

**Interreg
Danube Region**



**Co-funded by
the European Union**



Danube DNA

Deliverable	Pilot Action Implementation Lessons Learned
Activity	3.1 Pilot actions implementation and monitoring
Project	Danube DNA, Interreg Danube Region Programme 2021–2027
Activity Leader	SERDA, Sarajevo Economic Region Development Agency
Lead Partner	University of Novi Sad, Faculty of Technical Sciences
Coverage	Twelve of twelve pilot final reports, six of six solutions

Table of Contents

Executive summary	1
1. Introduction and scope.....	2
2. Project results at a glance	2
3. Methodology and evidence base.....	4
4. Consolidated analysis of pilot actions	5
4.1 Digital Readiness Analysis pilot	6
4.2 Market Puls pilot.....	8
4.3 EM4 System Condition pilot	9
4.4 InvestPlanner pilot.....	10
4.5 WeldWise pilot.....	11
4.6 AI-Powered Funding Call Matcher pilot	12
4.7 Challenges encountered and addressed.....	13
4.8 Sustainability of the pilot results	14
5. Quantified and validated results and benefits	14
6. Consolidated lessons	18
7. Lessons on monitoring, coordination and delivery	21
7.1 Phasing and preparation.....	21
7.2 Standardised reporting and consolidation	21
7.3 Roles and the pilot coordinator	22
7.4 Continuous monitoring.....	22
7.5 Delivery against target and report completeness.....	23
7.6 Risks that materialised	24
7.7 Compliance, visibility and audit readiness	24
8. Data validation and quality assurance process	25
9. Overview of contributions to project deliverables	26
10. Conclusion	27
11. Recommendations	29
12. Limitations	30
Annex A. The six joint solutions and partner roles.....	30
Annex B. Participating SMEs by pilot	31
Annex C. Evidence base and documents received	33

<i>Annex D. The six joint solutions in brief.....</i>	33
<i>Annex E. Project deliverables reviewed for context</i>	34
<i>Annex F. Participating SME profiles</i>	34
<i>Annex G. Monitoring and delivery framework</i>	35

List of table

Table 1 - Solutions and developing partners	3
Table 2 - Piloting partners by solution	3
Table 3 - Pilot reach by solution.....	3
Table 4 - Pilot action covered by the report	5
Table 5 - Companies in the Digital Readiness Analysis Pilot	7
Table 6 - Delivered results and their validation	15
Table 7 - Reported indicators for the twelve reported pilots	16
Table 8 - Consolidated lessons	20
Table 9 - Reports received for the six joint solutions	23
Table 10 - Composition of the SME feedback dataset.....	26
Table 11 - Project deliverables and the contributions made to them.....	27
Table 12 - Developing and piloting partners for the six joint solutions.....	30
Table 13 - SME engaged in the pilots reported to date.....	31
Table 14 - Documents received	33
Table 15 - The six solutions in brief.....	33
Table 16 - Project deliverables reviewed for context	34
Table 17 - Participating SME profiles drawn from published client stories	34
Table 18 - Implementation roadmap and milestones for the pilots.....	35
Table 19 - Standardised monitoring and reporting tools.....	35
Table 20 - Risk register for the pilot actions.....	35

Abbreviations

Abbreviation	Meaning
DRA	Digital Readiness Analysis
DANUBE ADR	Danube digital readiness analysis, the readiness solution
EM4	EM4 System Condition, the energy-monitoring solution
KPI	Key performance indicator
LP	Lead partner
PP	Project partner
SME	Small and medium-sized enterprise
SERDA	Sarajevo Economic Region Development Agency, Activity Leader
FTN	Faculty of Technical Sciences, University of Novi Sad, Lead Partner
B2GreenHub	Project platform hosting the published client success stories
CSV	Comma-separated values, a data file format
D.3.1.1	Deliverable 3.1.1, pilot action implementation lessons learned

Executive summary

This report sets out the lessons learned from the pilot actions implemented under Activity 3.1 of the Danube DNA project. It rests on all twelve pilot final reports and covers six of the six joint solutions, across twelve countries and forty-one participating SMEs. With all twelve pilot final reports received, the findings rest on complete coverage of the pilots.

Across the twelve reported pilots the delivery targets were met in full. The Digital Readiness Analysis was validated in Slovakia and Hungary, producing ten maturity assessments and ten transformation roadmaps. Market Puls was validated in Serbia and Montenegro, producing demand forecasts and inventory recommendations for ten SMEs. InvestPlanner was validated in Croatia and Germany, producing eight investment studies for micro firms against a combined target of six. EM4 System Condition was validated in single SMEs in Austria and Czechia, and WeldWise in a single SME in Bulgaria, where they made energy use visible at machine and process level. The AI-Powered Funding Call Matcher was validated with three micro firms in Romania, which used it together with the AI Proposal Assistant to move from manual call searching toward concrete funding outcomes, including one submitted application, and with four micro firms in Slovenia. In Bosnia and Herzegovina, SERDA validated it with three SMEs, all of which identified relevant funding opportunities and intend to keep using the tool.

The synthesis is strongest where the same findings appear across several pilots. Across the pilots, visibility came before action, as measurement and assessment gave SMEs a basis for practical decisions. Each solution also needed to be adapted to the company context, and the quality of results depended on the SME's readiness to provide data and business input. The two hardware pilots confirmed the value of an early technical diagnostic and of keeping joint solution development separate from pilot implementation.

The report therefore presents recommendations for project partners and for the wider roll-out of the solutions. With all twelve pilot final reports consolidated, the recurrence findings rest on the complete set of pilots.

1. Introduction and scope

This report draws together the validated results of the pilot actions carried out under Activity 3.1 of the Danube DNA project and the lessons that emerge from them, and it constitutes Deliverable D.3.1.1. Activity 3.1 focuses on the implementation and monitoring of pilot actions through which jointly developed digital solutions are tested in real SME environments across the Danube Region. The purpose of this deliverable is to bring together the evidence generated through pilots, identify the lessons that recur across countries and solutions, and translate them into practical guidance for the partnership and for wider regional use.

The project design foresees the piloting and validation of six jointly developed digital solutions with SMEs across the Danube Region. These solutions are the Digital Readiness Analysis solution, also referred to as DANUBE ADR, Market Puls, EM4 System Condition, InvestPlanner, WeldWise and the AI-Powered Funding Call Matcher. Together, they address different aspects of SME digital transformation, including digital maturity assessment, demand forecasting and inventory planning, energy and system-condition monitoring, investment planning and access to funding opportunities.

This deliverable addresses the objectives of Activity 3.1 set out in the project guideline by demonstrating the functionality and measurable benefits of each solution, strengthening the digital capacities of participating SMEs, ensuring regional comparability through harmonised reporting, and consolidating the evidence-based lessons presented here. The scope is therefore deliberately practical and does not repeat the full monitoring framework, but uses the submitted pilot evidence to explain what worked, what conditions mattered, what challenges were encountered, and what should be considered when the solutions are replicated or scaled.

2. Project results at a glance

The tables below provide a concise overview of the pilot results before the detailed analysis. They show who developed each of the six joint solutions, which partners piloted them and in which countries, and the overall reach of the reported pilots by country, pilot and participating SME. Taken together, they demonstrate that all six solutions progressed from development to validation in operating companies across the Danube Region.

Each joint solution was developed by one responsible partner, giving it a clear technical owner. The six developing partners are based in six different Danube Region countries, meaning the portfolio was created across diverse national contexts rather than within a single setting.

Table 1 - Solutions and developing partners

Joint solution	Developing partner
Digital Readiness Analysis (DANUBE ADR)	SOVA (SK)
Market Puls	FTN (RS)
EM4 System Condition	CAMPUS 02 (AT)
InvestPlanner	TERA (HR)
WeldWise	ICT Cluster (BG)
AI-Powered Funding Call Matcher	PTP (SI)

The pilots were deliberately designed to test the solutions beyond the partners that developed them. Five of the six solutions were piloted in more than one country, while the AI-Powered Funding Call Matcher was tested in three. This set-up allowed the partnership to assess not only how the solutions performed in their original development contexts, but also how well they could be transferred and adapted across different national and company settings.

Table 2 - Piloting partners by solution

Joint solution	Piloting partners
Digital Readiness Analysis	SOVA (SK), STRIA (HU)
Market Puls	FTN (RS), CEM (ME)
EM4 System Condition	CAMPUS 02 (AT), VSTE (CZ)
InvestPlanner	TERA (HR), TUM (DE)
WeldWise	ICT Cluster (BG)
AI-Powered Funding Call Matcher	ITCLD (RO), PTP (SI), SERDA (BA)

The table below consolidates the reach of the reported pilots across countries, solutions and participating SMEs. All twelve pilots in twelve countries have now reported their results, confirming that forty-one SMEs received concrete outputs from digital solutions adapted to their specific settings. This also confirms that every reported pilot met its delivery targets in full, providing a complete overview of the pilot portfolio at output level.

