













## **EDIH-MADRID REGION**

EUROPEAN DIGITAL INNOVATION HUB - MADRID REGION

# D 3.2 REPORT SERVICES PROVIDED DURING THE SECOND YEAR. WP3

Task 1.2 Technical coordination and results integration

Issued by:

16/04/2025 Issued data: Work Package Leader: UC3M

Written By: UC3M Contributors: **FMID** 

Sandra Busturia Reviewed By:

Document history	
Version	Issued Date
D 3.1 v1	01/04/2025





#### TABLE OF CONTENT

Exe	ecutive Summary	3
1.	Introduction	3
2.	Description and information of services provided WP3	5
3.	Service Delivery Analysis	18
4.	Best practices and Continuous Improvement	19
5.	Conclusions	20



### **Executive Summary**

This document describes the procedures to evaluate and report the quality of the **Test Before Invest (TBI)** services provided by EDIH MADRID REGION during the second year (M12-M24) of the project, helping project managers and stakeholders assess performance and make informed decisions for future project implementation.

The Test Before Invest methodology plays a key role in driving digital transformation. It allows businesses and public sector entities to experiment with and assess cutting-edge digital solutions within a controlled setting before making substantial financial commitments.

In total, during the second year 298 TBI services were provided, including:

- 194 Digital maturity assessment (DMAs)
- 48 Knowledge and technology transfer
- 6 Integration and adaptation of Technology
- 50 Testing and experimentation

The main recipients of TBI services are SMEs operating in manufacturing, Industry 4.0, service industries, and the mobility and transport sectors (in addition to public administrations, whose services received are reported in the corresponding deliverables).

#### 1. Introduction

The EDIH MADRID REGION project aims to establish a European Digital Innovation Hub (EDIH) in the Madrid region, targeting the digitization of both the public sector and small to medium-sized enterprises (SMEs). It achieves this by offering a comprehensive suite of services designed to enhance digital capabilities, including Digital Maturity Assessments and Test Before Invest services, specialized training and skill development programs, as well as support for accessing financial resources needed for digital transformation. The project encompasses several key sectors, specifically:

- SMEs in the service sector
- Industrial SMEs focusing on Industry 4.0
- Regional and municipal public administrations
- Mobility and transport sectors

The project commenced on December 1, 2022, and is set to run for 36 months. This timeline includes various phases of implementation, monitoring, and evaluation to ensure the project meets its objectives and delivers tangible benefits to its stakeholders. In this deliverable, we will analyse the services provided during the second year of the project, from December 1, 2023, to November 30, 2024 (70% timeline of the project), and the achievements and problems found specifically in WP3: Test Before Invest Services.

The TBI approach represents a critical element in facilitating digital transformation. It is designed to enable companies and public sector organizations to pilot and evaluate innovative digital solutions in a controlled environment before committing significant investments. The primary objectives of the TBI services, aligned with those of the EDIH project include:

- Assessing Digital Maturity and Readiness: TBI services provide comprehensive diagnostic
  evaluations to gauge an organization's current digital maturity. This helps in identifying gaps and
  areas for improvement while determining the optimal digital tools and strategies needed for
  successful transformation.
- Risk Mitigation and Informed Decision-Making: By allowing organizations to test technology prototypes and new digital processes, TBI services minimize the risks associated with full-scale



investment. The iterative testing process facilitates evidence-based decision-making and ensures that the adopted solutions are robust and well-suited to the user's requirements.

- Process Optimization and Customization: The services aims to refine and optimize existing
  processes through experimental trials. By validating digital solutions in real-world settings,
  companies can tailor these innovations to meet their specific operational needs and enhance overall
  efficiency.
- Enhancing Collaboration and Innovation: The TBI framework fosters a collaborative environment where technology providers, research institutions, and industry experts work together. This ensures that the solutions tested are not only innovative but also aligned with market demands and technological trends.

These services are provided by a consortium of key partners, each contributing specialized expertise in digital innovation support. The partners involved in WP3 include:

- 1. Universidad Carlos III de Madrid (UC3M): UC3M is the lead beneficiary of WP3. It contributes its extensive research and technical expertise to carry out detailed assessments of the tested technologies, and provides access to various high-tech facilities, including industrial robotics laboratories, general robotics laboratories, and 3D printing infrastructure.
- 2. Asociación de Empresarios del Comercio e Industria del Metal de Madrid (AECIM): AECIM offers access to the FabLab from IVECO in Madrid and brings extensive experience in supporting industrial SMEs in the region. It also plays a vital role by supporting industrial and metal sector companies, ensuring that all stakeholders receive tailored guidance and robust support throughout their digital journey.
- 3. **Asociacion de Empresarios del Henares (AEDHE)**: AEDHE contributes its expertise in providing business support services to SMEs, by offering tailored advice and practical support, focusing on digital maturity assessment and technology integration. They help small and medium-sized enterprises understand how to access regional, national, and European funding opportunities, ensuring that the tested solutions are both feasible and adapted to the needs of these companies.
- 4. Fundación para el Conocimiento Madrimasd (MADRIMASD): MADRIMASD acts as a key coordinator, leveraging its leadership in digital transformation and ensuring seamless integration with networks such as the European Enterprise Network. Their role is crucial in maintaining the continuity and quality of the service offerings
- 5. **Hewlett-Packard Servicios España (HPE)**: HPE offers high-performance computing capabilities, and ensures continuous technical support, thereby guaranteeing the reliability and security of the testing environment. HPE is the world leader in high-performance computing (HPC) with 40% of global market share.
- 6. **EIT Digital** contributes with its expertise in digital innovation and trend forecasting. Their insights help guide the selection of cutting-edge technologies and ensure that the services remain forward-looking and adaptable to future digital challenges EIT Digital participates in 12 EDIH proposals with the aim of creating a "corridor" of pan-European services.

