SPIDER

EU-LAC Digital Partnership

Mapping/portfolio of the services offered by the selected innovation hubs

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1. EXECUTIVE SUMMARY

This deliverable compiles and analyses the services on digital technologies provided by the innovation hubs selected under the **SPIDER Twinning Programme**.

The Twinning Programme aims to connect EU and LAC innovation hubs to boost collaboration on the digital transformation technologies addressed by SPIDER, namely AI, Cloud Computing, Blockchain, 5G, Cybersecurity, High Performance Computing (HPC) and Virtual Research Environments (VRE). Under this scope, 5 Twinning Pairs, each comprising one EU organisation and one LAC organisation, were connected and encouraged to develop a structured cooperation, to be documented through an Action Plan.

As part of the innovation hubs cooperation, each actor selected under the SPIDER Twinning Programme was asked to describe 2 to 5 of their services dealing with digital transformation technologies through a standard template. This resulted in the service portfolios that are to be hosted on the SPIDER website and shared with the projects, startups and SMEs benefiting from the support services to be delivered under T4.2 of the SPIDER programme.

The present document collects and analyses the services described by each of the Twinned Hubs, so as to identify trends and good practices within the EU and LAC ecosystems. In total, 9 out of the 10 twinning hubs were provided a service portfolio template that was adapted to the type of services delivered and submitted to the team implementing Work Package 4 under the SPIDER Project. The charts and aggregated data in this deliverable take the services of these 9 twinned hubs into account. The full service portfolios of each innovation hub can be found in the annexes.

2. METHODOLOGY

The implementation of the Twinning Programme began with the identification of 176 R&I Hubs from the EU and LAC regions to invite for the activities under Work Package 4. (T 4.1). This effort was led by EurA, with the support of all 9 members of SPIDER consortium, notably from EIT Digital when it came to identifying the organisations to target on the EU side. Relevant organisations from the databases of each member of the consortium were added to a shared document and contacted by EurA.

The mapped organisations were then invited to apply for a Call for Expressions of Interest by the team implementing WP4.1, made up Carolina Turcato, João Amaral, Rita Catalão from EurA AG. The organisations were invited to apply through a dedicated form and evaluated through a series of selection and excellence criteria[1], including experience with digitalisation technologies, previous experience and familiarity with the BELLA network, number of projects supported, experience participating in EU-funded programmes and participation in international innovation networks. The call received a total of 19 applications.

The selected organisations were then connected in **5 pairs**, based on their technologies and sectors of focus, types of services provided and potential for collaboration. The partnerships were formalised with the bilateral signature of Memorandums of Understanding, which established the hubs' commitment to develop an action plan for collaboration, participate in online networking events and, finally, individually provide a service portfolio outlining their offers .

[1] These criteria are fully listed in the annexes of the document.

In order to standardise the portfolios provided by each of the Twinned Hubs, the programme team developed a blank template, through which the organisations were encouraged to list and describe up to 5 services.

The sectors included in the portfolio were the following: Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem[2]; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries[3].

The participants were, however, encouraged to list alternative sectors if these labels did not accurately describe their targeted verticals. Most made full use of this option, adding extra sectors to fit their needs. In cases in which the listed sectors were simply alternative terms for the categories listed above (ex: Engineering rather than Electrical and Electronic Engineering Industries (EEI)), they were counted under the original term.

Some of the hubs did not provide information on specific sections (mainly price and period of implementation) as these are dependent on the specificities of the client. These instances were also counted and detailed in the sections developed below.

3. SUBMITTED SERVICES

3.1 DESCRIPTION OF THE TWINNED HUBS

A short overview of each Digital Innovation Hub (DIH) is provided below:

- CeNAT (Costa Rica)

CeNAT was established as an inter-university platform designed to foster collaboration between academia, government, and the industrial sectors across various high-tech fields, with a focus on advancing research and innovation. Its mission is to conduct research initiatives that equip Costa Rica with the strategic, relevant, and necessary technologies to support the competitive development of the country's economic, social, and environmental sectors. CeNAT pursues this goal through innovation, technological development, capacity building, and the provision of scientific and technological services.

Favoured technologies: AI; Virtual Research Environments (VRE).

- CERTI (Brazil)

CERTI is a private, non-profit, technology-driven organisation based on the campus of the Federal University of Santa Catarina (UFSC) in Florianópolis, southern Brazil. The institution focuses on research and the development of innovative products and services, leveraging enabling technologies to enhance quality of life and deliver significant business impact across Latin America. With a national reach, CERTI serves as an ideal partner for product development, research initiatives, and consultancy services in areas such as Industrial Metrology, Instrumentation and Automation Systems, Mecha-Optoelectronics, Industrial Manufacturing, and Digital Convergence.

