Software solution for data circles

This is a translation – for the original challenge description, contacts and submission got to: https://www.ioeb-innovationsplattform.at/challenges/detail/softwareloesung-fuer-datenkreise/

An initiative of

Federal Ministry
Republic of Austria
Digital and
Economic Affairs

Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

In cooperation with

BBG
BUNDESBESCHAFFUNG

Challenge Sponsor

Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

Background / Point of departure

Billions of pieces of data are generated, analyzed and managed every day: Environmental data, sensor data, health data, social media data and web data, to name just a few areas. These volumes of data are changing business models in the economy right now, but many people face closed doors when it comes to using data that is not generated in their own company or environment.

The Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) supports the development of data-driven and sustainable technologies and solutions through funding and initiatives. In particular, the Data Intelligence Offensive (DIO) was founded for this purpose. It acts as a mouthpiece for Austria's stakeholders in the field of data economy and data-driven technologies for the BMK. The BMK aims to advance the intelligent use of data and to initiate an ecosystem together with the digital economy. The simple use and the secure sharing of data by third parties should be made attractive and possible via innovative, decentralized data circles. A data circle is understood to be a concrete exchange of data in a specific area of application: "A data circle consists of several participants, but at least two, and should create added value for all participants. This added value usually comes from a merging of existing datasets and the new analytical results this enables."

BMK has identified with relevant stakeholders the need for a software solution for the technical implementation for such data circles. This solution needs to enable a structured and regulated data exchange. This development is to be initiated via a new type of digital marketplace that brings together data providers and data seekers in an ecosystem while complying with legal requirements.

Main Question

How can an initial concept of a software solution look like on which organizations can exchange data in data circles?

Desired situation

The BMK would like to initiate a system for Austria that makes it possible to set up and use an environment on which pilot work in data circles can be tried out. The BMK envisions an initial concept for an innovative software solution that makes such an exchange of data possible.

The BMK would like to use this challenge to obtain a market overview of software solutions and technology providers. Ideas and rough concepts for a software for data circles are sought.

The most important key points of a first version of such a software for data circles are:

- The software should represent an environment in which different data sources can be brought together and shared by the participants.
- The software should enable decentralized data storage and metadata management (use of virtual metadata catalogs for the data circles).
- The software should be customizable, i.e. offer the possibility to adapt data circles in a domain-specific and specifiable way to the needs of the respective data circle / industry / topic.
- The software should follow an approach that enables the connection to existing (data) systems of the participants of the data circles. The effort required for the connection of the data circles participants to the software should be as small as possible.
- The software should offer the possibility of assigning graduated usage rights according to role and partner (specifiable access rights can also be set within a data circle) and should feature data rights management.
- The software should be easy to use, intuitive and cross-platform.
- To ensure connectivity to other solutions and concepts, the software should fit into existing national and international frameworks (conformity to the European initiative Gaia-X or IDSA reference architecture as well as IDS certification).

In the medium to long term, the software should also enable pricing to be mapped. A possible approach would be the use of smart contracting systems.

Non-objectives: proprietary approach, purely centralized platform with centralized storage only, vendor lock-in.

What is not expected:

- The representation of pure standard products without a rough concept
- The representation of classic product catalogs

In the long term, the software solution should contribute to building a decentralized and functioning data market in Austria, taking into account global data ecosystems.

Details for your submission (Call for proposals)

The online submission consists of:

Description: You are a provider and/or developer and know what a software solution can look like on which companies can trade data in data circles? Do you already have an initial concept in the drawer? In both cases, submit your solution proposal. You are also welcome to do this with cooperation partners. An early exchange helps all sides to turn the idea into a procurement project. Think about the evaluation criteria. Describe on the basis of projects and competencies why you should be the BMK's first discussion partner. Bring in first ideas how a cooperation between BMK and you could look like.

Summary of the most important points (added value): Summarize the benefits of the software for the BMK, data providers and data seekers.

Confidential info for the jury (Optional): in this text box you can enter information that you would like to share exclusively with the challenge moderator and challenge sponsor. Alternatively, email a pdf to the challenge moderator.

Additionally, you will need a **cover image**. This will be your visual signboard when reviewing submissions to this Challenge. Optionally, you can also attach a file. This file should complement the texts of the form fields but not replace or repeat them! Use the file attachment e.g. for graphics.

Important note: In the context of your online submission, please show in total a short presentation (max. 10 presentation slides or 4-5 Din A4 pages) which conceptual ideas you have for the software solution or which solution approach you pursue. It is not necessary to elaborate detailed descriptions and exact technical details.