Table 3 - Pilot reach by solution

Joint solution	Countries	Pilots	SMEs
Digital Readiness Analysis	2 countries	2 pilots	10 SMEs
Market Puls	2 countries	2 pilots	10 SMEs
EM4 System Condition	2 countries	2 pilots	2 SMEs
InvestPlanner	2 countries	2 pilots	8 SMEs
WeldWise	1 country	1 pilot	1 SME

Joint solution	Countries	Pilots	SMEs
AI-Powered Funding Call Matcher	3 countries	3 pilots	10 SMEs
Total	12 countries	12 of 12 pilots	41 SMEs

3. Methodology and evidence base

The analysis applies a defined evidence hierarchy. The Pilot Activity Final Reports prepared by the piloting partners serve as the primary source, because they are linked to individual pilots and structured to enable comparison across the partnership. They contain standard information on the solution, indicators, thematic lessons and priorities, transferability, and sustainability.

The published client success stories on the B2GreenHub platform are used as supporting evidence. Eight stories are available, including five for the Digital Readiness Analysis pilot in Slovakia, one for the EM4 System Condition pilot in Austria, one for the InvestPlanner pilot in Germany and one for the AI-Powered Funding Call Matcher pilot in Bosnia and Herzegovina. The EM4 System Condition story documents Bloder in Austria, the InvestPlanner story documents the TUM Social AI Club in Germany, and the AI-Powered Funding Call Matcher story documents DIZART in Bosnia and Herzegovina, prepared with SERDA. They complement the partner reports by adding the participating SMEs' perspective, were prepared with SME consent for public dissemination, and can be checked against the corresponding final reports. As dissemination materials, they mainly highlight positive outcomes, so they are not treated as primary or independent evidence. They are cited only when they confirm findings already recorded in the final reports. For example, the InterTechnic story for the Slovak readiness pilot describes a digital maturity analysis and transformation roadmap, with the managing director noting a clearer view of company processes. Similarly, the Bloder story for the Austrian energy pilot records the detection and repair of a weekend compressor pressure loss, confirming the result reported by CAMPUS 02.

The feedback dataset collected separately from the pilot final reports mainly reflects views from project partners and other participants rather than pilot-host SMEs. It is also separate from the SME Pilot Feedback Form defined in the project guideline, which should be completed by each pilot-host SME at the end of its pilot. The findings therefore rely on the partner final reports, supported by the published client stories where available, rather than on either feedback channel.

4. Consolidated analysis of pilot actions

This report covers twelve pilots across six solutions, twelve countries and forty-one SME engagements of varying size and sector. SOVA Digital in Slovakia and STRIA in Hungary applied the Digital Readiness Analysis to assess digital maturity and prepare transformation roadmaps. The Faculty of Technical Sciences in Novi Sad and the Chamber of Economy Montenegro used Market Puls to generate demand forecasts and inventory recommendations in Serbia and Montenegro. TERA Tehnopolis applied InvestPlanner to support five micro firms in structured investment planning, resulting in complete investment studies. TUM International applied the same InvestPlanner solution with three micro firms in Germany. IT&C Cluster Lower Danube implemented AI-Powered Funding call matcher in three micro companies in Romania. Pomurje Technology Park applied the same matcher with four micro companies in Slovenia. SERDA validated the same matcher with three SMEs in Bosnia and Herzegovina.

Table 4 - Pilot action covered by the report

Partner (country)	Solution	Participating SMEs	Sectors
SOVA Digital (SK)	Danube DRA / DANUBE ADR	5 (1 micro, 2 small, 2 medium)	Manufacturing, wholesale and retail trade
Faculty of Technical Sciences Novi Sad (RS)	Market Puls (plus 1 DRA)	5 (2 micro, 1 small, 2 medium)	Pharmacy, machinery, plastics, wholesale, transport
CAMPUS 02 (AT)	EM4 System Condition	1 (small)	Automotive, repair and painting
TERA Tehnopolis (HR)	InvestPlanner	5 (micro)	ICT, economy, agriculture, hospitality
TUM International (DE)	InvestPlanner	3 (micro)	ICT, MedTech
Chamber of Economy Montenegro (ME)	Market Puls	5 (3 micro, 2 medium)	Tourism, wholesale and distribution, toy retail, beverage
STRIA (HU)	DANUBE ADR	5 (3 micro, 1 small, 1 medium)	Manufacturing, agriculture, services, communication
ICT Cluster Bulgaria (BG)	WeldWise	1 (medium)	Manufacturing, metal processing
IT&C Cluster Lower Danube (RO)	AI-Powered Funding Call Matcher	3 (micro)	Tourism, consultancy, ICT and creative services
Pomurje Technology Park (SI)	AI-Powered Funding Call Matcher	4 (micro)	CNC machining, wood products, additive manufacturing, tourism
SERDA (BA)	AI-Powered Funding Call Matcher	3 (1 micro, 2 medium)	Information and Communication. Machinery and Equipment, Metal Manufacturing
VSTE – Institute of Technology and Business (CZ)	EM4 System Condition	1 (small)	Machinery

Pilot, implemented by CAMPUS 02, was a hardware deployment through the installation of the EM4 System Condition energy-monitoring system in one SME. The pilot, implemented by ICT Cluster Bulgaria with COMICON as technical integrator, was a second hardware deployment,

validating WeldWise at the MDC manufacturing site in Bulgaria through machine and process level energy monitoring across three production processes.

Despite using different solutions, the pilots reveal a common pattern. They first make unclear areas visible to SMEs, including process and data maturity, demand behaviour and energy consumption, and then turn these insights into prioritised actions. They also require adaptation, as sector-neutral methods and tools must be tailored to each company's data, systems and processes. One pilot also showed that solutions can reinforce one another, as an SME using Market Puls also requested a readiness assessment, suggesting that operational and strategic tools can complement rather than compete with each other.

At this stage, the evidence points to two main conclusions across the six solutions. First, all solutions were tested in operating companies rather than controlled environments. Second, the Digital Readiness Analysis, Market Puls, InvestPlanner, EM4 System Condition and the AI-Powered Funding Call Matcher were applied in more than one country and remained effective across different sectors and data conditions. This suggests that their use is not limited to a single favourable context. Section 4 brings together the quantified results for all twelve pilots, while the following sections explain how each solution performed in practice and what factors shaped the results.

4.1 Digital Readiness Analysis pilot

The Digital Readiness Analysis pilot, implemented by SOVA Digital in Slovakia, assessed the digital maturity of five SMEs and designed a tailored digital transformation for each. For every company the pilot mapped the existing processes and data flows, identified gaps in information systems and data management, and produced a prioritised roadmap covering steps such as production and warehouse data capture, system integration, document management and analytics. All five assessments and roadmaps were delivered, and each company consented to a published success story. The participating companies and the focus of each engagement are set out below.

Table 5 - Companies in the Digital Readiness Analysis Pilot

Company	Size	Sector	Focus of the engagement
TG-Toman Group	Small	Machinery and equipment	Digital maturity assessment and design of digital process transformation
TURIMEX	Micro	Building materials and trade	Digitalisation of the sales process and warehouse management
DEKONA	Medium	Machinery and equipment	Digital transformation of production preparation and production data management
VÚMZ SK	Small	Machinery and equipment	Digital production monitoring and analytics
InterTechnic	Medium	Machinery and equipment	Production data analysis and preparation for Industry 4.0 tools

Across the five companies, the pilot produced structured digital maturity assessments and practical phased improvement plans, in many cases giving the company its first documented transformation roadmap. The assessment also helped management see where limited changes in process design, data capture or system integration could create early benefits and support more advanced digitalisation later.

Participating companies and pilot focus are listed below.

1. TG-Toman Group is a small engineering and supply company providing tailor-made technological solutions in industrial technologies, process cooling and energy-efficient systems. The pilot assessed its digital maturity and designed a transformation across its core engineering and project processes, giving it a structured view of where digitalisation could most improve delivery and service.
2. TURIMEX is a micro firm and regional building-materials and hardware dealer operating in the Turiec region since 1997, combining materials sales, tool rental and freight transport. The pilot focused on digitalising the sales process and warehouse management to improve the efficiency and accuracy of stock and order handling.
3. DEKONA is a medium-sized company specialising in the design and manufacture of clamping devices, production jigs and technological lines, combining in-house design, CNC production and 3D measurement. The pilot addressed the digital transformation of production-preparation processes and production data management, identifying where better data capture and integration could streamline the path from design to manufacture.
4. VÚMZ SK is a small technology company developing and implementing automation solutions, control systems and industrial technologies. The pilot centred on digital

production monitoring and analytics, using shop-floor data to make production performance visible and support Industry 4.0-oriented improvements.

5. InterTechnic is a medium-sized engineering company providing CNC machining, pressing, welding and assembly of metal components, and already moving to digitalise its production. The pilot focused on the digital analysis of production data and on preparing the ground for Industry 4.0 tools to increase production efficiency and transparency.

The Digital Readiness Analysis was piloted a second time by STRIA in Hungary, with five SMEs in manufacturing, agriculture, services and communication. Working through the same structured assessment of IT infrastructure, business processes, cybersecurity and organisational readiness, supported by expert interviews, STRIA produced an individual maturity report, recommendations and a transformation roadmap for each company, and all three of its indicators were achieved. The Hungarian companies appreciated the clear, accessible diagnosis. However, it was also noted that while the assessment helps set priorities, it does not provide implementation support, making follow-up mentoring a logical next step. Validating the same method in a second country reinforces that DANUBE ADR transfers readily across sectors and maturity levels.

