



WELCOME to the Tenth DOME 4.0 Newsletter!



DOME 4.0

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We are pleased to announce the publication of the tenth issue of the DOME 4.0 newsletter. If you are interested in industrial data and digital marketplaces, you are at the right place!

DOME 4.0 is a 4-year Research and Innovation Action (RIA) from 2020 to 2024 funded under Horizon 2020 focusing on developing a comprehensive industrial data ecosystem aligned with the Open Science and Open Innovation objectives to enable sharing of business-to-business (B2B) data for the purpose of value generation and creation of new or enhanced products, processes, and services.

DOME 4.0 will be open to all providers and users of data, and aims to facilitate maximum

knowledge extraction with the help of ontology-driven semantic data interoperability and modern data processing technologies adopted from the fields of Machine Learning (ML) and Artificial Intelligence (AI). These features are crucial to scale and advance the proposed ecosystem to any sector of the economy. Given the significant contribution of the materials and manufacturing sectors to the European economy, DOME 4.0 focuses on data-driven knowledge generation within these key sectors.

STAY TUNED

Stay updated on all our latest news, developments, research and general information regarding the DOME 4.0 project.

Stay tuned @www.dome40.eu!

[SUBSCRIBE here](#) to our newsletter!

PROJECT INFORMATION

Digital Open Marketplace Ecosystem (DOME) 4.0
Grant Agreement ID: 953163
Start Date: December 1st, 2020
End Date: November 30th, 2024
Coordinator: COMPUTATIONAL MODELLING CAMBRIDGE LIMITED (CMCL)

✉ @DOME40_H2020 in @DOME40

Data Tools & Services: Enhancing DOME 4.0's Capabilities

The Data Tools and Services (WP2) focuses on providing robust, efficient, and user-friendly tools that empower participants to manage, transform, and utilize data within the DOME 4.0 platform. This initiative aims to streamline data workflows, supporting the seamless execution of real-world success stories and ensuring compliance with FAIR data principles.

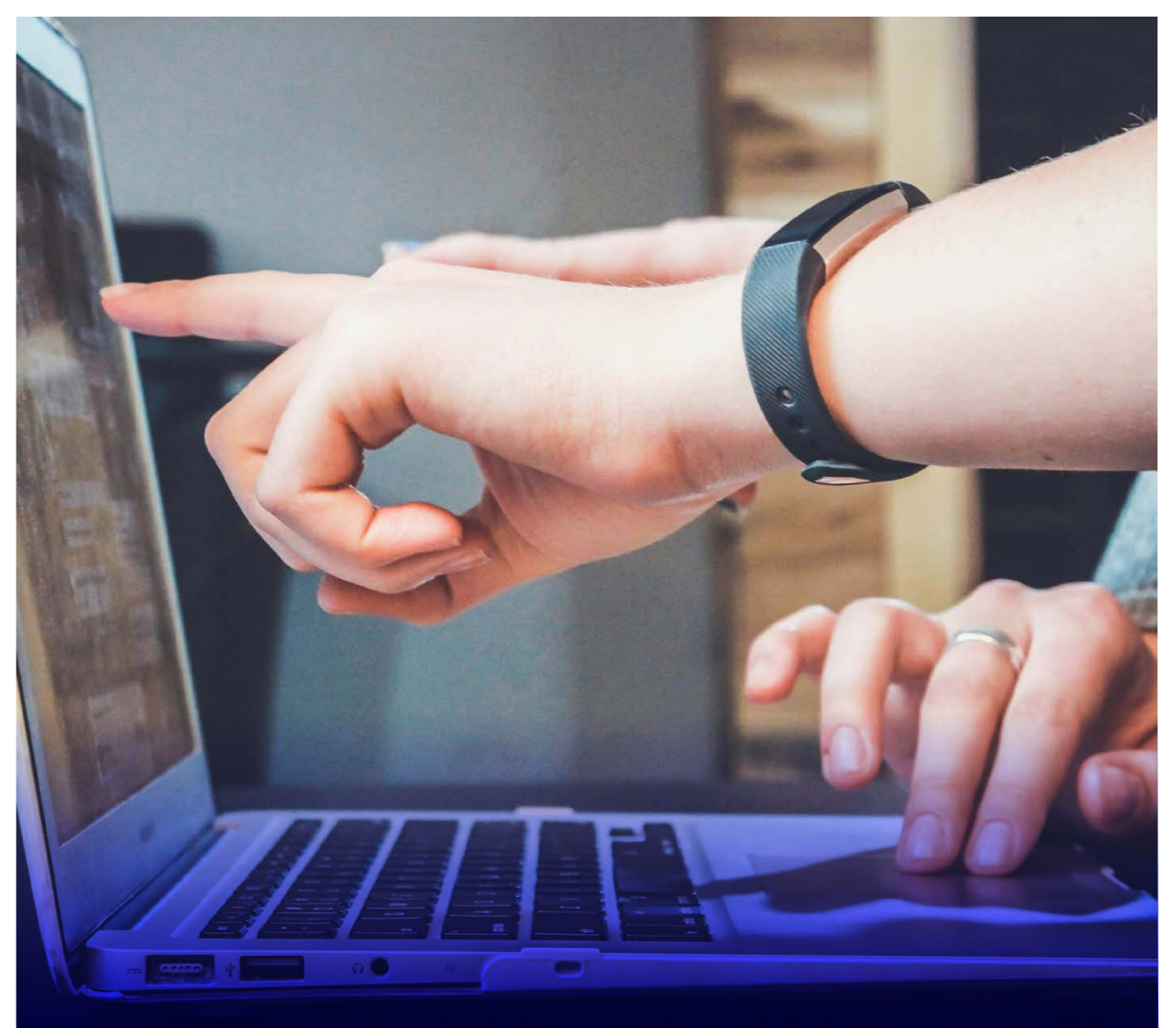
A core objective is to enable efficient data retrieval, transformation, and integration, ensuring that platform participants can effectively leverage data streams for their specific workflows. The work package emphasizes secure and reliable tracking of data origin, ownership, and licensing, making it easier to ensure compliance with relevant regulations. This is critical in protecting data integrity and fostering trust among platform users.