Benefits of the Challenge and further course of the project

This challenge provides the BMK with an overview of possible solutions and potential partners. The jury of internal and external experts from the sponsor then invites those companies whose solutions stand out particularly positively in the evaluation criteria to an innovation dialog. This is the first opportunity to discuss the initial concept and possible cooperation.

As a company, your participation in the Challenge puts you on the BMK's radar. You can place your concept for a software solution. If you are among the winners and are invited to the final innovation dialog, you will have the opportunity to exchange ideas directly with those responsible. You will deepen the possible rough concept and find out how a cooperation could look like. Be optimistic: **Please keep June 8, 2021 free for the innovation dialog.**

The **winners** will also have the opportunity to present their concept at the **Austrian Data Day on June 17, 2021.**

By the way: The public part of your submission will remain visible even after the Challenge is over. It is a business card for further interested parties - have this in mind when designing as well.

Depending on the results, it could continue like this after the Challenge:

Your submission is an impuls. Depending on the complexity, necessary framework conditions, the degree of maturity, expected costs and benefits, the sponsors will decide on the project design after the Challenge.
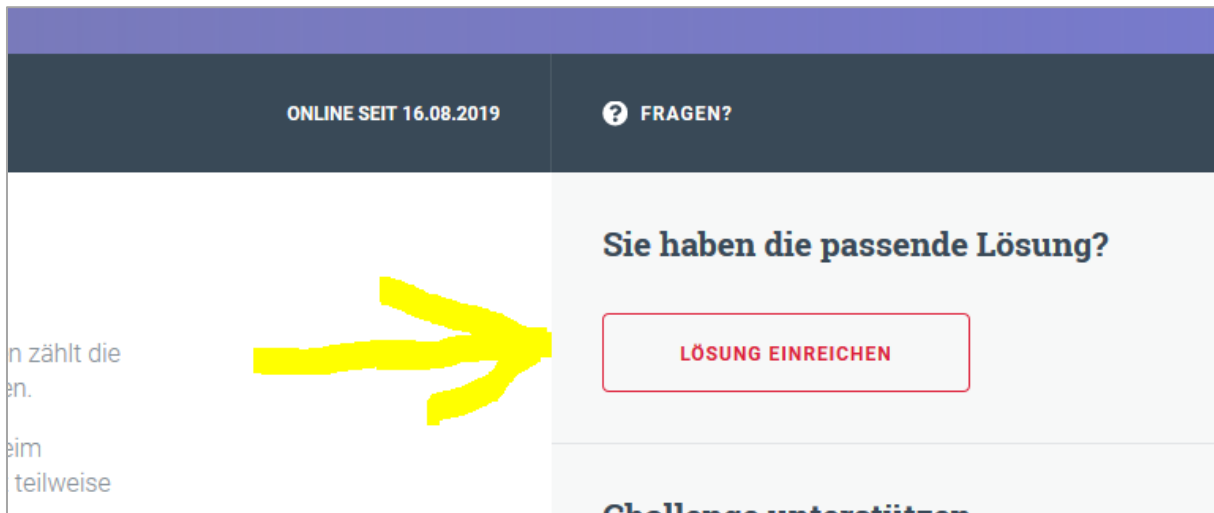
The goal may be to award an initial version in accordance with BVergG 2018. Please be aware that companies that did not participate in the Challenge for market consultation will also need to be considered for the tender procedure.

Your Questions

Contact the moderator or post your question about the Challenge. Our moderators will check, research and publish your question together with the answer. This way, all potential participants are certain to receive relevant information.

How to submit a solution/idea

Go to the challenge page. Click on the button "Lösung einreichen" on the top right side of the page.

- <u>Beschreibung</u>
  Post a meaningful description (make references to the description of the challenge and evaluation criteria on the right side of the challenge page)

- <u>Mehrwert</u>
  Highlight the benefits of your solution.

- <u>Titelbild</u>
  Upload a picture to be displayed on the landing page of the challenge.

- <u>Kooperationspartner</u>
  If you are handing in a joint contribution with other companies, this is where you make sure they are represented with logos and names.

- <u>Dateien & Infos</u>
  If necessary in addition to the descriptions above: add pdf-files (e.g. existing product brochures). But: Keep your contribution manageable for the jury.

- <u>Vertrauliche Infos</u>
  If necessary, place a confidential information for the jury, the sponsor and moderator (e.g. indication of approximate price range). All other parts of the contribution will be public.

Please be aware of the fact, that a challenge is market research / market engagement prior to a possible procurement. The challenge will not decide upon a contract award nor will it lead to any unfair advantage in a tender. Please balance your time and effort.

Contact Information

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