

A northern German company in the machinery maintenance sector is seeking a digital solution to preserve the knowledge of experienced employees and make it accessible to future generations in a structured way

Summary

Profile type

Technology request

Company's country

Germany

POD reference

TRDE20260723020

Profile status

PUBLISHED

Type of partnership

**Commercial agreement with
technical assistance**

Targeted countries

• All countries

Contact Person

[Enrico FRANZIN](#)

Term of validity

23 Jul 2026**23 Jul 2027**

Last update

23 Jul 2026

General Information

Short summary

We are looking for a digital solution to document plant maintenance and day-to-day processes of experienced workers before they retire, using audiovisual technologies in a way that makes it easy to use in daily work to support future onboarding, problem documentation, and knowledge sharing. Innovative SMEs and startups are sought to test technologies as part of a pilot project. If the pilot is successful, a rollout to three additional companies is possible.

Full description

A company in northern Germany has identified knowledge management as a key area for innovation. In operational settings, valuable experiential knowledge is generated directly in day-to-day work, but it is often not systematically recorded, is tied to specific individuals, or is difficult to locate. This creates risks of knowledge loss, for example due to employees retiring or changing jobs.

Therefore, the goal is to find a practical, AI-supported solution for capturing, structuring, and making implicit domain knowledge available. The focus is on the audiovisual documentation of systems and processes, as well as ease of use in day-to-day work to support onboarding, problem documentation, and knowledge retention.

Solutions already implemented:

- Use of existing knowledge management solutions, e.g., documents, training materials, file repositories, and Office and collaboration systems.
- Partial use of isolated knowledge platforms and multiple databases with limited interconnectivity.
- Debriefing and interview formats to capture the knowledge of experienced employees (e.g., prior to retirement or offboarding).
- Ongoing or completed projects for documenting facilities, the findings of which should be taken into account.
- Previous approaches in the field of augmented reality (AR), the lessons learned from which can be incorporated into solution development.
- Low-code applications for documenting events with visual material.

Limitations of previous approaches:

- Existing solutions are not sufficiently field-ready; in particular, they lack hands-free functionality.
- There is a lack of uniform standards and a consistent structure for documenting knowledge.
- Knowledge is difficult to find and can only be used to a limited extent because it is scattered across various systems.
- Implicit experiential knowledge has not yet been systematically recorded and preserved.
- An intelligent, user-friendly solution for capturing, structuring, and providing experiential knowledge is currently lacking.

Please note:

Since this request is part of an innovation challenge, kindly answer the questions below within your EoI or write me an email.

1. Solution Approach

(Describe briefly and precisely: How do you solve this specific challenge? Please avoid promotional language and focus on the specific use case.)

2. Fulfillment of Specific Requirements

(Describe to what extent you meet the specific requirements of the use case)

3. What quantifiable impact does the solution deliver?

4. Maturity Level of the Solution (Please select)

- a) MVP/Prototype (ready for initial testing)
- b) Market-Ready (already in use by customers)
- c) Scaled Product (established solution)

5. References

(Have you previously collaborated with an SME or an industrial company? If so, briefly describe the project and the outcome.)

Advantages and innovations

The goal is to find a practical, AI-supported solution for capturing, structuring, and making implicit domain knowledge from experienced workers available. The focus is on the audiovisual documentation of systems and processes, as well as ease of use in day-to-day work to support onboarding, problem documentation, and knowledge retention.

Technical specification or expertise sought

Possible solutions:

- Hands-free solution for audio, video, and photo recording in the field (e.g., smart glasses, helmet-mounted cameras, or wearables).
- Hands-free operation via voice control or buttons; simultaneous voice commentary during recording.
- Rugged and portable for field use (e.g., construction sites, factories, technical facilities) with sufficient battery life.
- Support for the German language, including speech-to-text, transcription, and AI-powered text enrichment.
- AI-based content structuring (segmentation, tagging, and knowledge processing).
- Intuitive use for both knowledge providers and knowledge recipients; documentation both on-site and in the office.
- Integration into existing IT, office, and collaboration systems; mobile use (ideally on company cell phones).
- Data protection and governance: Content approval by knowledge providers, no continuous recording, and consideration of employee participation rights and personal rights.
- Digital sovereignty: European, interchangeable AI models and avoidance of dependencies on U.S. or Chinese models.
- Experience with AI-based video analysis, speech-to-text, NLP, and knowledge management, as well as, ideally, in industrial environments and the DACH region.
- Nice-to-have: Solutions or partnerships for field-ready hardware, as well as gamification elements to promote knowledge sharing.

Stage of development

Available for demonstration

IPR Status

IPR Notes

Sustainable Development goals

- **Goal 8: Decent Work and Economic Growth**
- **Goal 9: Industry, Innovation and Infrastructure**

Partner Sought

Expected role of the partner

The partner should present and explain the technology in detail and provide it for pilot testing. But clients test and try to implement the technology together. In case of a successful pilot the technology might be scaled up to three further enterprises.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **SME 11-49**
- **SME <=10**
- **SME 50 - 249**

Dissemination

Technology keywords

- **01003003 - Artificial Intelligence (AI)**
- **01003006 - Computer Software**
- **01003008 - Data Processing / Data Interchange, Middleware**
- **01003015 - Knowledge Management, Process Management**
- **01003012 - Imaging, Image Processing, Pattern Recognition**

Targeted countries

- **All countries**

Market keywords

- **08002003 - Process control equipment and systems**
- **08002005 - Machine vision software and systems**

Sector groups involved

- **Digital**