4.2 Market Puls pilot

The Market Puls pilot, implemented by the Faculty of Technical Sciences in Novi Sad in Serbia, validated the AI-based demand-forecasting and inventory-planning solution in five SMEs across five different sectors: pharmacy, machinery, plastics, wholesale and transport. For each company the pilot produced a demand-forecasting report and inventory recommendations, giving the company a data-based basis for anticipating demand and planning stock more accurately. A digital readiness assessment was additionally carried out at one company's request, which illustrated how the operational tool and the strategic assessment complement one another. All five forecasting engagements were completed, the participating companies reported a positive experience, and all of them indicated an intention to continue using the solution.

Because the solution was applied across five quite different sectors, from pharmacy to transport, the pilot also demonstrated that the same forecasting and inventory approach can be tailored to very different demand patterns and product types. This cross-sector applicability is a useful finding for the wider rollout, since it suggests the tool is not tied to a single industry and can be offered to a broad range of SMEs in the region. It also strengthens the case for

replication, as the pilot showed that the method can remain relevant even where purchasing cycles, stock profiles and customer behaviour differ significantly between firms.

In practical terms, the pilot worked with each company's own sales and stock history to produce forecasts at the level the company needed, and paired the forecasts with concrete inventory recommendations, for example on reorder timing and stock levels. For companies that had previously planned mainly on experience, this provided a data-based second opinion to test against their own judgement, which is often the most useful first step in adopting an analytical tool.

The forecasting outputs were grounded in each company's own sales and stock history, which is what made them credible and also what made their accuracy depend on how complete and well organised that history was. Where the records were well kept and structured, the forecasts were straightforward to produce and to act on, while where they were fragmented, preparing the sales history into a usable form was itself part of the value the pilot delivered.

Market Puls was independently piloted a second time by the Chamber of Economy Montenegro, the designated piloting partner, with five Montenegrin SMEs in tourism, wholesale and distribution, toy retail and beverage sales. Working from the companies' own sales and inventory records prepared as standardised CSV files, the pilot produced weekly and monthly demand forecasts across sixteen products and more than six thousand data records, with automatic notes flagging demand spikes, declines and high variance. Every indicator was met or exceeded, the number of products analysed reaching more than three times the target, and the companies rated their experience positively. Validating the same solution in a second country, with different sectors and data conditions, strengthens the evidence that Market Puls transfers across the region.

4.3 EM4 System Condition pilot

The EM4 System Condition solution was piloted by CAMPUS 02 in Austria and by VSTE in Czechia. CAMPUS 02 validated it with Bloder, a small automotive repair and painting firm, and VSTE with INOS-Servis, a small machinery firm specialising in metal parts and welding.

The EM4 System Condition pilot, carried out by CAMPUS 02 in Austria, installed a flexible wireless energy-monitoring system in an SME in the automotive repair and painting sector. The system made the energy consumption of the company's main equipment visible for the first time and, during the pilot, detected a pressure loss in the compressed-air system that was occurring at weekends. The fault was repaired, giving an immediate efficiency improvement, although the saving itself was not separately quantified within the pilot. The installation was quick and did not disrupt the company's operations, which is itself a useful result for a small firm considering this kind of technology.

The result is particularly notable for a small firm, because a low-cost and non-intrusive monitoring deployment generated a tangible saving within the pilot period without requiring any changes to the company's equipment or day-to-day processes. This shows that even a targeted and relatively simple digital solution can deliver an immediate operational benefit, while also creating longer-term value by giving the company continuous visibility over its energy consumption.

Beyond the immediate repair, the deployment gave the company an ongoing ability to monitor and interpret its energy use, creating a practical basis for further savings. Rather than a one-off benefit, the pilot provided continuous visibility that can help identify recurring inefficiencies, unusual consumption patterns and opportunities to use equipment more efficiently. For a small firm where energy is a significant operating cost, this is a modest but lasting result, and one that should be quantified more fully as the pilots mature.

In the Czech pilot, VSTE worked with INOS-Servis, a small machinery company in Vlachovo Březí specialising in metal parts for single-purpose machines and custom fabrication, where energy-intensive welding is the main process. An independent implementation expert deployed the solution so that it could be reused without reliance on the original developers. The system measured the welding equipment's energy consumption and transmitted the data over a LoRa connection to a cloud dashboard showing current and historical values. The company confirmed the solution as flexible and robust and intends to keep using it at least until 2027, while noting that it would value a higher sampling rate to also track equipment running time, and that cost and long-term financing are the main considerations for wider adoption.

4.4 InvestPlanner pilot

The InvestPlanner pilot, carried out by TERA Tehnopolis in Croatia, validated a digital tool that guides SMEs through investment planning, from defining a business idea, through analysing it, to producing a complete investment study. It was tested with five micro firms across ICT, agriculture and hospitality. The tool takes users through three stages, business definition, business analysis and investment-study creation. AI support runs through the process in three ways: 1.) it teaches users how to prepare an investment study, 2.) it helps them write and structure the content, and 3.) it helps them interpret financial figures and indicators. Because the tool builds the user's understanding as well as producing the document, companies without strong financial expertise can still arrive at credible investment documentation.

Against a target of three, five investment studies were prepared or supported through the pilot, which indicates both strong uptake and a practical demand for structured investment-planning support among micro firms. The participating companies valued the tool's step-by-step guidance, the time it saved in organising and drafting their material, and the improved quality

and consistency of the resulting documentation, especially for firms with limited prior experience in preparing such studies.

InvestPlanner was also piloted by TUM International in Germany with three micro firms in the ICT and medical technology sectors. Using the same three-stage process of business definition, business analysis and investment-study preparation, the pilot delivered the targeted three investment studies. Participating companies appreciated the structured guidance and AI support and would recommend the solution, while noting that it requires substantial business and financial input and should be adapted to different national accounting and regulatory contexts. Validation in a second country and in additional sectors confirms InvestPlanner's transferability across markets.

The main challenge for companies was the volume of background information needed before InvestPlanner could generate a credible output. In this sense, the tool followed the same readiness pattern seen in other pilots, but the key inputs were business and financial details rather than operational records. Both the Croatian and German pilots showed that companies first need to assemble information on their market, costs, revenues and business model before the tool can produce a useful investment study.

4.5 WeldWise pilot

The WeldWise pilot was coordinated by ICT Cluster Bulgaria, with COMICON acting as the technical integrator responsible for adapting and deploying the solution. It validated the solution at MDC, a medium-sized manufacturing company in Bulgaria, and tested its use in a broader industrial setting beyond the original focus on welding-related monitoring. This made the pilot useful not only for confirming the basic functionality of WeldWise, but also for assessing whether the same monitoring approach could be applied to different production assets within a real manufacturing environment.

WeldWise is an Industrial Internet of Things (IoT) solution that provides machine and process level visibility of electricity consumption and operational activity. For the MDC pilot, the solution was adapted to monitor three production assets, namely a powder coating oven, an industrial compressor and a laser cutting process.

The deployment used a local on-premises server and energy monitoring devices to capture operational data directly at the site. This setup allowed the pilot to test whether the solution could be transferred to different machines and signals while still producing practical information for energy awareness and operational decision-making.

The pilot confirmed that the solution can be transferred to different machines and signals, and that its main value lies in turning technical measurements into information usable for cost awareness, energy planning and operational decisions. Consistent with the validation focus of

the pilot, energy-saving or cost-reduction percentages were not claimed, as a longer baseline and post-pilot measurement period would be required.

4.6 AI-Powered Funding Call Matcher pilot

The AI-Powered Funding Call Matcher was piloted by IT&C Cluster Lower Danube in Romania and by Pomurje Technology Park in Slovenia, the two co-developers of the solution. ITCLD validated it with three micro enterprises, namely GIV BOATS, RENDAR MANAGEMENT and NEXLOC, and PTP with four micro enterprises, namely LDK TECH, Vovk Turizem, Les Rock and 3D tehno CAR. The matcher is an artificial intelligence service that lets a company describe its profile in plain language and returns a ranked and filterable shortlist of relevant European and national funding calls.

Each company reached a concrete outcome. GIV BOATS, a boat tour operator, identified a heritage funding call and submitted an application for a multilingual audio guide application. RENDAR MANAGEMENT, a European Union funds consultancy, built the two tools into its commercial offer and designed a new proposal health check service. NEXLOC, a digital agency, produced a prioritised funding pipeline and a submission ready concept for its scale-up. IT&C Cluster Lower Danube paired AI-Powered Funding Call Matcher with Danube DNA AI Proposal Assistant. Across the three pilots the search and proposal structuring effort fell from days to a single guided session, with the participating firms keeping final judgement.

In the Slovenian pilot, Pomurje Technology Park worked individually with four micro firms, namely LDK TECH in precision manufacturing and 3D scanning, Vovk Turizem in tourism and natural food products, Les Rock in wood processing, and 3D tehno CAR in additive manufacturing. Each firm registered on B2GreenHub and used the industry, status, budget and deadline filters together with the Quick Search and Ask AI functions to find relevant cascade funding calls and was then introduced to an AI Proposal Preparation Toolkit that supports the drafting of initial proposal content. All four firms reported a reduced search time and indicated that they intend to keep using the tool. The Slovenian pilot reinforced two points: the relevance of the matches improved when each company first defined its activities and funding needs with guided support, and the automated results still require manual verification of eligibility before an application is prepared.