#### This report evaluate the effectiveness and efficiency of the services delivered in WP 3.

**Effectiveness** refers to the extent to which the services delivered achieve the intended outcomes and goals. For the EDIH MADRID REGION project, effectiveness can be measured through several key indicators: Digital transformation success, skill development, innovation and growth (impact on competitiveness (enable the SMEs to better compete in the market)

Efficiency relates to the resources used to deliver the services and the speed and cost-effectiveness of the delivery process. Key factors include resources utilization (human, technological resources to deliver high



quality services); timelines (delivery of the services with the planned timelines); services delivery processes (by reducing bureaucracy and improving speed); scalability (ability to scale services to accommodate more services without increasing costs or time)

By focusing on these aspects, the EDIH MADRID REGION project aims to ensure that the services provided are both effective in achieving their intended goals and efficient in their delivery, maximizing the benefits for all stakeholders involved.

#### 2. Description and information of services provided WP3

Test before Invest (TBI) services can be defined as expert guidance and technological experimentation aimed to facilitate successful and cost-effective digital transformation for, in this WP, small and medium-sized enterprises These services are divided into:

- **Digital Maturity Assessment (DMA):** This service evaluates an organization's current digital capabilities by systematically measuring its processes, technology, and workforce readiness. The DMA identifies strengths and areas for improvement, providing a clear baseline for future digital transformation initiatives.
- **Knowledge and Technology Transfer:** This component is dedicated to sharing best practices, expertise, and technological insights among stakeholders. It encompasses guidance sessions, workshops, and mentoring programs designed to facilitate the effective adoption of digital solutions. By promoting collaboration and learning, this service ensures that both public and private organizations can leverage new technologies to drive sustainable digital transformation.
- Integration, Adaptation and Customization of Digital Technologies: This sub-category focuses on embedding new digital solutions into existing business operations. It involves tailoring technologies to fit the unique needs of an organization, ensuring that they seamlessly integrate with current systems and processes. The goal is to enhance efficiency and create customized digital tools that directly support strategic objectives.
- Testing and Experimentation with Digital Technologies: This service offers a controlled environment where organizations can pilot and experiment with innovative digital solutions before full-scale implementation. It provides the opportunity to validate functionality, assess performance, and gather feedback through iterative testing, ultimately reducing risks and informing investment decisions.

The Digital Maturity Assessment (DMA) serves as the gateway for SMEs to access the comprehensive support offered by the EDIH. In many cases, following the DMA, a Knowledge and Technology Transfer service is provided—typically in the form of detailed technical reports that evaluate specific challenges or assess potential purchase options. Based on the insights gained from these reports, the process then proceeds to either Testing and Experimentation or to Integration, Adaptation, and Customization of digital technologies, tailored to the results obtained and the specific needs of the client.

The descriptions of the Test Before Invest services provided during the second year of the project are listed in the following tables:



### A) Digital Maturity Assessment (DMA)

Partner	Number of DMAs carried out
UC3M	8
AECIM	56
AEDHE	11
MADRIMASD	78
IDC	9
EIT	8
CMH/MOVEN	9
Total	194

### B) Knowledge Technology Transfer

Entity	Service description		
	Services delivered by UC3M		
Isati Engineering Solutions SL	Technical consultancy for the development of a structural monitoring system based on guided ultrasonic waves.		
Isati Engineering Solutions SL	Visit to Isati's offices to learn about the development and operation of their product iSUM, a structural monitoring system based on guided ultrasonic waves. Technical advice and joint determination of use cases necessary to test the performance and develop detection algorithms and failure prognosis of their product.		
IVAQ Technologies S.L.	This report is a response to the problems encountered by IVAQ in the hardware and software architecture of its flagship product: the IVAQ finder, an avalanche rescue and location drone. This report consists of an analysis of its design, including the configuration of the payload module, the actuated mechanisms and systems, the localization algorithm, the local server for the web application, among other issues.		
Millennials Consulting SL	Analysis and technical consultancy of their proyect to sensorize all the access doors to the food markets, in order to know the number of people at any given moment. We had a meeting in which they explained their project, and UC3M offered a first technical advice. However, we were waiting to receive a document with technical specifications from the client that never arrived, so the service has been cancelled.		
ACCURO TECHNOLOGY S.L.	Technical consultancy to analyze the problems encountered in the operation of its pilot robotic system for the assembly and maintenance of photovoltaic panels.		
ACCURO TECHNOLOGY S.L.	Technical report with proposed solutions to the navigation and communication problems encountered on your pilot robot: space, need for internet, touch screen, navigation map, remote control and LiDAR system.		
ACCURO TECHNOLOGY S.L.	Technical report with proposed solutions to the mechanical and electronic problems encountered on their pilot robot: spacing, shock absorber clamping, gear friction, battery, voltage regulation and protoboard.		
PSICONNEA B2B, S.L.	Mentoring and technical consultancy on the development of automated psychological assessments based on real-time data, and personalized ML-based treatment plan recommendations		
PSICONNEA B2B, S.L.	Mentoring and technical consultancy on the development of communication interfaces with the user: avatar and chatBot		
PSICONNEA B2B, S.L.	Mentoring and technical consultancy on solutions for the development of text and audio (voice) processing systems		