[2] Abreviated to "Agri-food" in the graph.

[3] Abreviated to "Textiles" in the graph.

Favoured technologies: AI, 5G, Cloud Computing, Cybersecurity.

- DIH CONNECT5 / TICE (Portugal)

DIH CONNECT5 provides Digital Transformation acceleration services to SMEs and entities of the Public Administration and is led by the Portuguese ICT Cluster - TICE.PT that covers the entire value chain in the area of ICT, promoting the interface between academic world and the business world.

Favoured Technologies: Cloud Computing, Cybersecurity, 5G.

- eDIH Paris-Saclay (France)

The eDIH Paris-Saclay is a consortium supported by co-funding from the European Commission's "Digital Europe" programme and the Île-de-France Region. Through this initiative, the consortium's partners provide a wide array of services to foster emerging digital technologies, including artificial intelligence, cybersecurity, high-performance computing, robotics, and additive manufacturing. Designed to assist industrial SMEs, the eDIH Paris-Saclay delivers comprehensive support to businesses in the Île-de-France area, offering services that span from training and proof-of-concept development to networking opportunities and the search for strategic partners and investors.

Favoured technologies: AI, Cloud Computing, 5G

- EDIH Rheinland (Germany)

EDIH Rheinland is an association of research and academic institutions, non-profit organisations, and public administration and aims to foster digital transformation, supporting SMEs and companies to access the latest findings in science and technology. EDIH Rheinland offers a broad range of services, including training, networking activities, digital maturity assessments and support on the digitisation of processes.

Favoured technologies: AI, Cloud Computing, 5G

- EDIH Tech4Efficiency (Spain)

EDIH Tech4Efficiency (Tech4E) operates as a collaborative competence centre, formed by a cohesive network of entities including business support organisations and innovation facilitators. Together, they guide companies and service providers through their digital transformation journeys. Fully aligned with the ambition of building a greener and more digital Europe, Tech4Efficiency EDIH focuses on leveraging technologies such as Cybersecurity, Artificial Intelligence, and High-Performance Computing to drive this transition.

Favoured technologies: AI, Blockchain, Cloud Computing, Cybersecurity, Virtual Research Environments, 5G.

- K-Labs (Ecuador)

K-Labs is recognised as Ecuador's leading corporate accelerator, committed to driving innovation and strengthening the ecosystem for both companies and startups. Its mission is to build a vibrant network that brings together resources, talent, and technology, enabling businesses not only to adapt to market changes but to lead them. K-Labs believes that sustainable and meaningful growth is achieved by placing innovation at the core of strategy, fostering agility and a competitive edge at every level.

Favoured technologies: AI, Cloud Computing, Cybersecurity.

- PCT Guamá (Brazil)

The Guamá Research Foundation Park is a non-profit, private organisation dedicated to promoting innovation, technological advancement, and sustainable development in the Amazon region (with particular focus on the agritech sector). Headquartered in Pará, the Foundation serves as a key driver of scientific research, supports entrepreneurial initiatives, and actively contributes to the growth and development of the regional ecosystem.

Favoured technologies: Cloud Computing, 5G.

- Tecnosinos (Brazil)

Tecnosinos is the technology park of the Universidade do Vale do Rio dos Sinos (Unisinos), dedicated to promoting innovation, research, and technological development, with a primary focus on information and communication technologies. It brings together companies, research centres, and educational institutions to foster collaboration and drive regional growth. Beyond this, Tecnosinos offers comprehensive infrastructure and support services in areas such as fundraising, intellectual property management, technology transfer, internationalisation, and investor relations. Training, mentoring, networking opportunities, and essential support for the development of projects led by startups and innovative companies is also offered by Tecnosinos.

Favoured technologies: AI, Cloud Computing.

- The Venture Builder (Portugal)[4]

The Venture Builder operates as an Innovation Hub, fostering connections across the Brazilian, Latin American, North American, and European ecosystems. Within this diverse environment, startups, corporations, investment funds, mentors, and academic institutions come together to share experiences, generate business opportunities, and develop new solutions.

3.2 SERVICES BY CATEGORY

The services shared by the organisations taking part in the Twinning Programme cover a range of different areas, and differ in terms of their scope, implementation and content. Therefore, 8 categories were identified in order to classify the services shared by the hubs

[4] Venture Builder did not provide the service portfolio to the programme team.

and to understand which type of services will be more relevant to the 10 startups selected during Task 4.2.