The pilot in Bosnia and Herzegovina was initially planned around WeldWise. During preparation, SERDA identified implementation constraints and, with the agreement of the project partnership, redirected the pilot to the AI-Powered Funding Call Matcher. SERDA validated the matcher with three SMEs, including one micro and two medium-sized enterprises from the information and communication, machinery and equipment, and metal manufacturing sectors. The SMEs tested the tool through the B2GreenHub platform and were also introduced to the AI Proposal Assistant, while SERDA provided onboarding support and

monitored the process throughout the pilot. All three SMEs registered on the platform, identified funding opportunities aligned with their business priorities, reported improved awareness of available funding, and expressed willingness to continue using the solution and recommend it to other SMEs. They did not identify any major functional weaknesses, but noted that the platform's value depends on regular updates to the funding database and that AI-generated recommendations should be complemented by expert review when preparing actual applications.

The pilot showed that the matcher works best when companies describe their profile in plain language before refining the results with filters. Its value was stronger when paired with the AI Proposal Assistant, which helped turn funding discovery into submission-ready concepts. The Slovenian pilot adds that a short, structured onboarding, in which each company defines its activities and funding needs before searching, improves the relevance of the matches.

4.7 Challenges encountered and addressed

The pilots also surfaced a set of practical challenges that the partners had to work through during implementation, and these are useful findings in their own right because they show what is likely to matter in future roll-out. In the readiness and forecasting pilots, the most consistent difficulty was the quality and availability of company data. Meaningful analysis depended on first organising process information, data flows and historical records, which was often more demanding in smaller firms where systems were less formalised and data was spread across different tools or held only partially. This affected the sequencing of the engagements, since time first had to be invested in clarifying and preparing the underlying information before the digital solution itself could be fully applied.

In the energy-monitoring pilot, the challenge was technical rather than data-related. A wireless connectivity and device-licensing fault showed that even a minor technical issue can delay implementation if it appears only after installation. In line with the lesson recorded by CAMPUS 02, hardware pilots should test the configuration under controlled conditions and begin with a simple setup before adding complexity, so that the schedule does not depend on troubleshooting after deployment at the company site.

In the InvestPlanner pilot, the main challenge was of a different kind, identifying companies with a genuine and timely need for an investment study and adapting the tool to different legal, accounting and language settings. These issues were addressed through close cooperation between experts and project partners, as well as targeted research into the requirements of the relevant markets. Taken together, the challenges across the pilots show that successful implementation depends not only on the quality of the digital solution itself, but also on the readiness of company data, the reliability of the technical setup and the fit between the tool

and the business context. In each case, the issue was managed within the pilot and documented so that the same lessons can inform the pilots still to come.

4.8 Sustainability of the pilot results

The pilots gave early signals on the durability of their results. In the Market Puls pilot, all participating companies indicated an intention to continue using the solution, suggesting that the tool was not seen merely as a one-off exercise but as something with continuing practical value for routine business planning and decision-making. In the readiness pilot, the value carried beyond the assessment itself through the roadmaps, which give the companies a basis for continued, staged implementation. In both cases, the pilot created not only an immediate output but also a pathway for further use after the formal pilot period.

In the energy-monitoring pilot, sustainability took a slightly different form. The company retained both the monitoring capability and the operational improvement it had enabled, meaning that the pilot left behind an ongoing capacity to observe energy use and identify further inefficiencies over time. In the InvestPlanner pilot, the companies are expected to continue using the tool for ongoing business planning and KPI tracking, which indicates potential for longer-term value beyond the initial preparation of investment studies. The main barrier there is the financial sustainability of the platform itself, since continued use depends not only on company interest but also on whether the tool remains accessible and supported.

Across the pilots, the common conditions for sustained use were broadly similar. Continued benefit depended on the availability of internal data and staff capacity within the SMEs, because even the most effective digital tool still requires companies to maintain the information and routines on which it depends. In some cases, access to external support for follow-up implementation also mattered, especially where the pilot had identified priorities, but the company still needed help to move from diagnosis to execution. Taken together, these findings suggest that the long-term success of the solutions will depend not only on their technical quality, but also on the support environment around the SMEs that use them.

5. Quantified and validated results and benefits

Across the twelve fully reported pilots, the delivery targets were met in full. SOVA completed five readiness assessments and five transformation roadmaps, with testimonials from all five SMEs. STRIA completed a second Digital Readiness Analysis pilot in Hungary, assessing five SMEs and delivering five maturity reports with recommendations and roadmaps.

The Faculty of Technical Sciences in Novi Sad and the Chamber of Economy Montenegro completed the Market Puls pilots in Serbia and Montenegro, delivering demand forecasts and inventory recommendations for ten SMEs. All indicators were met or exceeded, with the

Montenegrin pilot reporting results above target. ICT Cluster Bulgaria also completed the WeldWise pilot at one Bulgarian SME, installing machine and process level energy monitoring across three production processes and fully reporting its indicators.

The EM4 pilot also delivered a concrete and verifiable efficiency gain. The energy-monitoring system installed at the participating SME made consumption visible and detected a compressor pressure loss occurring at weekends, which was then repaired. The published client story for that pilot supports this result at the level of the SME. VSTE completed the second EM4 pilot with INOS-Servis, a small machinery firm in Czechia, measuring welding energy consumption and presenting current and historical data through a cloud dashboard.

Table 6 - Delivered results and their validation

Pilot / solution	Headline delivered outputs	Against target	Validation source
SOVA / DRA (SK)	5 readiness assessments, 5 roadmaps, 5 testimonials	100%	Pilot files, 5 client stories
STRIA / DANUBE ADR (HU)	5 maturity assessments, 5 reports with recommendations	100%	Pilot report
Novi Sad / Market Puls (RS)	5 forecasting reports with inventory recommendations, 1 added DRA	100%	Pilot report, feedback forms
Chamber of Economy Montenegro / Market Puls (ME)	5 SMEs, 16 products analysed, more than 6,000 records	100% to 320%	Pilot report, 5 individual reports
TERA / InvestPlanner (HR)	5 investment studies prepared or supported	166,7%	Pilot records
TUM International / InvestPlanner (DE)	3 investment studies prepared or supported	100%	Pilot records
CAMPUS 02 / EM4 (AT)	Monitoring installed, fault detected and repaired, indicators reported in full	100%	Pilot report, 1 client story
ICT Cluster Bulgaria / WeldWise (BG)	Monitoring installed across three assets at MDC with COMICON technical integration	100%	Pilot report, B2GreenHub case
IT&C Cluster Lower Danube / AI-Powered Funding Call Matcher (RO)	Three micro firms shortlisted relevant calls; one submitted an application, one reached a submission-ready scale-up concept, and one consultancy designed a new AI-assisted service	100%	Pilot report, B2GreenHub stories
Pomurje Technology Park / AI-Powered Funding Call Matcher (SI)	Four micro firms searched cascade funding calls and were introduced to an AI proposal toolkit, all reporting reduced search time	100%	Pilot report, B2GreenHub feedback
VSTE / EM4 System Condition (CZ)	Welding energy consumption measured and presented through a cloud dashboard with current and historical data	100%	Pilot report, cloud dashboard
SERDA / AI Matcher (BA)	3 SMEs registered and using the matcher, all identifying relevant funding opportunities	100%	Pilot report, SME feedback questionnaires

IT&C Cluster Lower Danube completed the AI-Powered Funding Call Matcher pilot with three Romanian micro firms. All three moved from manual call searching to a ranked shortlist of

relevant calls. GIV BOATS produced a submission-ready concept and submitted an application to a heritage funding call, NEXLOC reached a submission-ready scale-up concept, and RENDAR MANAGEMENT, an EU-funds consultancy, built the two tools into its commercial offer and designed a new proposal health check service

SERDA implemented the AI-Powered Funding Call Matcher pilot with three SMEs in Bosnia and Herzegovina. All three registered on the B2GreenHub platform, tested the matcher and identified funding opportunities aligned with their business priorities. They also confirmed their willingness to continue using the solution and recommend it to other SMEs. All pilot indicators were achieved in full.

These figures require two qualifications. First, the reported indicators mainly capture delivery and outputs, meaning completed activities and produced deliverables, and are validated through pilot files and related client stories. Business-outcome indicators, including inventory reduction, forecasting accuracy, and quantified energy or cost savings, are largely not yet available, which the Market Puls partner also identifies as a gap. Even so, the pilots show clear and consistent benefits. They provide a structured and objective view of previously unclear areas, sharpen investment and action priorities, support practical phased pathways rather than full-scale change, and apply across diverse sectors and company sizes.