To enhance transparency and accountability, the platform will include comprehensive logging, tracing, and reporting capabilities. These features allow for robust monitoring of all data transactions, supporting automated reporting and compliance.

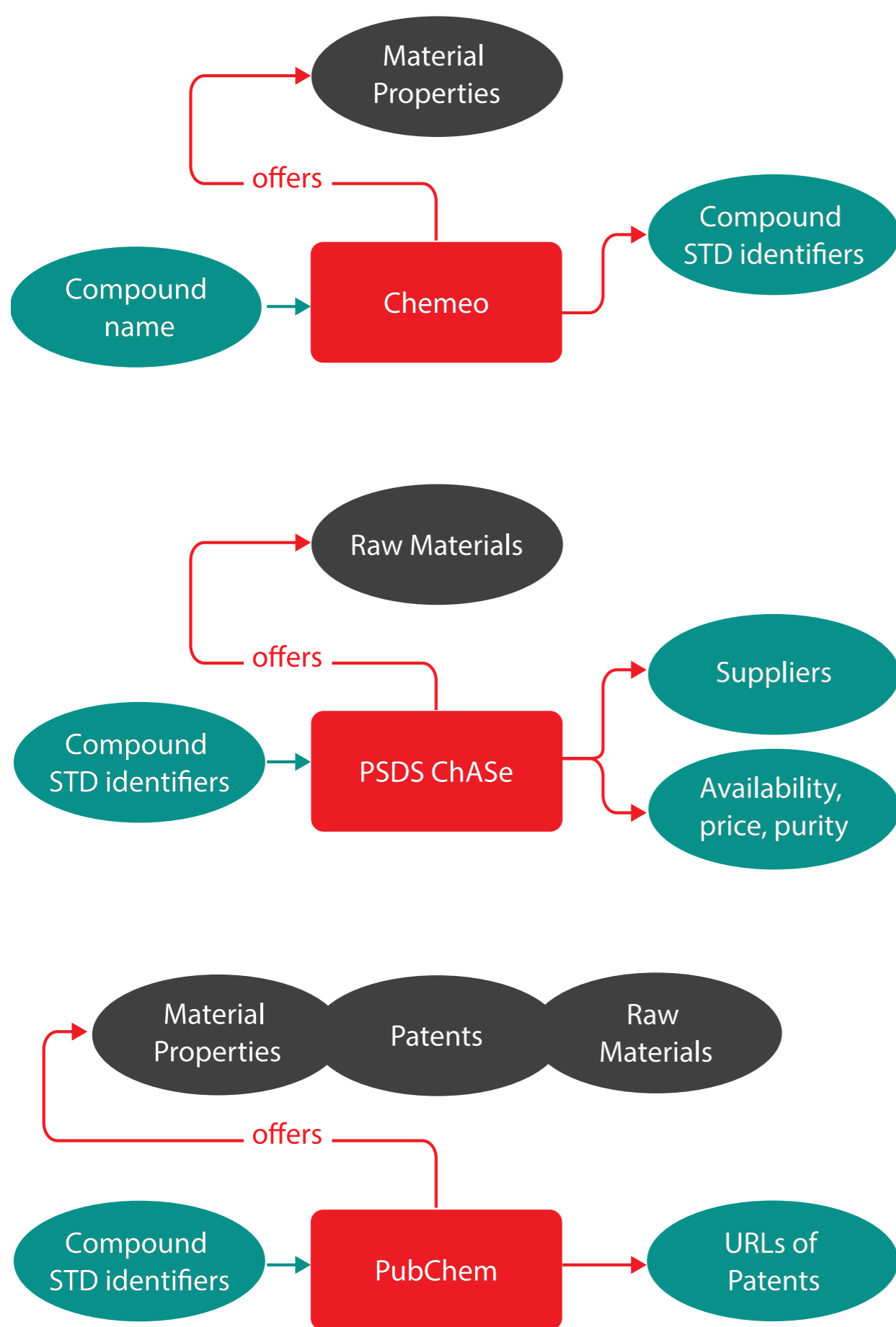
The package also includes tools for advanced data analytics, including knowledge graph generation and machine learning workflows. This supports participants in deriving deeper insights and generating predictive models, thereby enhancing decision-making processes across diverse applications.

