ITEA 4

Project Profile

OMD

Optimising service provision with AI

To address the high demand for online service support, the ITEA project OMD (Optimal Management of Demand) will create a software framework in which AI models optimise service provider operations while functioning as a decision support system with an advanced analytics dashboard for the management of service desks.

Addressing the challenge

Service providers are facing increased demands on their service desks and could benefit from greater automation. Service desk management (SDM) tools exist but rarely incorporate AI capabilities; mistakes in the categorisation or prioritisation of tickets can quickly lead to latencies, low productivity and unhappy customers. These tools are also focused on IT support (ITSM), so no general framework exists to provide SDM across domains such as health or manufacturing. The implementation of AI and generalisation of such tools to new domains therefore presents a golden opportunity for both businesses and society at large.

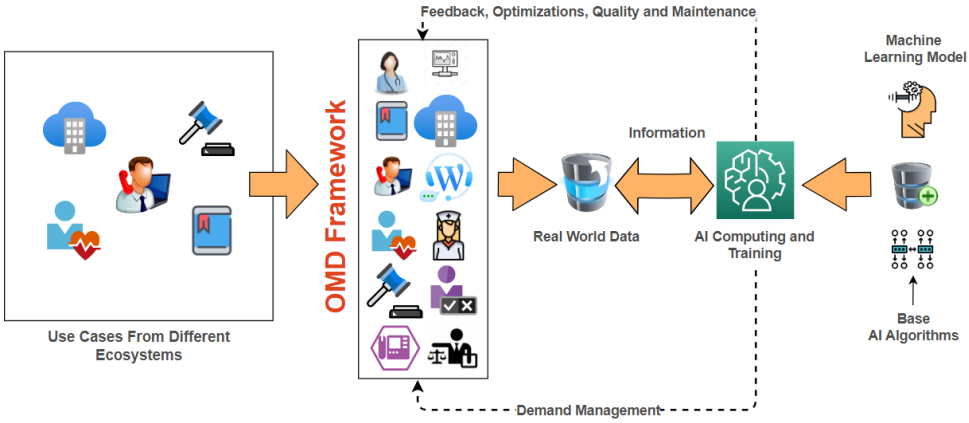
Proposed solutions

OMD's primary output will be a product that helps businesses to assign the correct agent to a service demand effectively and remotely. This will go beyond the state-of-the-art by developing and utilising AI models (including natural language processing, deep/machine learning and an optimisation module), resulting in a cloud-native framework that can be implemented using a microservice architecture. This allows the heavy computation of AI models and other computationally intensive models to easily be scaled using containers and container orchestration tools. This OMD framework will be customisable to different sectors by plugging in and out of modules and services and will be validated in nine domains: software support, justice, healthcare, consumer electronics, e-commerce, telemarketing, manufacturing, logistics and software development.

Projected results and impact

By providing a pluggable AI framework in which human factors can be quantified and processed for intelligent task assignment, OMD will ensure the effective use of resources and avoidance of repetitions, thereby increasing efficiency, reducing operational costs and enabling high-quality services. Across the consortium, reductions are expected to ticket filling time (5%), ticket assignment time (10%) and unresolved tickets (5%); for some partners, operational costs can be reduced by up to 20%. This also has a social dimension: better management of healthcare, for instance, can improve quality of life for patients, while the judicial use-case will help match disadvantaged groups with better legal counsel.

Regarding market access, ITSM software is expected to be worth USD 4991 million by 2026 at a compound annual growth rate of 11.7% between 2021 and 2026. By both enhancing this market with AI and expanding it to new sectors, OMD will provide its partners with a strong competitive advantage – including SMEs, which can grow with fewer costs thanks to the framework's flexibility. Given the increase in companies providing remote support following COVID-19, the demand for OMD is only set to increase.