	Madrid Region	
PSICONNEA B2B, S.L.	Technical approach and introduction to the development of an AI-based complement to psychological assessments.	
	Services delivered by ID Consortium	
LEVOX	Advisory support for integration and adapt technologies: technological scope definition and adaptation for an innovation project	
ROSEPETAL	<ul><li>20h advisory in:</li><li>1) Identification of intangible assets, risks and opportunities (Audit of intangible assets).</li><li>2) Strategic roadmaps for exploitation.</li></ul>	
KIK BALANGA S.L	Consultancy services on IP management.	
	Services delivered by MADRIMASD	
KUULI TECHNOLOGIES	Kuuli is trying a solution that is a content marketing and social media management platform that helps organizations create, plan, and optimize their content strategies. It provides data-driven solutions to increase brand awareness, customer engagement, and conversions. The platform enables users to discover trending topics in their industry, ensuring the creation of relevant and impactful content. It offers an intelligent social media scheduler that allows businesses to plan, publish, review, and optimize their content across multiple channels for better reach and engagement.  They will be using this tool for a ayera but the services has been already pais. A full document after a year of service will be uploaded.	
Advanced Mineral Processing S.L	TRANSFER TECH-KNOWLEDGE to provide strategic advice on the use and best practices of AI in order to optimise and improve internal processes.	
Consultora Kleinson S.L.U.	Study of needs and search for suppliers for the development of an innovative e-learning IA project. Community of Madrid.	
Conscious Management Institute S.A CMI	Facilitating access to expert e-Learning consultancy to understand the opportunities that different e-learning technologies can offer businesses, as well as the different options for digitisation of training content that exist.	
Evidence-Based Behavior	IPR assessment for the protection of E2B data and software. The hired a copyright registry to protect the evidence of the 5 algorithms they have created until now, and combine this with other protection methods	
	Services delivered by Connected Mobility Hub	
SERVICIOS URBANOS AVANZADOS, S.L. (NOVALITY)	NOVALITY contributes to the development of urban micromobility through bicycle and e-scooter parking stations equipped with private lockers that include plugs to charge the vehicles while they are stored. We have a wide variety of surface, subway and hybrid stations with different designs to meet the needs of both public administrations and private companies, being a fully scalable business. The parking lots are controlled from a central unit and users can download an intuitive app to reserve their lockers in advance. Communications use IoT technology (M2M cards or similar), employing an encrypted modem that uses private tunnels to ensure protection against hackers. The system obtains regular status information, as well as for remote management and ensures that data exchanges are carried out through the platform and for which it interacts with the interfaces defined for this purpose aligned with the FIWARE NGSIv2 standard, thus being a FIWARE READY solution.	
Services delivered by AEDHE		
Fersay Electronica	Intelectual property equipment analysis	
Metalúrgica Madrileña SA	SAGE platform testing	
Cultur Alcala	Testing of electronic locks	
Services delivered by AECIM		



SOLUCIONES TECNICAS MTECH, S.L.	SOLUCIONES TÉCNICAS MTECH, S.L. benefits from ANCORA's expertise and knowledge in digitizing manual production records, with a particular focus on supporting SMEs in the metal sector in order to eliminate paper use in production processes and improve performance and efficiency of digitalized processes.
Orbis Tecnología Eléctrica S.A	AECIM has visited the two Orbis factories in Madrid and has provided it with know-how from a technological centre to study possible improvements in its production processes, specifically:  1. Multi-cavity moulds 2. Redesign of components 3. Inspection and measurement 4. Industrial automation and robotics
Talleres Mecánicos Paramio S.L	AECIM visits the facilities of Talleres Paramio on September 13, 2024 accompanied by a consultancy firm specialized in Industry 4.0, Sofftek, which proposes various actions to automate their production processes.
ABC Ventanas	Knowledge Transfer Report. You are offered 3 options for technological solutions to undertake the digitalization and automation of your workflows, both in the window factory and in the shops/retailers.
GRUPO QUERO JC- ELECTRONICS SPAIN SLU	AECIM advises QUERO on the advantages and benefits of its investments in software and hardware for digitalisation in order to prepare the technical report for the application for aid for investment projects for the modernisation, digitalisation and innovation of commercial, service and craft SMEs in the Community of Madrid.
Anillas Talismán S.L	A knowledge transfer report is provided with 3 technological solutions for the purchase of a more sophisticated hardware device. Anillas Talismán S.L is working on several lines of digitalization. Among them, it is worth highlighting the hardware, since the one used by the company, especially the computers, is completely obsolete: they need to update and renew it urgently, ideally replacing it with something with higher performance, because they have acquired new machinery that requires greater sophistication in the computer.
Gantrex Crane Solutions S.L	Knowledge transfer report with 3 technological solutions to adopt the digital employee time control system (now they do it manual)
Chimetal S.A	Sending a report on Knowledge-Transfer, which contains 3 technological solutions and their suppliers to implement digital signing, which they currently do manually
Chimetal S.A	Sending a Knowledge Transfer report, which contains 3 technological solutions and their suppliers to implement 3D design software.
Forjas Mobiliario Urbano	Transfer technology - knowledge: Technical report informing about 4 available technological solutions for laser engraving of parts.
SOLUCIONES TECNICAS MTECH, S.L.	AECIM informs its members about the call for the "Acquisition of Productive Resources" grant from the Community of Madrid, for which the suitability of MTECH and its investments is analyzed and it is concluded that it can opt for it. To apply for the grant, AECIM carries out a transfer of knowledge in which it highlights the advantages and benefits of the investments undertaken in 2023 in the field of digitalization, preparing the technical report of the application, specifically, on these technologies purchased by MTECH:  1. Test bench, ancillary elements, tools and facilities necessary for operation 2. Production equipment for the automation of the wiring forming process. 3. Milling machine, ancillary elements and tools for machining polyester casings
Saargummi S.A	AECIM prepares the technical documentation to submit the application for the "Acquisition of Productive Means of the Community of Madrid" grant for investments in 8 tangible and intangible assets for the digitalization of its production process worth €510,000
Luger Centro de Corte S.L	Between January 4 and January 15, AECIM advised Luger Centro de Corte S.L on the "Digitalisation of industrial SMEs" grant from the Community of Madrid, for its investment project consisting of the purchase of a 12 kW fibre laser cutting machine from HSG Laser, model G6025H, worth €220,000. Knowledge transfer



