

# Intelligent career assistant for students

The International Data Spaces Association  
(IDSA)

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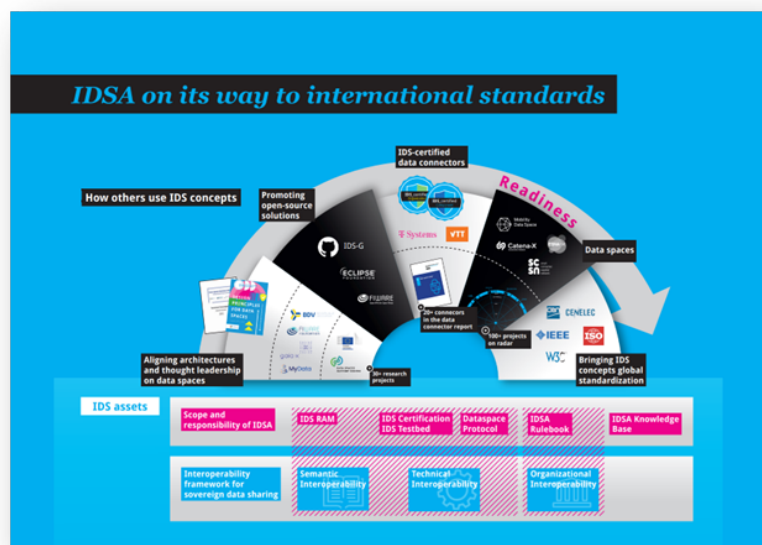
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# 1. Introduction

## a. Brief overview of organisation and Industry

The International Data Spaces Association (IDSA) is a non-profit organisation with a specific focus on establishing and promoting standards for data spaces, including the creation of trusted environments whereby organisations can share their data while retaining full control over its use.



## b. Main stakeholders and the roles they play in designing the use-case

- Schülerkarriere is an innovative company specialising in bringing companies and the promising young professionals of tomorrow together. Schülerkarriere develops an intelligent career assistant that enables students to find suitable jobs more easily, and in this use case, provides data and services available on MERLOT Marketplace.
- MERLOT (Marketplace foR LifelOng educaTional dataspaceS and smart service provisioning) project, funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK), is one of eleven projects funded as part of the "Innovative and practical applications and data spaces in the Gaia-X digital ecosystem" funding competition. The MERLOT funding project will create specially protected educational data spaces and services within the Gaia-X ecosystem. These ensure that the owners of educational data always retain sovereignty over their data, and they can make it available to

other users or services in an interoperable manner as required. In this use case, MERLOT is providing a marketplace where data and services can be exposed following Gaia-X Concepts.

- IMC is the leading full-service provider for digital training. Founded as a German university spin-off at Saarland University, IMC provides holistic support to more than 1,300 companies, public and educational institutions from all sectors and of all sizes in the planning and implementation of digital training strategies. In this use case, the role of IMC is to ensure the technical and legal compliance of the MERLOT marketplace with the Gaia-X Framework, as well as to enable the implementation of data-driven business models of the users, focusing on the conception of the functionalities for self-sovereign data exchange, as well as on the implementation of the interfaces.

## 2. Context & Challenge

### a. *Brief description of the problem that the use-case addresses*

Internship and job markets are a jungle for students in Europe. Indeed, it is never easy for a student to highlight his or her skills and studies, but it is also hard to find relevant offers from companies that match their skillset and thus plan their career.

Furthermore, organisations struggle to find suitable candidates, spending a lot of time in the recruitment process, which represents a substantial financial effort.

## 3. Solution description

### a. *Solution implemented to address the identified challenges*

MERLOT wants to revolutionise the career search for students so that every student with internet access in Europe can access services to plan their career. Furthermore, MERLOT sets out to reduce the shortage of skilled workers in Europe through well-founded career planning, evaluation and focused career paths. The aim is to create an intuitive process that finds the job for each user that best suits him/her and supports him/her on the way to the career goal.

In addition, MERLOT wants to help companies, universities and public administration to find suitable candidates with minimal time and financial effort. The user experience on both sides is in the foreground and should be the driver of development here. In this line of thinking, the career assistant makes it easier for students to find suitable jobs related to their areas of interest. Choosing the right career trajectory based on interest makes it more convenient to plan their next steps.

With this Smart Education Service, the consortia partner of MERLOT Schülerkarriere, offers relevant data and services on the MERLOT marketplace to be an exemplary use case that other market participants can follow. Together with the project leadership by IMC a persona was created to showcase the basic functions of the use case. In this respect a company called "Chempoint" (Company learning suite/LMS) seeks to get young people interested in their corporate vision and offer internships, which is then facilitated by Schülerkarriere via connecting schools and students to the job market.

## **b. Role of technology in the development and deployment of the solution**

Technology plays a key role in the MERLOT use case. Indeed, the challenge of the solution is based on data exchanges, that must be secure in terms of GDPR but also to help each student retain sovereignty over their data, however the organisation is processing it or accessing it in the future. In that sense, the data space created by MERLOT provides a technical solution to assess if data will be tampered with over time and only allows it to be shared following Gaia-X rules and GDPR rules.