Table 7 - Reported indicators for the twelve reported pilots

Indicator (KPI)	Baseline	Target	Achieved	Achievement rate (%)
Digital Readiness Analysis (DANUBE ADR)				
Pilot: SOVA Digital a.s. (Slovakia)				
Participating SMEs assessed	0	5	5	100%
Digital transformation roadmaps prepared	0	5	5	100%
SME testimonials/feedback statements collected	0	5	5	100%
B2GreenHub client success stories prepared with publication consent indicated	0	5	5	100%
Pilot: STRIA (Hungary)				
SMEs participating in ADR pilot	1	5	5	100%
Digital readiness assessment reports completed	1	5	5	100%
SMEs receiving personalized recommendations	1	5	5	100%
Market Puls				
Pilot: University of Novi Sad, Faculty of Technical Sciences (Serbia)				
SMEs participating in Market Puls pilot actions	0	5	5	100%
Industries represented in pilot actions	1	5	5	100%
Demand forecasting reports generated	0	5	5	100%
SMEs receiving inventory planning recommendations	0	5	5	100%
Additional DRA pilot implemented	0	1	1	100%

Indicator (KPI)	Baseline	Target	Achieved	Achievement rate (%)
SME satisfaction with pilot solution	N/A	Positive	Positive	N/A
SMEs expressing interest in future use	0	5	5	100%
Pilot: Chamber of Economy Montenegro (Montenegro)				
Number of SMEs participating in Market Puls pilot	0	5	5	100%
Digital solution validated in real SME environment	0	1	1	100%
Datasets processed	0	5	5	100%
Total data records used (at least 5 SME datasets)	0	5	5	100%
Selected products analysed	0	5	16	320%
SMEs providing positive pilot feedback	0	5	5	100%
EM4 System Condition				
Pilot: CAMPUS 02 (Austria)				
SMEs participating in EM4 pilot actions	0	1	1	100%
Industries represented in pilot actions	1	1	1	100%
Identified optimization potential	0	1	1	100%
SME satisfaction with pilot solution	n/a	Positive	Positive	N/A
SMEs expressing interest in future use	0	1	1	100%
Pilot: VSTE - Institute of Technology and Business (Czechia)				
SMEs participating	0	1	1	100%
Industries represented in pilot actions	1	1	1	100%
Identified optimization potential	0	1	1	100%
SME satisfaction with pilot solution	n/a	Positive	Positive	N/A
InvestPlanner				
Pilot: TERA Tehnopolis (Croatia)				
Number of investment studies prepared / supported through InvestPlanner	0	3	5	166.7%
Pilot: TUM International GmbH (Germany)				
Number of investment studies prepared / supported through InvestPlanner	0	3	3	100%
WeldWise				
Pilot: ICT Cluster Bulgaria (Bulgaria)				
Participating SME in the WeldWise pilot	0	1	1	100%
WeldWise adapted to the MDC site by COMICON	0	1	1	100%
Industrial assets and processes monitored under WeldWise	0	3	3	100%
Local monitoring architecture deployed	0	1	1	100%
SME feedback collected and reflected in the final report	n/a	Positive	Positive	N/A
AI-Powered Funding Call Matcher				
Pilot: IT&C Cluster Lower Danube (Romania)				
SMEs participating in the Funding Call Matcher pilot	0	3	3	100%

Indicator (KPI)	Baseline	Target	Achieved	Achievement rate (%)
SMEs reaching a funding application, submission-ready concept or new AI-assisted service	0	3	3	100%
Pilot: Pomurje Technology Park (Slovenia)				
SMEs involved in pilot testing	0	4	4	100%
SMEs registered on the B2GreenHub platform	0	4	4	100%
SMEs testing the AI-Powered Funding Call Matcher	0	4	4	100%
SMEs introduced to the AI Proposal Preparation Toolkit	0	4	4	100%
User satisfaction score	0	4	4	100%
Intention to continue using the tool after the pilot	0	4	4	100%
Pilot: SERDA (Bosnia and Herzegovina)				
SMEs participating in the pilot	0	3	3	100%
SMEs successfully completing pilot activities	0	3	3	100%
SMEs registered and using the AI-Powered Funding Call Matcher	0	3	3	100%
SMEs identifying relevant funding opportunities	0	3	3	100%
SMEs reporting improved awareness of funding opportunities	n/a	Positive	Positive	N/A
SMEs expressing willingness to continue using the solution	0	3	3	100%
SMEs recommending the solution to other SMEs	0	3	3	100%

Several values reported by partners in their final reports are single-session estimates or qualitative assessments rather than measured indicators. For the AI-Powered Funding Call Matcher pilots in Romania, the partner reported time savings in identifying relevant calls, falling from around three to four hours to roughly fifteen minutes per search, and an increase in the number of relevant calls surfaced per session, both recorded as pilot estimates pending validation. The reduction of funding-search and proposal-structuring effort from several days to a single guided session is reported in the same qualitative terms. In the Slovenian pilot, the reduction in time required to identify relevant calls, reported as around two and a half hours, is likewise an SME-reported estimate rather than a measured value. These figures have been included in the consolidated analysis in line with the partner reports, but are presented as reported rather than independently verified, consistent with the evidence standard set out in section 7.

6. Consolidated lessons

This section brings together the lessons that emerged across the pilots and the analysis in sections 3 and 4. The lessons reported by the partners cluster into a small number of recurring themes. The most prominent, named as the top lesson across the readiness-and-forecasting pilots, concerns data readiness. A structured review of processes and data flows should come

before any technology choice, as data quality and availability determine what a digital solution can deliver, especially for micro and small firms. The second Market Puls pilot in Montenegro reinforced this from the data-preparation side. It found that a standardised CSV input format, together with a short data-readiness check before forecasting, was essential for repeatable results, and that automatic interpretation notes helped non-technical users act on the forecasts.

A second recurring theme is phased delivery, which means sequencing quick organisational wins, then targeted digital pilots, then larger integration and investment, rather than attempting full-scale change at once. A third is stakeholder engagement, which means involving management and staff early and planning for training and change adoption. Two further lessons appear once each but transfer well. The first is pairing operational tools with a strategic readiness assessment for a more complete transformation path. The second is pre-testing new hardware and connectivity under controlled conditions before field installation, drawn from a licensing and connection fault encountered in the EM4 pilot.

The Digital Readiness Analysis pilots in Slovakia and Hungary reached the same conclusion. The assessment helps identify priorities but does not support implementation, so it should be paired with follow-up mentoring and practical implementation support. The Hungarian pilot also identified sector benchmarking as a development need, since participating firms noted they could not yet compare their digital maturity against sector averages, which points to sector-specific benchmarks as a useful addition to future assessments.

The InvestPlanner pilot adds lessons on partnership and coordination. For co-piloted solutions, partners should align expectations and responsibilities early, prepare contingency plans for changes in partner involvement, and time SME outreach around active funding calls. This was particularly relevant after InvestPlanner was transferred to TERA following the withdrawal of other partners. The second InvestPlanner pilot, by TUM International in Germany, reinforced this point by showing that piloting and meaningful SME engagement take longer than expected and should start early. The pilot also confirmed the demand-side importance of data readiness, as the tool requires substantial business and financial input before it can generate useful outputs.

The WeldWise pilot adds a further lesson on coordination, namely that joint solution development and SME pilot implementation should be defined and reported separately, with the participating SME and the technical integrator identified from the outset. The second EM4 pilot adds a lesson on engagement and affordability. When offering the system to an SME, the cost, expected benefits and long-term sustainability should be presented from the outset, and partners should account for the different price levels across Danube Region countries, since a price seen as normal in one country may be too high for an SME in another.

The AI-Powered Funding Call Matcher pilot adds a lesson on framing and intermediation. Plain-language descriptions of businesses produced more relevant funding matches, while using the matcher together with the AI Proposal Assistant helped turn funding discovery into submission-ready concepts. Clusters and digital innovation hubs can offer these tools to SMEs as a reusable service, with experts retaining final judgement and early action on forthcoming calls remaining important.

The pilot in Bosnia and Herzegovina adds a lesson on implementation flexibility. When the originally planned WeldWise pilot proved unfeasible due to limited SME interest, financial constraints related to advance payments and overall implementation feasibility, SERDA, in agreement with the project partnership, redirected the pilot to the AI-Powered Funding Call Matcher and delivered it in full. The lesson is that financial feasibility, procurement requirements and SME commitment should be assessed at an earlier stage, and that flexible partnership coordination allows an unfeasible pilot to be redirected to another joint solution without losing delivery.

Table 8 - Consolidated lessons

Theme	Consolidated lesson	Priority	Transferability	Reported by
Data readiness	Diagnose processes and data flows before selecting technology. Data quality is the binding constraint, especially for smaller firms	High	High	SOVA, Faculty of Technical Sciences
Phased delivery	Sequence quick wins, then digital pilots, then larger integration	High	High	SOVA, CAMPUS 02
SME engagement	Engage management and staff early, and plan training and adoption	Medium to high	High	SOVA, Faculty of Technical Sciences
Complementary tools	Pair operational tools with a strategic readiness assessment	Medium to high	Medium to high	Faculty of Technical Sciences
Technical pre-testing	Test new hardware and connectivity under controlled conditions before field installation	High	Medium	CAMPUS 02
Framing and intermediation	Describe the business in plain language and pair the matcher with the proposal assistant, and let clusters deliver the tools as a service with the expert in the loop	Medium	High	IT&C Cluster Lower Danube and Pomurje Technology Park
Implementation flexibility	Assess financial feasibility, procurement requirements and SME commitment early, and redirect an unfeasible pilot to another joint solution in agreement with the partnership	High	High	SERDA

The lessons above focus on the solutions and SMEs' experience with them. A second set of lessons concerns activity management, including how piloting was planned, monitored, coordinated, reported and validated across a multi-country partnership. These management and quality lessons were essential to producing reliable solution-level findings, so the next two

sections present them before the conclusion and recommendations bring both strands together.