	After the analysis, it was concluded that Luger could apply for this grant, so AECIM prepares a Knowledge Transfer Report in which it highlights the advantages and benefits of this machinery in the production process, in order to prepare the technical report for the aid application.
Martinrea	AECIM put Tekniker in contact with Martinrea. At the MCA Board of Directors meeting held on February 15, as point 4 of the agenda, Patxi López, Head of Technology Transfer at Tekniker, the leading technological and industrial research centre in the Basque Country, recently installed in Madrid, spoke. The Head of Technology Transfer gave a presentation on the capabilities offered by Tekniker, as well as specific cases of practical application. At this meeting, Martinrea detected that he had two needs in his production process that Tekniker could help with: improving the quality analysis of his parts, and moving from placing the parts manually to automatically.
Aluminios Seppala S.A	On January 17, 2024, AECIM advised Aluminios Seppala S.A for the purchase of a Schirmer CNC cutting and machining center model BAZ-G4; an URBAN model GLS300/S4 junquillera machine; and software for integrating both machines into SEPPALA's production process, worth €690,000.  After the analysis, it was concluded that Aluminios Seppala could apply, specifically for the "Digitalization of industrial SMEs" grant from the Community of Madrid.  Knowledge transfer report: In order to prepare the technical report for the grant application, AECIM describes the technical characteristics of each of the investments, highlighting the advantages and benefits that they will bring to Seppala in the innovation and digitalization of its production process.
Golderos	Golderos is considering purchasing a 3D laser printer with the aim of designing parts and producing samples for its clients. It has an approximate budget of €5,000. AECIM prepares a knowledge transfer report with 3 technological options. Finally Golderos chooses one of them and buys it.
Juan Flores S.L	In October 2023, AECIM advises Juan Flores S.L on the grant that will be opened in January 2024 "Digitalization of industrial SMEs" of the Community of Madrid. Juan Flores S.L decides to apply for this grant for the purchase of a machine-plant for surface treatment and metal passivation.  Knowledge transfer report: In order to apply for this grant and prepare the technical report, AECIM prepares a Knowledge Transfer Report in which it describes the benefits and advantages of acquiring said machinery for the production process of Juan Flores S.L.:
Nagamohr	Nagamohr was considering the possibility of incorporating knowledge about Siemens Programmable Logic Controllers (PLC) and the TIA (Totally Integrated Automation) Portal programming software. AECIM prepared a Knowledge Transfer Report describing the benefits of incorporating this knowledge, and recommends carrying out an ad hoc training course for its workers.
Industrias GES	Currently, Industrias GES uses Power Business Intelligence at a basic level, to collect, analyze and visualize different types of data. With this, you are able to make decisions in a more informed and efficient manner, which in turn drives operational efficiency, improves customer satisfaction and increases your profitability. However, after using Power B.I for some time, the need has been detected to go one step further and explore the possibilities that an advanced Power BI would offer. That is why AECIM prepared a Knowledge Transfer Report, to detect possible suppliers that offered this knowledge. 1 video call was made with 3 suppliers and finally one was chosen, with whom AECIM has recommended specialized training.
Martín Vecino S.L	Martín Vecino S.L wanted to know what technology can be used to mark the parts of the medical devices they manufacture, either with laser, with QR, or other options. They would like to have the marking machine in their facilities, since they have been manufacturing their parts since the 80s and they encounter the problem that the client can tell them that the parts are theirs and they have to assume it.  For this reason, AECIM offered different technological solutions, with similar characteristics, that were detailed described in a Technology Transfer Report.