In addition, the solution for the use case is about finding the best match between profiles and job offers. To do so, the career assistant is relying on AI tools and machine learning.

## **4. Implementation**

### **a. How the solution was integrated into the use-case organisation's existing systems or processes**

At this stage, the use case is in proof-of-concept phase. Thus, data providers (students) and data consumers (companies) are simulated ones. But the aim is to provide a digital portal for students so that they can easily access MERLOT services, but also some connectors for companies or organisations to be able to easily link their information system to the MERLOT marketplace.

The use case is accessible through the following [url](#).

## **5. Benefits & Impact**

### **a. Benefits for the end-users**

For the students, the benefits is to be able to build a career path and then find the best internship or job offers matching their expectations. But the solution is not only limited to students. It is also accessible to professionals and adults who are looking for training (thus using the matching AI system powered by the solution to find the most relevant training linked to their expectations).

For organisations, the main benefits are to speed up the recruiting process, mirroring suitable profiles with the requirements for a given position, which means also saving money.

Finally, for organisations, the AI solution is also pushing the perfect match for skilled workers, reducing the shortage of these kind of profiles.

## 6. Added Value through Gaia-X

### a. Alignment with the [Gaia-X vision](#)

MERLOT adheres to the vision of Gaia-X to reduce barriers to data exchange while maintaining the trust framework needed to protect personal data. As described in the solution, a huge amount of data is exchanged, including personal information that has to fulfil GDPR requirements. Following Gaia-X principles will enable any data provider (students or organisations) and data consumers to interact with trust.

MERLOT seeks to create specially protected educational data spaces and services following Gaia-X concepts of trust and interoperability. These ensure that the owners of educational data always retain sovereignty over their data and can make it available to other users or services in an interoperable manner as required. Organisations, schools, public institutions, administrations, or companies are thus enabled to exchange educational data in a GDPR-compliant manner and to share it without having to conclude separate individual agreements with each participant. This facilitates the interaction of the actors in federal systems, aligned with the vision of Gaia-X and opens new possibilities in processing highly sensitive educational data. With the focus on the educational domain, MERLOT is a valuable addition to the research projects that were initiated to showcase the variability of Gaia-X and its goals.

### b. Alignment of current architecture and technology stack with the Gaia-X technology model, and any convergence needs

From an architectural perspective, MERLOT incorporates key requirements of the Gaia-X Framework and strives to be compliant with policy rules and criteria set out by the Compliance Document. As the technical basis for the proof of concept of MERLOT will feature a marketplace, all service offerings, providers and customers can get its Gaia-X Verifiable Credentials from any of the Gaia-X Digital Clearing Houses (GXDCH) attesting the compliance to the Gaia-X rules of trust and interoperability. Concerning the mandatory declaration, MERLOT effectively adheres to the Gaia-X standard conformity.

## 7. Use-case scaling

### a. Requirements and steps for a new member (user, provider, or service providers) to join use-case

As mentioned earlier, the MERLOT use case is still in a proof-of-concept phase. Therefore, requirements to be allowed to join a MERLOT data space are not set out yet in detail, but because MERLOT is based on Gaia-X concepts, all new participants will have to present a Gaia-X Verifiable credential collected from a Gaia-X Digital Clearing House to attest they are trustworthy as individuals or organisations, but also to indicate that all the services they want to deploy on MERLOT Marketplace are Gaia-X Compliant.

## **b. Other sectors that could benefit by making use of the resources in this usecase**

The career assistant is capable of investigating and matching interests with professional jobs and career opportunities. This matchmaking process could potentially be used for CRM in companies in assessing the possibilities of vocational training based on preferences and former interests and capabilities.

## **8. Next steps**

### **a. What are the next steps of your project functionally-speaking?**

As the MERLOT project has now created all the components that work as proof of concept, the project is ready to venture into the next phase. In the coming months, refinement and finalisation of the use case for the demonstration at events will be paramount. With all project goals achieved, the project consortium will be able to show what will be possible with and in a MERLOT education data space.

### **b. How do these functionalities leverage the Gaia-X vision?**

The new functionalities mentioned (using MERLOT marketplace for recruitment or training purposes) will directly benefit from all the technical and organisational set up made around MERLOT Marketplace. Indeed, the services shown in the MERLOT catalogue will be Gaia-X Compliant and participants will need to also have their Gaia-X Credentials, everything will be ready to assess how accessible the trust and interoperability will be for new functionalities.

### **c. What are the next steps of your project in relation to the current (and near-future) versions of the Gaia-X architecture, and/or Policy Rules Compliance Document, and/or GXDCH release?**

As MERLOT incorporates key requirements of the Gaia-X Framework and strives to be compliant to policy rules and criteria set out by the Gaia-X Compliance Document, the project will aim to adhere to the new versions of the Gaia-X documents and specifications, including the newly released Loire version. Compatibility to the future Gaia-X releases is a key element in the MERLOT roadmap to reassure all participants that they can rely on Gaia-X trust and interoperability.

# Gaia-X

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