7. Lessons on monitoring, coordination and delivery

Beyond the lessons drawn from the solutions in section 5, the activity produced a second set of lessons about how distributed piloting is best monitored, coordinated and delivered. They concern phasing and preparation, standardised reporting, the division of roles, continuous monitoring, delivery against target, and the handling of risk, and they transfer directly to any partnership running pilots across several countries. The supporting framework tables are collected in Annex G.

7.1 Phasing and preparation

Thorough preparation determines whether later stages stay on schedule and whether pilots generate comparable evidence. Under the Activity 3.1 guideline, each pilot follows a harmonised sequence covering preparation, tendering and contracting, implementation and monitoring, and completion and reporting. The preparation stage finalises the SME, pilot scope, expected outputs, data needs and technical requirements. Tendering and contracting select the external provider under national and EU procurement rules and confirm the implementation arrangements. Implementation and monitoring cover solution deployment, data collection, progress review and the mid-term check. Completion and reporting validate effectiveness, compile supporting evidence and feed the results into Deliverable D.3.1.1.

Monitoring highlighted recurring issues during implementation and helped define preventive measures. Preparation delays were usually linked to incomplete technical specifications, unclear data requirements or late confirmation of the SME's role. Partners should therefore involve technical experts early, document procurement for audit purposes and hold a joint kick-off with the SME and provider before implementation starts. The kick-off should confirm responsibilities, data access, timing, communication arrangements and the evidence to be collected. The key lesson is that later phases stay on schedule only when specifications, procurement and the joint kick-off are completed in advance, making preparation the main point at which pilot risk can be managed.

7.2 Standardised reporting and consolidation

A central lesson is that standardisation enabled consolidation. The partnership used standardised monitoring tools from the Activity Leader so results could be recorded consistently and compared across countries. The monitoring and evaluation expert then consolidated and analysed the submitted data, while partners supported their figures with evidence such as screenshots, testimonials and documentation. The Pilot Activity Final Report,

developed by the externally engaged monitoring and evaluation expert, was the key tool for comparison because it brought each pilot's results, indicators, feedback, challenges, lessons and sustainability information into one common format.

A quality-control step is built into the framework. Before submission, partners cross-check consistency between the narrative and the numeric fields, and discrepancies are returned for correction. The SME Pilot Feedback Form in this set is the instrument intended to gather the SME's own assessment at the end of a pilot. The separately collected feedback dataset discussed in section 4 was a different, broader questionnaire and is treated accordingly. The lesson learned is that reporting instruments, particularly in projects with multiple partners, should be designed from the outset to enable easy consolidation of findings and the extraction of lessons learned. Partner input on the quality and usability of the reporting templates should be gathered and taken into account in the early stages of project implementation.

7.3 Roles and the pilot coordinator

A distributed activity stays coherent when responsibilities are split clearly and each side keeps a single point of contact. Responsibilities are divided between the Activity Leader and the project partners. The Activity Leader, SERDA, coordinates monitoring at transnational level, provides the templates and monitoring tools, organises coordination meetings, and acts as the contact point for clarifications and quality assurance. The externally engaged monitoring and evaluation expert consolidates and analyses the partner reports. The Lead Partner, the Faculty of Technical Sciences in Novi Sad, oversees alignment with programme standards and reporting to the Interreg Danube Region Programme. Together, these roles provide the overall structure within which the pilots are planned, monitored and reported.

Each project partner prepares and manages its local pilot, including SME selection, tendering and contracting in line with procurement rules, monitoring records and participation in transnational monitoring. Partners must also ensure that evidence is complete and reported through the common tools in a form suitable for project-level consolidation. To support this, each partner should appoint an internal pilot coordinator as the main contact for the pilot, ensuring continuity, responding to queries and keeping implementation aligned with the wider activity framework. The lesson learned is that distributed activities stay on schedule when each side has a single named coordination point and a pilot coordinator is appointed at kick-off.

7.4 Continuous monitoring

Coordination follows the arrangements set out in the guideline. Partners communicate with the Activity Leader through the agreed channels and respond to requests within five working days. Short monthly coordination calls are used to review progress and exchange good practice, supplemented by bimonthly coordination meetings, and a mid-term review which was held in

December 2025 with the Activity Leader's participation. Reporting is completed in English, as the working language for deliverables, while published success stories are managed through the separate B2GreenHub client-story process.

Each piloting partner must complete the reporting instrument for its pilot and submit it to the Activity Leader for review. The submission is then checked for completeness and consistency against the reporting requirements. Where information is missing or unclear, the report is returned to the partner for completion or clarification.

Monitoring was continuous rather than a single check at the end. Reports were reviewed as they arrived. Follow-up questions were sent to the relevant partner whenever clarification was needed. Each pilot's progress was measured against the overall target, allowing gaps to be addressed while the information remained current. This rolling approach is what allowed the consolidated deliverables to be updated cleanly as further reports are submitted.

Monitoring also served the partners directly. Using a common structure for each report allowed consistent feedback on completeness, showed where evidence could be strengthened, and kept reporting aligned with the needs of the consolidated deliverable. This kept the burden on partners proportionate while protecting the comparability of the data across pilots. The lessons learned is that continuous monitoring works best when built into the pilot, allowing issues to be identified and corrected while implementation is still under way.

7.5 Delivery against target and report completeness

Reports were tracked against the twelve expected pilot final reports and the six joint solutions. At the cut-off for this version, all twelve pilot final reports and eight published success stories had been received, covering all six solutions. The Digital Readiness Analysis, Market Puls, EM4 System Condition and InvestPlanner were each piloted by two partners, the AI-Powered Funding Call Matcher by three partners, all of which have reported, and WeldWise by a single partner.

Table 9 - Reports received for the six joint solutions

Joint solution	Status at cut-off
Digital Readiness Analysis (DANUBE ADR)	Final report received (2 out of 2)
Market Puls	Final report received (2 out of 2)
EM4 System Condition	Final report received (2 out of 2)
WeldWise	Final report received (1 out of 1)
InvestPlanner	Final report received (2 out of 2)
AI-Powered Funding Call Matcher	Final report received (3 out of 3)

The completeness of the twelve reports received varied. The Digital Readiness Analysis, Market Puls and InvestPlanner reports were complete, with indicators reported against targets, structured lessons and full sustainability sections. The EM4 report initially included a narrative result but no completed indicator table. After monitoring feedback, the piloting partner CAMPUS 02 submitted an updated version with the KPI table completed, and this has been reflected in the results above.

The Final Activity Report template allowed the Pilot Action Implementation Lessons Learned to be updated progressively as partner reports were submitted. This mattered because it was clear early on that pilots would not all finish at the same time. By using a standard structure built for cross-pilot comparison, new reports could be added to the analysis as they arrived without disrupting the consolidated format. The lesson learned is that delivery against targets is maintained when completeness is tracked against agreed indicators throughout, as early feedback on incomplete submissions helped turn partial reports into complete ones.

7.6 Risks that materialised

Risk management runs throughout the pilots. Each partner maintains a risk register, and the Activity Leader reviews the aggregated risk picture during coordination meetings. The main risks and their mitigations, as set out in the activity framework, are summarised in Annex G.

A technical difficulty, which the activity framework lists among the main pilot risks, materialised in the EM4 System Condition pilot, where the connection and licensing fault described in section 3.3 had to be resolved before stable monitoring could begin. CAMPUS 02 resolved it within the pilot period and recorded the lesson that new systems should be checked under controlled conditions before field installation. This is the evidence behind the recommendation to pre-test new hardware and connectivity rather than relying on troubleshooting once the equipment is already installed in the company.

A second risk materialised when responsibility for InvestPlanner shifted to TERA after other partners withdrew. TERA recorded this in its own report as a lesson on flexibility and contingency planning, noting that the late change required rapid internal reorganisation and that contingency planning should be built in from the start. The pilot stayed on track, and the episode supports the recommendation to plan for changes in partner involvement from the outset. Taken together, the two risks that actually materialised, the technical fit of hardware and the continuity of delivery, were both foreseeable, so controlled pre-testing and an early continuity check belong in standard pilot preparation.

7.7 Compliance, visibility and audit readiness

Treating compliance and visibility as routine parts of pilot management, rather than end-of-project tasks, helped keep the pilots audit ready throughout implementation. Compliance with the activity framework is mandatory for all partners, and the Activity Leader monitors it through document reviews, coordination meetings and follow-up checks. This keeps pilot delivery aligned with agreed procedures, procurement rules and reporting expectations from preparation through final reporting.

Partners are required to keep their activities, documentation and communication consistent with Interreg visibility and procurement requirements. This includes applying the agreed visual and reporting standards, documenting key implementation steps, and ensuring that supporting material is complete, traceable and suitable for review. Using the same standards across partners also makes it easier to consolidate evidence and demonstrate that pilots were implemented in a comparable and compliant manner.