Compañía Auxiliar de Aeronáutica, S.L (CADA Madrid)	CADA Madrid has acquired two machining centers for an amount of around €800,000, with digital elements. AECIM has advised them in the search for financing, recommending a grant from the Community of Madrid. Subsequently, AECIM has prepared a knowledge transfer report, with all the advantages that this machinery entails for the company, in terms of automation. AECIM has proposed a schedule with the phases for the integration and adaptation of that technology, in the facilities of its factory in Ajalvir. And finally, AECIM has accompanied them in the testing and experimentation processes of that machinery and software.
Servosis S.L	Report on technological solutions for 3D printer

### C) Integration, Adaptation, and Customization of Digital Technologies

Entity	Description of the service	
Services delivered by AECIM		
PROTOLDO S.A.	AECIM advises PROTOLDO on the steps to follow for the correct integration and adaptation of an automatic welding machine and another automatic sewing machine, which can be found in the attached document.	
Luger Centro de Corte S.L.	Integration and adaptation report of the HSG laser cutting machine in the LUGER production process:  1. Initial Tests and Adjustments  - Cutting tests must be carried out on different materials and thicknesses.  - Adjust parameters such as speed, laser power and focus to optimize quality.  - Detect possible faults or necessary adjustments before mass production.  2. Integration into the Production Process  - Synchronize the machine with other production areas (warehouse, assembly, finishing).  - Establish work procedures for programming and cutting operation.  - Optimize the workload to maximize efficiency of use.  3. Maintenance and Monitoring  4. Implement a preventive maintenance plan (cleaning lenses, calibration, checking consumables).  - Monitor machine performance to detect necessary improvements or adjustments.  - Maintain operation and maintenance records for better control.  5. Continuous Evaluation and Improvement  - Periodically review the impact of the machine on production.  - Collect feedback from operators to improve efficiency and quality.  - Identify opportunities to expand its use or improve the production process."	
Juan Flores S.L	<ol> <li>Background:         <ol> <li>Advice in which AECIM identified the call for proposals "Digitalisation for industrial SMEs" of the Community of Madrid in which Juan Flores S.L could opt to buy the surface treatment and passivation machine for metals.</li> <li>Preparation of a Knowledge Transfer Report in which AECIM highlights the advantages and benefits of this machinery for the production process, in order to present the technical report in the application for aid.</li> </ol> </li> <li>Preparation of a Test and Experimentation Report with the most optimal steps to follow so that the machine begins to prepare upon arrival at the facilities of Juan Flores S.L.         <ol></ol></li></ol>	
Aluminios Seppala S.A	AECIM advises Aluminios Seppala on the steps to follow for the introduction and initial configuration of the machine in its facilities, preparing an Integration and Adaptation Report for a Schirmer CNC cutting and machining centre model BAZ-G4; an URBAN model GLS300/S4 junquillera machine; and software for the integration of both machines in the SEPPALA production process.	



TECNICA	AECIM prepares an Integration and Adaptation Report with the steps to be followed by TMN upon
MECANICA	arrival at its facilities of the fiber laser cutting machine and the electronic press brake.
NORMALIZADA, SL	
Compañía Auxiliar de Aeronáutica, S.L (CADA Madrid)	CADA Madrid has acquired two machining centers for an amount of around €800,000, with digital elements. AECIM has advised them in the search for financing, recommending a grant from the Community of Madrid. Subsequently, AECIM has prepared a knowledge transfer report, with all the advantages that this machinery entails for the company, in terms of automation. AECIM has proposed a schedule with the phases for the integration and adaptation of that technology, in the facilities of its factory in Ajalvir. And finally, AECIM has accompanied them in the testing and experimentation processes of that machinery and software

# D) Testing and Experimentation with Digital Technologies

Entity	Service description
Services delivered by UC3M	
Isati Engineering Solutions SL	Contact with AECIM to perform functional tests and develop failure detection and prognosis algorithms, making use cases, in:  - Metal structures and parts in general, as well as, rails, tubular structures, that have failures due to fatigue, corrosion or manufacturing failures.  - Carbon composite structures and parts susceptible to failures such as cracks, porosities, delaminations, etc.
Innerspec Technologies Europe S.L.	Attendance to the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Umiles Corporation	Umils attended live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material (also applicable to Unmanned Aerial Systems), from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
HispaRob	Members of HispaRob attended the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Fundación Tekniker	Attendance to the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Tecnatom - Westinghouse Electric Company	Attendance to the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Star Robotics (STARTIUN, S.L.)	The head of R&D attended the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Silcotech, S.L.	Members of Silcotech attended the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material - also applicable after some modifications to polymers such as silicones-, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
GRUPO TECNOLOGICO E INDUSTRIAL GMV, SA	Attendance to the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material, from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.