The categories established in this context are the following:

Acceleration – Services designed to fast-track the growth of research projects and startups by providing mentorship, access to networks, investment opportunities, tech-transfer support, and tailored resources to help businesses scale efficiently and sustainably.

Business Planning - Consultancy services to support the development of robust business strategies. This includes market research, defining value proposition, financial planning, communication, and go-to-market strategies.

Digital Transformation - Individualised support to help organisations integrate digital technologies across their operations and processes. This covers the adoption of advanced technologies that foster automation and process optimisation.

Matchmaking - Services that facilitate connections between players from the local and national ecosystems (usually startups or research projects) with companies, technology providers, investors, research institutions, accelerators, and incubators, among others.

Proof of Concept (PoC) - Support in developing prototypes or pilot projects to demonstrate the feasibility and potential value of new digital solutions. This helps organisations validate ideas before full-scale implementation, reducing risk and improving outcomes.

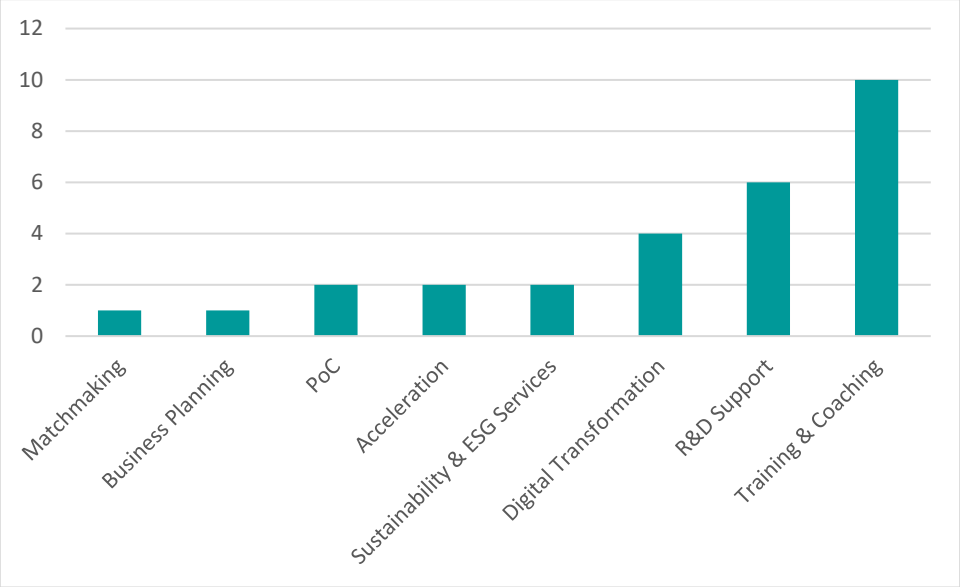
R&D Support - Assistance in planning and executing research and development activities. This includes access to technical expertise, individualised support, and cutting-edge equipment and infrastructure.

Sustainability & ESG Services - Guidance and tools to help organisations integrate environmental, social, and governance (ESG) principles into their strategies. This supports sustainable development goals and compliance with regulations, while positioning the companies as leaders in sustainability topics.

Training & Coaching - Learning programmes (individual or collective) that cover a broad range of topics, including business planning, team and talent development, leadership and creative capabilities, or technical topics related to digital transformation in organisations. Trainings can have different formats, including workshops, mentoring sessions, or webinars.

As shown in **Table 1**, of the 28 services shared by the organisations selected for the Twinning Programme, the most representative are services related to Digital Transformation, R&D Support and, above all, Training and Coaching.