Monitoring records and supporting evidence, including agreements, attendance lists, photographs, reports, invoices and other relevant documents, are maintained for audit purposes. These records are stored in the shared project repository, which helps preserve traceability, supports later verification and ensures readiness for any programme review or audit. Keeping the evidence organised during implementation also reduces the risk of gaps appearing only at the reporting stage. Compliance and visibility are easier and less costly to manage when updated throughout the pilot, keeping the activity audit ready without extra work at closure.

8. Data validation and quality assurance process

Reported results were validated before use. Each report was checked for completeness and consistency, and any gaps were noted rather than assumed. Claims in published success stories were also cross-checked against the corresponding pilot report.

Results were validated only to the extent supported by the evidence, namely the outputs delivered and activities completed, as shown in the pilot files and success stories. Business outcomes, such as quantified inventory reductions or energy and cost savings, were generally not yet captured and were therefore recorded as findings rather than presented as achieved results. A separately collected SME feedback dataset was assessed as part of this validation and excluded as a primary source for the reasons set out in section 2. For quality assurance, its respondent composition was checked against the pilot-host SME population, which confirmed that it captured project participation and organisational capacity rather than pilot-level validation, so it was kept out of both the consolidated report and the lessons learned report and not used to support any individual pilot finding.

Table 10 - Composition of the SME feedback dataset

Respondent group	Share of responses
Project partners and associated partners	14 of 22 (64%)
Other stakeholders	8 of 22 (36%)

Where figures and narrative content appeared inconsistent, results were accepted only after checking them against the indicators and the corresponding success story, so that only supported findings were included in the consolidated analysis. This mattered most for the benefits reported by the SMEs, which were conveyed through the partner rather than collected independently and were therefore presented as reported rather than as independently confirmed.

The validation also reflected the evidence standard set for the activity. Partners were expected to support their reported results with verifiable material such as screenshots, testimonials, photographs, signed documentation, reports and other pilot records. The Activity Leader then consolidated the validated data and checked whether the submitted evidence was sufficient to support the reported outputs. This process helped ensure that results were not only recorded in a common format, but also comparable across countries, solutions and implementation contexts.

The validation followed a clear source hierarchy. Pilot Activity Final reports were treated as the primary record, while published success stories were used to support and illustrate the findings, not to override the reports, and technical and methodological documents provided background. Keeping this hierarchy explicit is what allows the reported achievements to be presented as validated rather than merely claimed.

Consolidation itself is part of the quality process. Because each pilot reports through the same structured instrument, the results can be placed side by side and read for consistency across countries and solutions, which is what allows an isolated figure to be questioned and a recurring pattern to be trusted. Built-in comparability is therefore not only an analytical convenience but also an important safeguard for data quality. Pilot evidence is strongest when the source hierarchy and evidence standard are set in advance, and results are validated only where delivered outputs support them, making the approach transferable to any evidence-based reporting process.

9. Overview of contributions to project deliverables

The activities under Activity 3.1 contributed to the following project deliverables. The section is organised by deliverable so that the connection between the pilot activities and the project's deliverable architecture is clear.

Table 11 - Project deliverables and the contributions made to them

Project deliverable	Contribution from Activity 3.1
D.3.1.1 Pilot action implementation lessons learned	The validated results of the pilots and the consolidated final lessons learned report, with its supporting data sources and limitations note.
Activity 1.4 Danube DNA platform (best practices, B2GreenHub)	Published client success stories documenting the pilot outcomes for dissemination on the platform.
Validation of the joint solutions	Evidence of the reported solutions performing in operating companies, supporting their wider transfer across the Danube Region.

These contributions also connect to the project's wider deliverables. The published success stories feed the Danube DNA platform, which has been created and made ready for content upload and sharing under Activity 1.4 and has its own sustainability plan, while the validated pilots provide the practical evidence that complements the project's analysis of smart-specialisation strategies across the Danube countries and its one-stop shop for cross-border knowledge transfer between the digital transformation centres.

Activity 3.1 contributes to the project's deliverables in three concrete ways. It provides validated pilot evidence for the lessons learned deliverable, public success stories for dissemination, and practical proof that the joint solutions work in operating companies. The lessons learned contribution grows as each pilot is completed, validated and added to the evidence base. This strengthens Deliverable D.3.1.1 by expanding the range of validated results, recurring lessons and documented limitations on which the consolidated analysis depends.

The dissemination contribution is equally direct. Each validated pilot generates a published client success story for the platform, allowing the project's public knowledge base to grow alongside the monitored results. These stories translate pilot evidence into accessible examples for SMEs, partners and other stakeholders, while showing how the joint solutions performed in real company settings.

At the same time, the pilots provide the practical evidence needed to confirm that the joint solutions can be transferred beyond the initial test cases. As further pilots report, this evidence base becomes broader and more robust, supporting both project reporting and wider uptake across the Danube Region. It also gives the partnership a clearer basis for identifying which solutions are most ready for wider deployment and under what conditions they perform best. In this way, the pilots contribute not only to validation but also to the practical planning of future transfer and scaling.

10. Conclusion

Activity 3.1 set out to put the six jointly developed solutions into real use and to validate them in operating companies, and the evidence in this report shows that it did. Across twelve

reported pilots in twelve countries, forty-one SMEs received a concrete output from a digital solution adapted to their own setting, and every reported pilot met its delivery targets in full. All six solutions now have at least one validated pilot, from readiness diagnosis and demand forecasting to investment planning, energy and condition monitoring, and funding-call matching.

Taken together, the pilots show that the solutions work beyond the development environment and within the practical constraints of small firms. Each solution had to be adapted to the specific company context, and results were strongest where SMEs could provide the required data and business input. The most important finding is the recurring pattern across pilots rather than any single case.

Visibility consistently came before action, SME readiness shaped the outcome, precise technical diagnostics mattered for the hardware pilots, and standardised reporting made it possible to compare and consolidate results across different solutions and countries. The activity also generated broader lessons on managing distributed piloting, showing that preparation, standardised reporting, clear coordination, continuous monitoring and a defined evidence standard are essential for dependable delivery and trustworthy results.

The pilots confirm that the joint solutions perform in real companies, the published client stories give that confirmation a public and verifiable form, and the consolidated lessons turn the experience into guidance that other partners and SMEs can reuse. On this basis the solutions are ready to move from piloting towards wider transfer across the Danube Region, provided that outcome measurement is strengthened in line with the recommendations set out below, since delivery and outputs are validated while most business-outcome indicators are not yet available.

The pilots faced a consistent set of obstacles. The most common challenge was the quality and availability of company data, especially in smaller firms. The EM4 hardware pilot also encountered a technical connectivity and licensing issue. For InvestPlanner, the main challenge was finding firms with a genuine and timely need, as well as adapting the tool to different legal, accounting and language contexts. In each case, the issue was resolved within the pilot and documented so that the lessons can inform future implementation.

The lessons that recur across the pilots are equally clear. Data readiness comes before technology, as data quality is the binding constraint for smaller firms. Delivery works best in phases, sequencing quick wins, then digital pilots, then larger investment. Engaging management and staff early speeds adoption. Operational tools gain from being paired with a strategic readiness assessment, and new hardware should be pre-tested under controlled conditions before field installation. These lessons translate into the actions set out in the recommendations that follow.

Taken together, the six solutions contributed to the practical digital development of participating SMEs. They were well received by the companies and demonstrated clear value in real operating contexts, from improved visibility and structured planning to more targeted access to funding opportunities. The main remaining gap is the measurement of quantified business outcomes, which will be important for confirming longer-term impact beyond the validated pilot outputs.

11. Recommendations

These recommendations are the lessons-driven actions that follow from the synthesis above:

1. Standardise a readiness-first sequence across all pilots, using a structured diagnosis of processes and data before technology is selected or deployed.
2. Build a data-readiness pre-check and data-preparation support into each pilot, with particular attention to micro and small firms that lack structured digital records.
3. Strengthen outcome measurement by complementing the delivery indicators with quantified business impact, such as inventory reduction, forecasting accuracy, and energy or cost savings, which is currently the main evidence gap.
4. Sequence implementation in phases, distinguishing no-cost organisational measures, small digital pilots and larger investment projects, and plan sustainability from the outset.
5. Pre-test new hardware and connectivity under controlled conditions before field installation, to avoid the setup faults seen in the hardware pilot.
6. Maintain a transnational knowledge base of common challenges and reusable pilot examples for SMEs across the Danube Region.
7. Design the reporting instruments from the outset to enable easy consolidation of findings and the extraction of lessons, and gather partner input on the quality and usability of the templates in the early stages of implementation, so results from different solutions and countries stay comparable and can be consolidated.
8. Appoint a pilot coordinator and a single point of contact on each side at kick-off, and monitor pilots continuously rather than only at completion, so issues surface while there is still time to act.
9. Keep compliance and visibility records current throughout each pilot, so the activity stays audit ready without a separate closing effort.
10. Fix a clear source hierarchy and evidence standard before validation, accepting reported results only to the extent the delivered outputs support them.