	Mauriu negiori
Ferrovial Construcción, SL	Ferrovial Construction's head of innovation projects attended the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material (whichcan be applied to other materials, such as infrastructural), from imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
ETRA AIR, SL	Etra Air attended the live demonstration conducted by CT engineers on the application of AI for the inspection of electronic material (applicable to the aeronautical sector), afrom imaging and dataset development, through detection and filtering algorithms, to drawing conclusions with a minimum margin of error.
Isati Engineering Solutions SL	Mentoring and technical consultancy on solutions for the development of text and audio (voice) processing systems
ACCURO TECHNOLOGY S.L.	Technical approach and introduction to the development of an AI-based complement to psychological assessments.
PSICONNEA B2B, S.L.	
	Services delivered by HPE
Qualifying Photovoltaics - QPV	Access to HPC and AI Infrastructure - Hewlett Packard Enterprise
	Services delivered by MADRIMASD
FORMACION CONTABLE Y ADMINISTRATIVA S.L.	Technical and strategic web consulting to Optimize their Website.  Analysis on how to elevate the digital presence with technical and strategic consulting for your website. Search for solutions through analysis and personalized strategies to optimize your website. From web audits to SEO recommendations.
Conscious Management Institute S.A CMI-	Technical and strategic web consulting to Optimize your Website.  Analysis on how to elevate the digital presence with technical and strategic consulting for your website. Search for solutions through analysis and personalized strategies to optimize your website. From web audits to SEO recommendations
Alaska Circular	Basic usability audit and UX best practices
Connection Human 2 human sl	Technical and strategic web consulting to Optimize your Website.  Analysis on how to elevate the digital presence with technical and strategic consulting for your website. Search for solutions through analysis and personalized strategies to optimize your website. From web audits to SEO recommendations.
calidad recursos e inversiones sl	Technical and strategic web consulting to Optimize your Website.  Analysis on how to elevate the digital presence with technical and strategic consulting for your website. Search for solutions through analysis and personalized strategies to optimize your website. From web audits to SEO recommendations
KIK BALANGA S.L.	Technical and strategic web consulting to Optimize your Website.  Analysis on how to elevate the digital presence with technical and strategic consulting for your website. Search for solutions through analysis and personalized strategies to optimize your website. From web audits to SEO recommendations.
Alto y Claro	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
LFE Aparejadores	Website Optimization with Provider Marte (Service Delivered)



	A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Estudio 11	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Centro psicopedagogico y logipedico Avanza (marta Fuentes)	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Grow (nueva web)	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
David Macias González Abogado Penalista	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Tu Huella Digital (Sipy)	Website Optimization with Provider Marte (Service Delivered)



	Madrid Region
	A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Sáiz Sánchez Abogados (Isabel)	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Mercontrol	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included:  Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Omakasemadrid (Japan Solutions)	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Guest AI (NOMADE)	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.



	Madrid Region
	A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
Eloisa Lopez Gallardo	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
FORMACION CONTABLE Y ADMINISTRATIVA S.L.	Website Optimization with Provider Marte (Service Delivered) A complete website optimization service was successfully delivered in collaboration with provider Marte. The project focused on enhancing the digital presence of the client through a mix of technical audits, SEO improvements, and strategic consulting. Detailed analysis of the website's structure, performance, and visibility, personalized strategies were developed to address key areas of improvement. The service included: Comprehensive web audits; Identification of technical and UX issues; SEO recommendations tailored to specific goals; Strategic insights to boost online positioning and performance; This service resulted in measurable improvements in website speed, search engine visibility, and user engagement, setting a strong foundation for continued digital growth.
	Services delivered by Connected Mobility Hub
ALOMON SL	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
Silice Tecnologia Y Servicios SL	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
INNOVASUR SL	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
IDENCITY ASESORIA DE CIUDADES SL	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
Hoopcarpool	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
Free Now	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.
Celering Smart Mobility Services SL	Data Mobility Platform Testing: Advanced data analysis and predictive modeling, targeting major activity hubs such as business parks, municipal centers, and areas with high commuter flows.