Multi-domain service management software development of the OMD project providing ML-based smart demand management

Project partners

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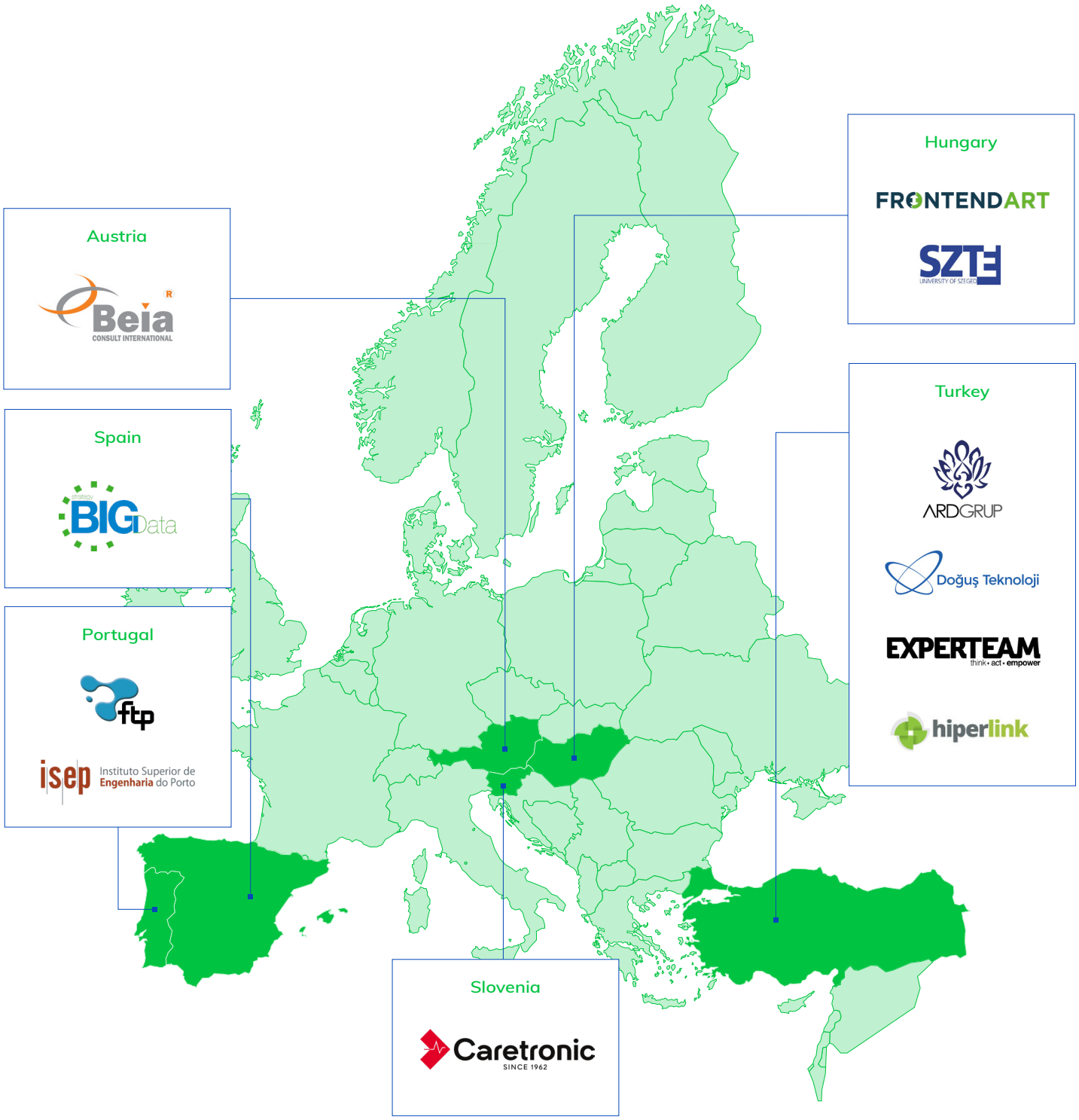

Project start
January 2021

Project end
December 2024

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ITEA is the Eureka R&D&I Cluster on software innovation, enabling a large international community of large industry, SMEs, start-ups, academia and customer organisations, to collaborate in funded projects that turn innovative ideas into new businesses, jobs, economic growth and benefits for society. ITEA is part of the Eureka Clusters Programme (ECP).

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