

Data Service Cards



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Data Service Cards

The Safe-DEED Data Service Cards help you to enhance or develop new data-based services through the systematic combination of data sources, analysis methods, customer benefits and revenue opportunities. Use the 50 cards as inspiration in the development process of data-driven innovations. As an extension, you can use the Data Service Cards in combination with the Safe-DEED Data Driven Business Canvas.

Tips for use

The Data Service Cards can be used individually but are most effective if used by an interdisciplinary team consisting of people e.g. from IT, Business Development, Sales and Finance.

Use the 50 cards as inspiration in the innovation process of data-driven services. Each card contains an explanatory image (frontside), an explanation text (top of backside) and a real-life application example (lower backside). Through selection & combination, new data-driven services are created. By choosing at least one card per main category (Data Source, Data Analytics, Data Service, Benefit and Revenue Models) you have already made your service idea sufficiently concrete for further processing.

How to use

1. **Data Sources:** In this category, you will find 10 selected data sources that can be individually distinguished between internal & external and existing & new data sources. Tip: Start by identifying internally available data sources.
2. **Data Analytics:** Data analytics enable you to gain new insights from data to deliver added value to customers. The applied analytics methods depend on the amount and quality of the data to be analysed. In this category, you will find 10 data analytics methods. Tip: Take sufficient time to select the appropriate analytics method for each data source you have selected. You should always focus on the generated benefits for your customer or your own organisation.
3. **Data Service:** The data service describes the way in which the added value from the data is made available to customers. Depending on the desired benefit, different forms of provision of the data services are suitable. In this category, you will find 10 well-known examples that you can use as inspiration for developing your individual data-driven service. Tip: Several services or combinations can be developed from most data sources. Ultimately, the customer's perspective decides which service is perceived as particularly useful.

4. **Benefit:** The customer benefit describes the added value generated by the provision of the data service. In this category, you will find 10 examples of customer benefits based on data-driven services. Tip: Since the customer benefit is derived from the customer needs, keep always customer pains and gains in mind.
5. **Revenue Models:** The 10 revenue model cards provide inspiration on what pricing strategy is suitable for your data service. Tip: Besides the well-known models like subscription and freemium, check out also possible alternatives like indirect monetisation or paying with data.

- Place category explanation cards on the table ordered by 1) Data Source, 2) Analytics, 3) Data Product, 4) Customer Benefit and 5) Financial Implications or use a print out of the Data Driven Business Canvas
- Try to rebuild your existing service based on the 50 cards
- Discuss all cards per category (order does not matter) whether it makes sense to consider the card with regard to additional customer benefits
- Discuss the developed data service and check the consistency.

You can apply the card deck in the following ways

Develop a new data service (group of 4-6 people)

- Place category explanation cards on the table ordered by 1) Data Source, 2) Data Analytics, 3) Data Service, 4) Benefit and 5) Revenue Models or use a print out of the Data Driven Business Canvas
- Discuss all cards per category in the group and select a maximum of 3 cards per category.
- Two sequences have proven to be promising.
 - Start with 1) Data Sources → 2) → 3) → 4) → 5)
 - Start with 4) Benefits → 3) → 2) → 1) → 5)
- Discuss the developed data service and check the consistency.

Further development of an existing service (group of 4-6 people)

The development of this tool is based on a publication of Breitfuss, G. et al. (2020) "Data Service Cards - A supporting tool for Data-Driven Business" The present further development of the Data Service Cards was supported by the European Union's Horizon 2020 project www.safe-deed.eu under grant agreement No 825225.

Example Netflix

industry Tech & Entertainment

products & services Streaming media, video on demand
film production, film distribution, television production

size of business 8.600 (2019)

revenue \$ 20.156 billion (2019)

location US



Netflix, one of the 50 largest media companies in the world, was unknown a few years ago. The company generates its profits through paid streaming subscriptions and the production of its own films and series. Due to its strong focus on data, the company can adapt to economic conditions and customer behaviour. Below you will find an application of the Data Service cards on Netflix.

Data Sources Cards - Usage Behaviour:

Netflix gathers data to see user trends to understand engagement at a deep level
Other identified Data Sources Cards: User generated Data and Geographic Data

Data Analytics Cards - Recommender System:

As part of the on-boarding process, Netflix asks new users to rate their interest in movie genres and rate any movies they've already seen
Other identified Data Analytics Cards: Association Analysis and Classification

Data Service Cards - API:

Adapting services to different operating systems and technical specifications is possible due to API.
Other identified Data Services Cards: Decision Support and Web-Element & Software Function

Benefit Cards - Information & Knowledge Gain:

Data analysis provides Netflix with much information which can be objectified for marketing, own productions and fitting user needs.
Other identified Benefit Cards: Costumer Trust & Satisfaction and Flexibilisation & Dynamisation

Revenue Model Cards - Subscription:

subscription-based business model, creating revenue through three simple plans: basic, standard, and premium, giving access to stream series, movies, and shows.
Other identified Revenues Models Cards: Indirect Benefit