In addition, services will be developed to support data sovereignty, ensuring data transactions are fully compliant with jurisdictional regulations and ownership rights. By integrating innovative technologies such as blockchain for data provenance, the platform enhances trust and transparency.

Overall, these tools and services aim to create a rich data ecosystem within DOME 4.0, empowering participants with the capabilities needed to innovate and optimize their workflows. The work package is critical in advancing digital transformation by providing the foundational data services required for efficient and secure platform operations.



SHOWCASE: Formulated Consumer Products

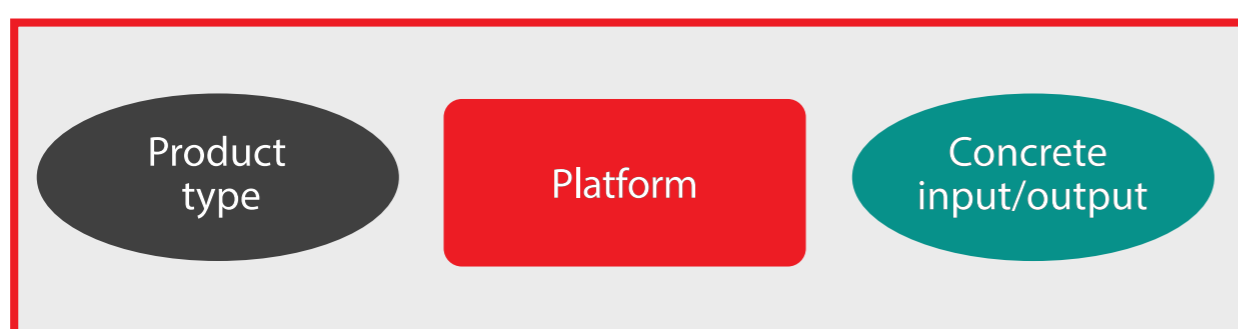


Showcase 7 is about formulated goods, in other words fluid complex mixtures (involving solvents, salts, surfactants, etc.), that, for example, are commonly used to produce personal care, food, and cleaning products. Broadly speaking, this use-case involves data on material properties (chemical and physical properties from either simulations or experiments), information about purchasing raw materials, and relevant existing patents.

All this information comes from various web-based sources, which display heterogeneity at multiple levels. In fact, in general, different sources might use different data formats, different terms for the same entities and even different perspectives to describe the same domain (corresponding to syntactic, terminological, and conceptual heterogeneity, respectively, following Euzenat & Shvaiko). DOME 4.0 will provide an entry point that enables a simultaneous query across the various data sources and will combine, and where possible harmonize, their answers.

Link of the video:
https://youtu.be/ghQMRvCm_IM

Learn more about our showcases at
<https://dome40.eu/dome-40-showcases>



Blog Posts

DOME 4.0 blog: How we are making a difference with our project

We invite you to read the blog posts that our project partners have written about their experiences and insights from working on DOME 4.0. The blog posts cover various topics, relevant to the project and they will give you a glimpse into the DOME 4.0 project.

- [The DOME 4.0 Approach: Leveraging Open Collaborative Networks](#)
- [DOME 4.0: A Collaborative Approach to Advanced Materials and Manufacturing](#)



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Visit our website: www.dome40.eu
Contact us: info@dome40

DOME 4.0 LINKS