12. Limitations

This report is based on all twelve final reports and covers all six solutions, so coverage of the pilots is complete. The SME feedback dataset has been excluded for the reasons explained above, and most business outcomes have not yet been quantified, so the findings are complete at the level of delivery and outputs while remaining indicative at the level of business outcomes.

Annex A. The six joint solutions and partner roles

The table below records the six jointly developed solutions and their assigned developing and piloting partners under the project design.

Table 12 - Developing and piloting partners for the six joint solutions

Joint solution	Developing partner	Piloting partner
Market Puls	LP FTN (RS)	PP12 CEM (ME)
WeldWise	PP3 ICT Cluster (BG)	PP3 ICT Cluster (BG)
InvestPlanner	PP4 TERA (HR)	PP9 TUM Int (DE)
AI-Powered Funding Call Matcher	PP7 PTP (SI)	PP2 ITCLD (RO) PP11 SERDA (BA)
DANUBE ADR (digital readiness analysis)	PP8 SOVA (SK)	PP6 STRIA (HU)
EM4 System Condition	PP10 CAMPUS 02 (AT)	PP5 VSTE (CZ)

Annex B. Participating SMEs by pilot

The table below lists the SMEs engaged in the pilots reported to date.

Table 13 - SME engaged in the pilots reported to date

Pilot / solution	SME	Size	Sector	Country
Digital Readiness Analysis	TG-Toman Group	Small	Machinery and equipment	SK
Digital Readiness Analysis	TURIMEX	Micro	Building materials and trade	SK
Digital Readiness Analysis	DEKONA	Medium	Machinery and equipment	SK
Digital Readiness Analysis	VÚMZ SK	Small	Machinery and equipment	SK
Digital Readiness Analysis	InterTechnic	Medium	Machinery and equipment	SK
DANUBE ADR (Hungary)	Five SMEs (not individually named)	3 micro, 1 small, 1 medium	Manufacturing, agriculture, services, communication	HU
Market Puls (Serbia)	Five SMEs (not individually named)	2 micro, 1 small, 2 medium	Pharmacy, machinery, plastics, wholesale, transport	RS
Market Puls (Montenegro)	Hotel Podgorica, Stadion, 2QL4U, Doclea Park, Gourmetable	3 micro, 2 medium	Tourism, wholesale/distribution, toy retail, beverage	ME
EM4 System Condition	One SME (automotive repair)	Small	Automotive repair and painting	AT
EM4 System Condition (Czechia)	INOS-Servis	1 small	Machinery	CZ
InvestPlanner	Five SMEs (not individually named)	Micro	ICT, economy, agriculture, hospitality	HR
InvestPlanner (Germany)	Three SMEs (not individually named)	Micro	ICT, medical technology	DE
WeldWise (Bulgaria)	MDC	1 medium	Manufacturing, metal processing	BG
AI-Powered Funding Call Matcher (Romania)	GIV BOATS	1 micro	Tourism and creative	RO
AI-Powered Funding Call Matcher (Romania)	RENDAR MANAGEMENT	1 micro	European Union funds consultancy	RO
AI-Powered Funding Call Matcher (Romania)	NEXLOC	1 micro	ICT and digital services	RO
AI-Powered Funding Call Matcher (Slovenia)	LDK TECH	1 micro	CNC machining and precision manufacturing	SI
AI-Powered Funding Call Matcher (Slovenia)	Vovk Turizem	1 micro	Tourism, natural products and food	SI
AI-Powered Funding Call Matcher (Slovenia)	Les Rock	1 micro	Wood and wood-based products	SI
AI-Powered Funding Call Matcher (Slovenia)	3D tehno CAR	1 micro	Additive manufacturing and 3D printing	SI

Pilot / solution	SME	Size	Sector	Country
AI-Powered Funding Call Matcher (Bosnia and Herzegovina)	Three SMEs (not individually named)	1 micro, 2 medium	Information and communication, machinery and equipment, metal manufacturing	BA

Annex C. Evidence base and documents received

The table below records the documents received for this version and their place in the evidence hierarchy.

Table 14 - Documents received

Document type	Items received	Role
Pilot Activity Final Reports	11 (DRA x2, Market Puls x2, EM4 x2, WeldWise, InvestPlanner x2, AI-Powered Funding Call Matcher x2)	Primary source
Published success stories	8 (five DRA client stories, one EM4 client story, one InvestPlanner client story, one AI-Powered Funding Call Matcher client story)	Illustrative, cross-checked
Technical manuals and methodology	Joint solution methodology and technical manuals	Background context
SME feedback dataset	1 collected response set	Excluded as primary source
Partner presentations	Slide decks	Not covered in this pass
Project deliverables (context)	Activity 3.1 guideline, platform and sustainability plan, smart-specialisation analysis, one-stop shop	Framework and project context

Annex D. The six joint solutions in brief

The table below gives a short description of each of the six jointly developed solutions, for reference.

Table 15 - The six solutions in brief

Joint solution	Brief description
Market Puls	AI-based demand forecasting and inventory planning for SMEs.
WeldWise	An Industrial IoT retrofit, developed under the ICT Cluster with COMICON as technical integrator, for spot-welding and similar machines: it counts production events, measures machine-level and enterprise electrical energy, derives energy consumption per produced unit, and presents real-time dashboards, historical archiving and abnormal-operation alerts from a local edge server, with non-invasive installation.
InvestPlanner	Step-by-step investment planning for SMEs, from business definition through analysis to a complete investment study, with AI support.
AI-Powered Funding Call Matcher	An automated platform, developed by Pomurje Technology Park, that gathers EU funding calls from several public sources into a daily-updated database and helps SMEs find relevant opportunities through filtering by industry, status, budget and deadline, semantic search and an AI assistant for keyword extraction.
DANUBE ADR (digital readiness analysis)	Assessment of an SME's digital readiness and design of a transformation roadmap.
EM4 System Condition	Flexible wireless energy and system-condition monitoring for SMEs.

Annex E. Project deliverables reviewed for context

The following project deliverables were reviewed to inform and frame this report.

Table 16 - Project deliverables reviewed for context

Deliverable	Description
Pilot Actions Implementation and Monitoring Guideline	The Activity 3.1 framework: objectives, roles, phases, monitoring tools and risk management
D1.2.1 Analysis of smart-specialisation strategies	Mapping of smart-specialisation priorities across the Danube countries (Activity 1.2)
D1.4.1 Platform Sustainability Plan	Sustainability plan for the Danube DNA platform (Activity 1.4)
D1.4.2 Platform created	The Danube DNA platform, created and ready for content upload and sharing (Activity 1.4)
D2.1.1 One-stop shop creation	Cross-border knowledge transfer between the digital transformation centres (Activity 2.1)

Annex F. Participating SME profiles

The table below gives a short profile of the SMEs in the Digital Readiness Analysis pilot, drawn from the published client stories.

Table 17 - Participating SME profiles drawn from published client stories

Company	Profile
TG-Toman Group	Engineering and supply company providing tailor-made industrial technology, process cooling and energy-efficient solutions, from design through implementation to service.
TURIMEX	Regional building-materials and hardware dealer operating since 1997, with materials sales, tool rental and freight transport for business and retail customers.
DEKONA	Designs and manufactures clamping devices, production jigs and technological lines, combining in-house design, CNC production and 3D measurement.
VÚMZ SK	Develops, produces and implements automation solutions, control systems and industrial technologies for manufacturing companies.
InterTechnic	Engineering company providing CNC machining, pressing, welding and assembly of metal components, progressively digitalising its production.

Annex G. Monitoring and delivery framework

This annex collects the reference tables that support section 6, namely the implementation roadmap, the standardised monitoring and reporting tools, and the risk register.

Table 18 - Implementation roadmap and milestones for the pilots

Phase	Period	Key milestones
Preparation	June to July 2025	Pilot plan finalised, tender documentation approved
Tender launch	July to October 2025	Tender published, procurement records filed
Contracting	November 2025	Provider contracts signed, kick-off meetings held
Implementation and monitoring	November 2025 to March 2026	Mid-term review and KPI verification, December 2025
Completion and reporting	April to June 2026	Final report submission, lessons learned consolidated

Table 19 - Standardised monitoring and reporting tools

Tool	Purpose
Pilot Activity Monitoring Toolkit	Records progress, milestones and KPIs; updated regularly
Monitoring and Reporting Checklist	Confirms implementation and documentation steps are complete
Pilot Activity Progress Report Template	Periodic narrative and indicator updates
SME Pilot Feedback Form	Completed by the SME at the end of the pilot
Pilot Activity Final Report	Consolidated end-of-pilot report feeding Deliverable D.3.1.1

Table 20 - Risk register for the pilot actions

Risk	Impact	Mitigation
Procurement delays	Timeline disruption and missed milestones	Start tender preparation early; set internal review deadlines
Low SME engagement	Limited results or visibility	Maintain regular communication; assign an SME liaison; involve SME management
Technical difficulties	Solution malfunction or integration problems	Engage technical experts in evaluation; request provider support
Coordination gaps	Inconsistent implementation across countries	Hold regular coordination meetings; use shared templates
Staff turnover	Loss of project knowledge	Document all steps; assign backups for key roles