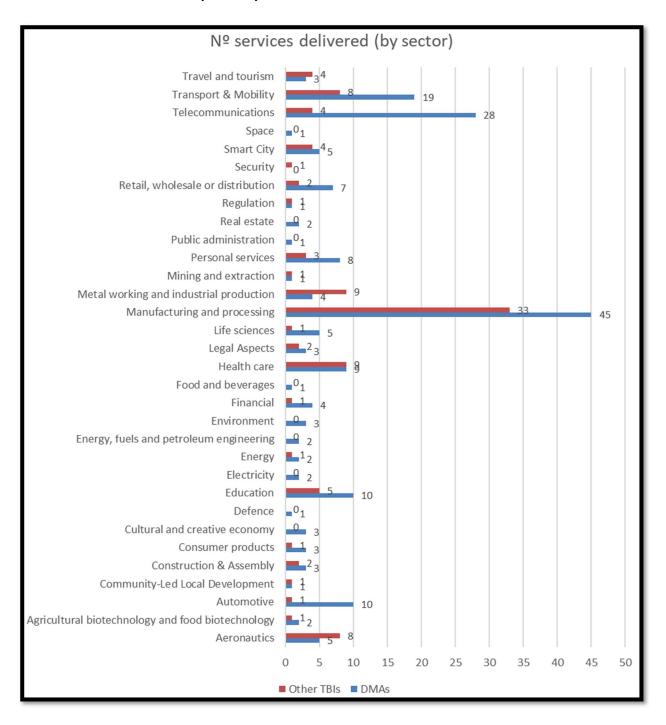
	Services delivered by AEDHE			
EMOTAB	Research on supercomputational experimentation within HPE EDIH Madrid Region Partner of new clients technologies			
	Services delivered by AECIM			
Metalurgia para Telecomunicación, S.A (MEPAT)	MEPAT explained that they are carrying out a process of digitalization of their factory, in which they are wiring and connecting the machines to be able to launch the manufacturing orders from the office to the plant. In this sense, MEPAT needs a visual image of the production and the monitors of each machine.  AECIM, together with Quimel, went to the MEPAT facilities on October 28 to carry out a demo for real-time data capture. Quimel is an SME specialized in industrial process automation, consulting and digital transformation			
Industrias GES	A demo is carried out on how artificial vision is applied to detect defects in different products, how said model is trained to be successful and the advantages of said system, such as the greater speed of inspected parts, savings in supervision times, absence of fatigue or stress (as opposed to an operator), flexibility and precision.			
SOLUCIONES TECNICAS MTECH, S.L.	The DEMO aimed to show how workers using a NLU-enabled intelligent mobile tool, Ancora Worker Connect (AWC), which features an intuitive visual interface. By leveraging AI, NLU, multimodal interfaces, and advanced analytics, the solution reduces cognitive load, organizes actions, and ensures consistency, enhancing productivity and quality. The system provides step-by-step instructions through voice and visual interfaces, allowing workers to efficiently complete dynamic quality controls. Integrated with MES/MOM/ERP systems, the solution dynamically adapts to the industry environment.			
Forjas Mobiliario Urbano	Testing and experiment: fiber and CO2 laser marking test on metal and wooden parts			
Martín Vecino S.L	On Tuesday, May 7, AECIM has organized a visit to the Trotec facilities, in Las Rozas, where it has the engraving machines. Martín Vecino has brought some sample pieces and we have tried laser engraving on them, with satisfactory results. Different types of pieces have been tested, with different shapes and thicknesses, as well as different engravings: letters, numbers, QR code			
PROTOLDO S.A	AECIM advises PROTOLDO on the steps to follow for the correct start-up and first tests of the two automatic machines to digitalize its production process, which are included in the attached Report and summarized here:  1. Needs Assessment and Planning 2. Installation and Configuration 3. Staff Training			
Juan Flores S.L	After advising him on the search for financing and preparing a knowledge transfer report, AECIM writes a Test and Experimentation Report so that Juan Flores S.L can follow the optimal steps upon arrival of the surface treatment machine valued at €97,000 to its facilities.			
Luger Centro de Corte S.L	<ul> <li>Background: <ul> <li>Between January 4 and January 15, AECIM advised Luger Centro de Corte S.L on the "Digitalisation of industrial SMEs" grant from the Community of Madrid, for its investment project consisting of the purchase of a 12 kW fibre laser cutting machine from HSG Laser, model G6025H, worth €220,000.</li> <li>Knowledge transfer. After the analysis, it was concluded that Luger could indeed apply for this grant, so AECIM prepared a Knowledge Transfer Report in which it highlights the advantages and benefits of this machinery in the production process, in order to prepare the technical report for the aid application.</li> <li>Testing and Experimentation: In February, AECIM indicated the steps to follow for the introduction and first configurations of the HSG laser cutting machine in its fabric.</li> </ul> </li> </ul>			
Aluminios Seppala S.A	Background:  On January 17, 2024, AECIM advised Aluminios Seppala S.A for the purchase of a Schirmer CNC cutting and machining centermodel BAZ-G4; an URBAN junquillera			



	<ul> <li>machine model GLS300/S4; and software for integrating both machines into the production process of SEPPALA. After the analysis, it was concluded that Aluminios Seppala could apply, specifically for the "Digitalization of industrial SMEs" subsidy from the Community of Madrid.</li> <li>In order to prepare the technical report for the application for the subsidy, AECIM describes the technical characteristics of each of the investments, highlighting the advantages and benefits that they will bring to Seppala in the innovation and digitalization of its production process.</li> <li>AECIM indicates the steps to follow for the introduction and first configurations of the machine in its facilities.</li> </ul>
TECNICA MECANICA NORMALIZADA,SL (TMN)	<ul> <li>Background: <ul> <li>In mid-2023, AECIM visited TMN and advised it on various grants it could access for the purchase of two machines and two software programs to digitize the production process, valued at more than €162,000. After the analysis, it was concluded that TMN could apply, specifically for the "Digitalization of industrial SMEs" grant from the Community of Madrid.</li> <li>At the end of 2023, AECIM wrote a Knowledge Transfer Report to describe the advantages and benefits that the machines and software bring to TMN's production process, in order to prepare the technical report for the grant application.</li> </ul> </li> <li>Test and experimentation report: Once the grant was requested in January 2024, AECIM prepared a Test and Experimentation Report indicating the steps to follow for the arrival of the machines at TMN's facilities, incorporating the first stages necessary for subsequent safe and optimal operation."</li> </ul>
Compañía Auxiliar de Aeronáutica, S.L (CADA Madrid)	CADA Madrid has acquired two machining centers for an amount of around €800,000, with digital elements. AECIM has advised them in the search for financing, recommending a grant from the Community of Madrid. Subsequently, AECIM has prepared a knowledge transfer report, with all the advantages that this machinery entails for the company, in terms of automation. AECIM has proposed a schedule with the phases for the integration and adaptation of that technology, in the facilities of its factory in Ajalvir. And finally, AECIM has accompanied them in the testing and experimentation processes of that machinery and software

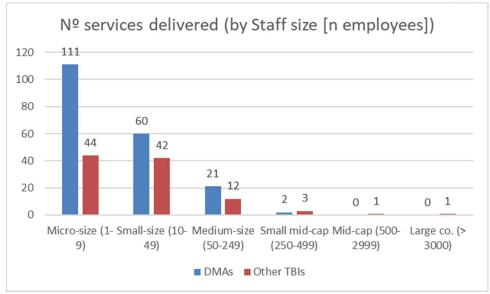


### 3. Service Delivery Analysis



Based on the main sector of the clients, the majority of Test Before Invest services—both DMAs and other TBIs—have been received by clients in the Manufacturing and Processing sector, accounting for 23% and 32% respectively. Overall, TBI service recipients come from a wide range of sectors, with most activity areas being represented.





