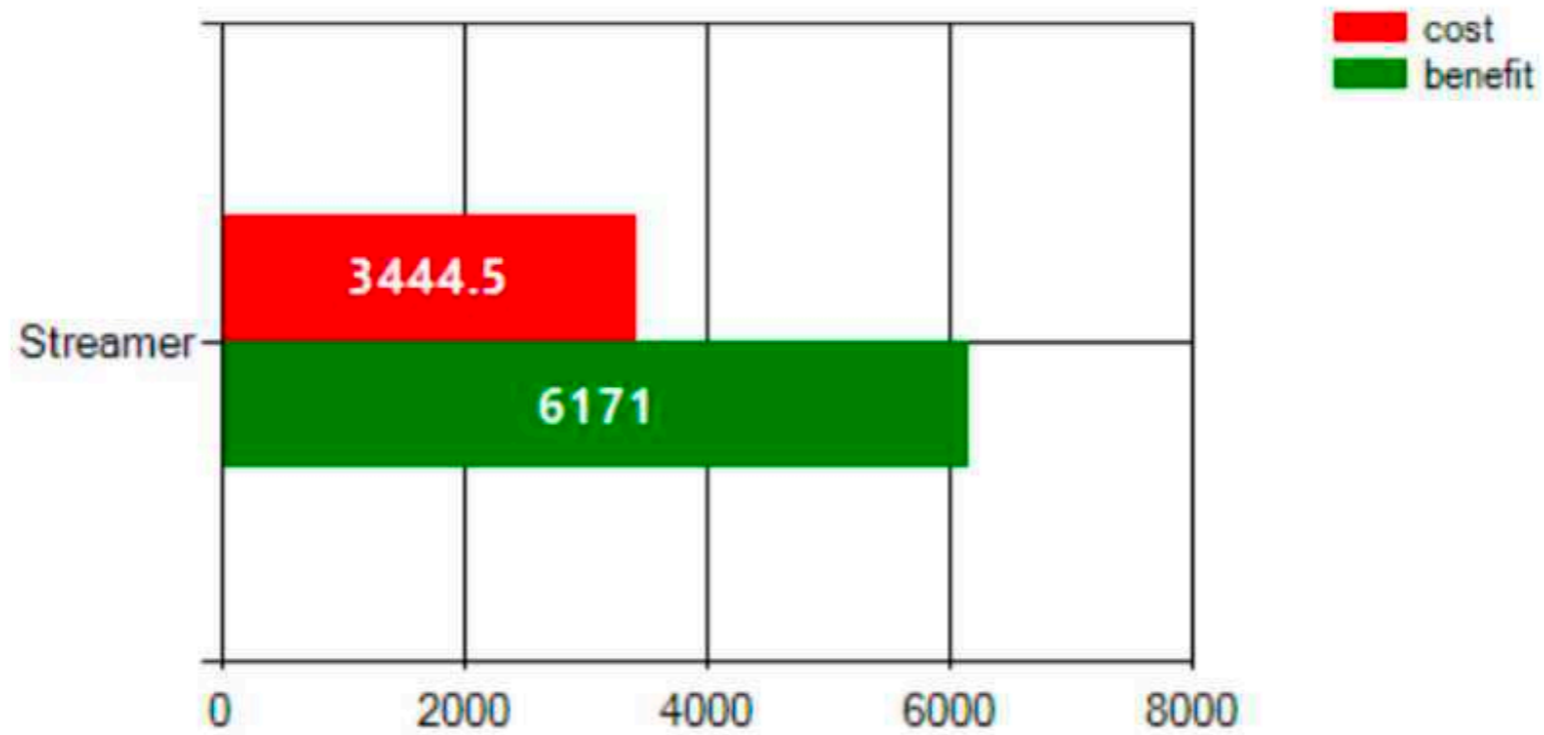
Figure 11. Cost-Benefit Tracking for Pay Streaming Costs Task in BPMN 2.0 diagram

