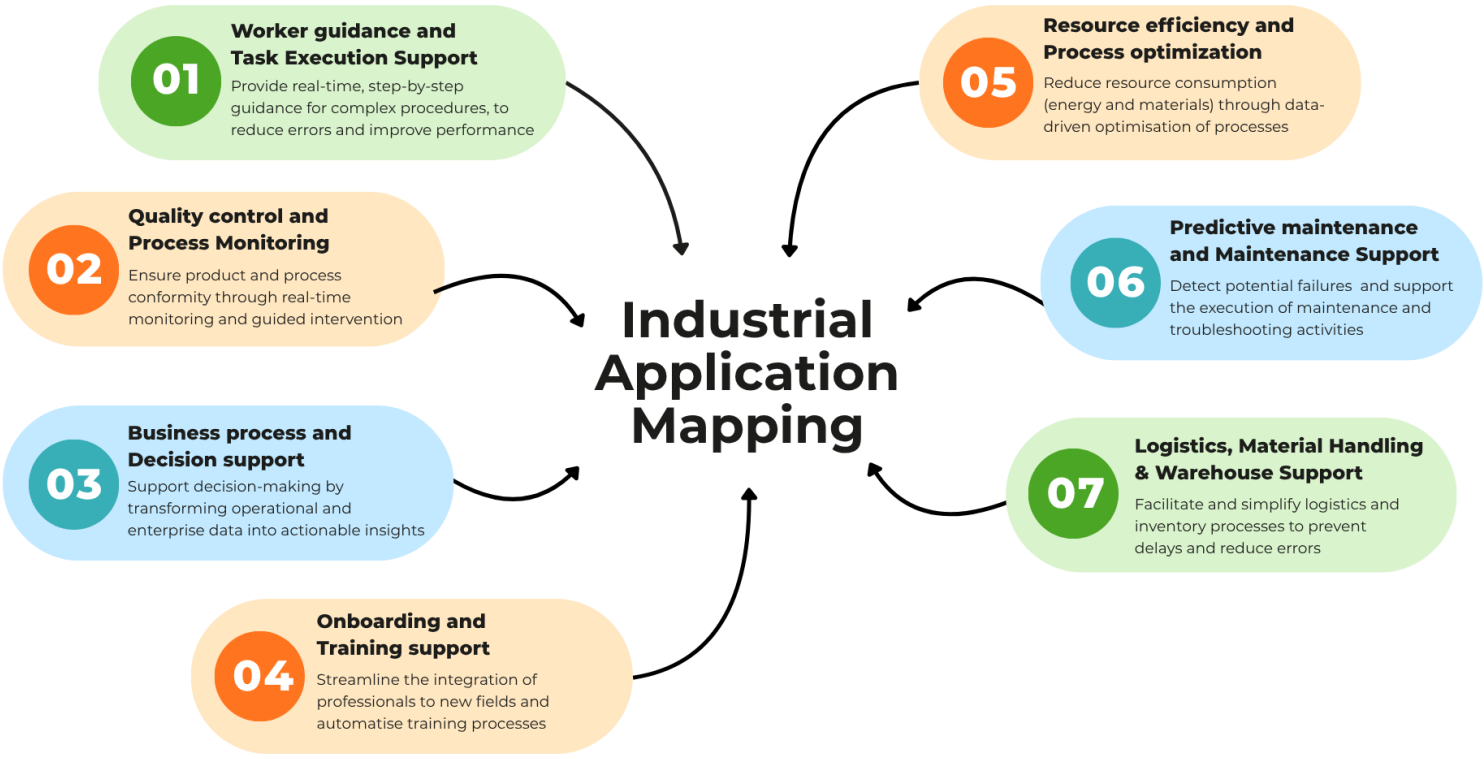
WASABI's Industrial Application Mapping across Open Call experiments accelerates AI-based assistance solution adoption

To facilitate its efforts to expand both, its ecosystem and its portfolio of solutions, the WASABI project has successfully funded **over 20 experiments** through the execution of two innovative Open Calls. This initiative has focused on empowering SMEs across Europe to design and develop **Digital Intelligent Assistant solutions** for the manufacturing sector, thereby improving the sustainability and efficiency of industrial processes, enhancing the agility and resilience of manufacturing operations and increasing the attractiveness and accessibility of manufacturing jobs for workers.

Open Calls Industrial Application Mapping

As the solutions developed within the WASABI experiments span a broad spectrum of industrial applications, the WASABI project conducted a systematic **analysis of the 22 selected experiments and their respective DIAs,** to better understand their impact and versatility**.**

By assessing both, the industrial challenges tackled by each solution, and the operational contexts in which they are deployed, the consortium identified common patterns that enabled the grouping of experiments into seven distinct industrial application clusters.



In particular, the solutions developed within the WASABI experiments demonstrate considerable potential in:

1. **Worker guidance and task execution support**: deliver contextual instructions and interactive support within daily industrial operations, supporting and empowering workers in their tasks.
2. **Quality control and process monitoring:** help operators and technical staff ensure product and process conformity through real-time monitoring and guided intervention, improving reliability and reducing defects.
3. **Business process and decision support:** support planning and strategic decision-making across manufacturing and supply chain processes, enabling faster and more informed business decisions.
4. **Onboarding and training support:** automate training processes and customise onboarding materials according to worker's roles, departments and locations.
5. **Resource efficiency and process optimisation:** reduce resource consumption through data-driven process optimisation, promoting sustainability while maintaining production and quality standards.
6. **Predictive maintenance and maintenance support:** support the detection of potential failures and assist maintenance and troubleshooting activities, enabling proactive identification of issues and efficient problem resolution.
7. **Logistics, material handling and warehouse support**: streamline logistics and inventory processes, enhancing workflow continuity, reducing errors and minimising operator fatigue.

Establishing the Groundwork for DIAs in Manufacturing

This industrial application mapping demonstrates how WASABI is positioning itself as a **key driver of innovation and digital transformation within the European manufacturing landscape**. The analysed solutions show strong potential to make Digital Intelligent Assistants (DIAs) increasingly accessible, scalable and manageable for manufacturing companies across Europe.

Overall, the results endorse the idea that DIAs can deliver tangible and scalable value across a wide range of manufacturing contexts, for both SMEs and large industrial companies. Beyond addressing company-specific needs, the analysed solutions demonstrate significant potential for **replicability, transferability, cross-sector applicability and scalability,** highlighting the capacity of DIAs to tackle shared industrial challenges across sectors and operational environments.

Collectively, the WASABI experiments showcase the **versatility of DIAs** in improving operational efficiency, product quality, process sustainability, worker safety and workforce development, contributing to the broader transformation of the European manufacturing sector.