When looking at company size based on the number of employees, the majority of clients receiving Test Before Invest services—both DMAs and other TBIs—were micro and small enterprises. Together, these two categories represent 84% of the total in both cases, highlighting the strong engagement of smaller companies in accessing TBI support.



Of the 194 DMAs delivered, 177 correspond to T0 assessments, conducted with new clients at the beginning of their engagement with the EDIH. The remaining 17 are T1 assessments, carried out one year after the initial support, to evaluate the evolution of the clients' digital maturity over time. On the other hand, out of the 79 clients who received Test Before Invest services (excluding DMAs) during the second year of the EDIH, the majority (63) received a single service. In contrast, 13 clients benefited from two or more TBIs. Specifically, 8 clients received 2 services, 7 clients received 3, and 1 client received as many as 4 TBIs.

# 4. Best practices and Continuous Improvement

The implementation of services within the EDIH Madrid Region project has revealed several best practices that have significantly contributed to delivering high-quality outcomes for industrial SMEs. A clear emphasis on collaboration between partners and stakeholders has proven to be a cornerstone for success. By leveraging the combined expertise and resources of participating organizations, the project has ensured that



services are both relevant and impactful, addressing the specific needs of SMEs in Madrid Region.

Key strengths identified include the effectiveness of digital maturity assessments as a diagnostic tool, which provided a solid foundation for recommending tailored solutions to SMEs. Moreover, the structured methodology for "Test Before Invest" services enabled businesses to experiment with advanced technologies in a controlled environment, minimizing risks while fostering innovation. The focus on capacity building through targeted training sessions has also been pivotal in empowering SME employees to adopt new technologies confidently.

In terms of continuous improvement, the project has benefited from regular feedback loops with stakeholders, allowing for adjustments to service delivery and the identification of areas for enhancement. Challenges encountered during service provision, such as addressing diverse technological needs and overcoming resource constraints, have served as valuable learning opportunities. These experiences have informed the development of concrete strategies to streamline processes, optimize resource allocation, and enhance communication channels.

Looking ahead, the lessons learned will guide the refinement of service offerings, ensuring alignment with the evolving needs of SMEs and maximizing the impact of the project. By fostering a culture of adaptability and proactive problem-solving, the EDIH Madrid Region project is well-positioned to continue driving digital transformation and industrial innovation in the region.

#### 5. Conclusions

Based on the analysis of service delivery, the tailored support for SMEs has not only facilitated their digital transformation but also strengthened their operational efficiency, competitiveness, and technological capabilities. The data shows that the majority of Test Before Invest (TBI) services—both DMAs and other TBIs—have been received predominantly by clients in the Manufacturing and Processing sector, which accounts for 23% and 32% of the services, respectively. This concentration underscores the relevance of digital transformation in traditional industrial sectors, while still highlighting that TBI recipients come from a wide array of activity areas, ensuring that the support is inclusive and reflective of diverse market needs.

Furthermore, when examining the company size based on the number of employees, it is evident that micro and small enterprises make up the bulk of the clientele. Together, these categories represent 84% of the total TBI service recipients in both the DMA and non-DMA segments. This finding is a strong indicator of the significant engagement of smaller companies in the digital support initiatives, which, in turn, catalyzes improvements in their technological capabilities and overall business performance.

The report also indicates that, over the course of the second year of the EDIH initiative, out of the 79 clients who received non-DMA TBIs, the vast majority (63) received a single service, while 13 clients benefited from multiple interventions. Notably, 8 clients received two services, 7 clients received three, and 1 client received up to four TBIs. This distribution suggests that while many SMEs initially engage with the support by accessing a single service, a dedicated subgroup finds ongoing value that encourages them to adopt additional digital solutions.

In the case of DMAs, the breakdown further shows that 177 of the 194 assessments correspond to T0 evaluations—conducted with new clients at the outset of their engagement—while the remaining 17 are T1 assessments, performed one year later to measure the evolution of their digital maturity. This phased approach not only provides an initial snapshot of a company's digital readiness but also allows for tracking improvements over time, thereby supporting continuous development.



In addition to these quantitative insights, the integration of advanced technologies such as IoT, robotics, AI, and big data has proven instrumental in modernizing industrial processes and equipping businesses to adapt to the demands of the digital era. The collaborative efforts among project partners have been central to this success, leveraging their collective strengths and expertise to deliver a wide variety of services—including digital maturity assessments, knowledge and technology transfer, as well as tailored technical support in the adaptation and customization of digital technologies.

The adoption of these services has yielded measurable improvements in both the skill sets of SME employees and the quality of operational processes. This success, combined with continuous learning and adaptation through the identification of best practices and areas for improvement, forms a solid foundation for refining future service offerings. Ultimately, the achievements detailed in this report underscore the transformative potential of the EDIH Madrid Region initiative. They reinforce its role as a key enabler of digital innovation and industrial modernization in the region, setting a strong precedent for the continued evolution of the project and laying the groundwork for further impactful outcomes in the upcoming phases.