Stream Song

KPI: Streaming Count

Cumulative streaming

KPI: =Streaming count * 0.45



Δ CB: +2726.5

Figure 14. Cost-Benefit Overview Diagram for Streamer Actor

Benefits (Nutzen)

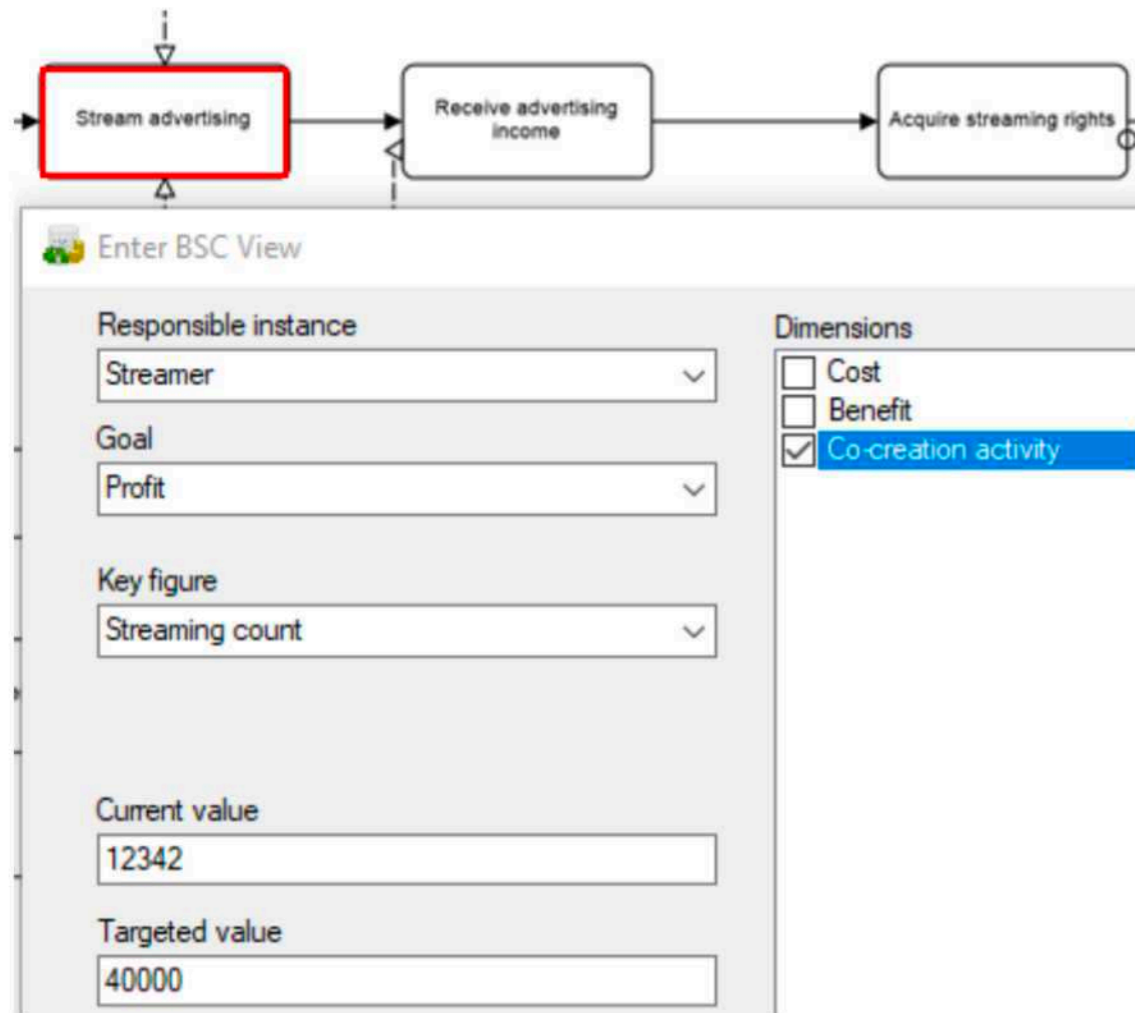


Figure 12. Cost-Benefit Tracking for “Stream advertising” Task in BPMN 2.0 diagram

Stream Advertising

KPI: Streaming Count = 12343

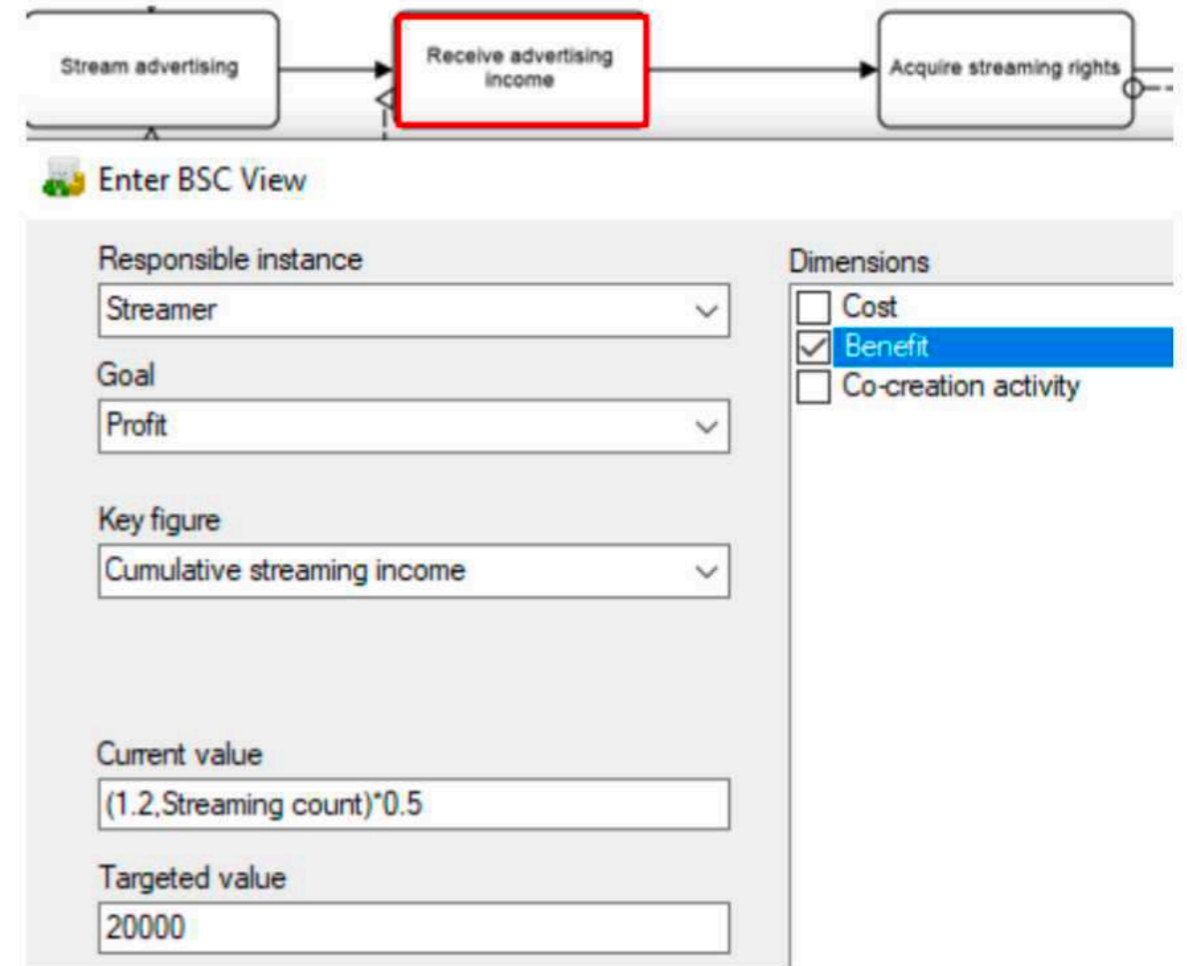


Figure 13. Cost-Benefit Tracking for Receive Advertising Income Task in BPMN 2.0 diagram

Receive Advertising Income

KPI: Streaming Count*0.5



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