Table 1 - Service Categories



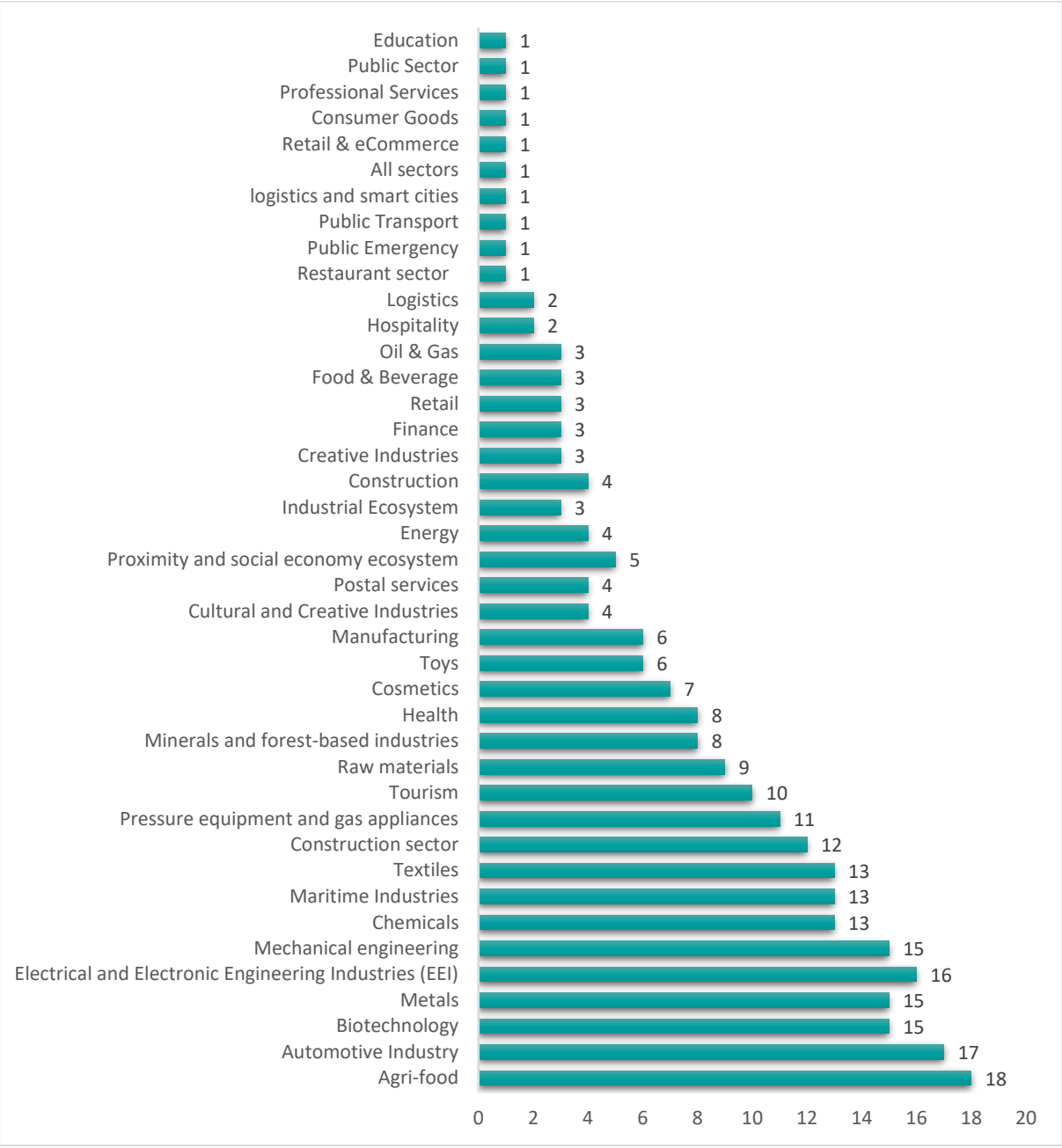
Since Twinned Hubs were asked to share and select services covering technologies supported by SPIDER (namely AI, Cloud Computing, Blockchain, 5G, Cybersecurity and Virtual Research), there is this prevalence of more technical services (R&D Support and Digital transformation services) that aim to accelerate digital transformation in Europe and Latin America and the Caribbean. Even the services falling under the Training & Coaching category have a very technical profile, and cover topics such as Introduction to AI, 5G or Cloud Computing, including digital maturity assessments, case studies on digital transformation or even training to learn using Python.

R&D support services made available by the selected DIHs cover the integration of AI tools in the data management process, support on the development of deeptech solutions (including hardware and software services) and cloud-related services.

Finally, digital transformation services have a very technical focus on introducing deeptech (particularly AI) both on the industrial production processes but also on the internal procedures of non-industrial companies. Also, the cultural dimension is covered by the service offer, which is crucial when introducing new tools and procedures, and to avoid resistance to change within teams. For example, one of the digital transformation services — Data-driven Culture from Tecnosinos — is fully focused on fostering a data-driven culture to support decision-making through data analysis, interpretation, and validation. The new procedures introduced through digital transformation go beyond the mere adoption of technological tools for data collection or automation; they also involve training, co-creation, and process validation with employees – as is the case with this service.

3.3 SERVICES BY SECTOR

Table 2 - Sectors



Breaking down the services by targeted sector, the Agri-food emerges as the leading beneficiary of the services, with the Automotive sector trailing a little behind, and significant representation of the Biotechnology**,** Metals**,** Electronic and Electronic Engineering Industries (EEI).

The weight of the Agri-food sector reflects its importance in both the EU and LAC economies. In the EU, approximately 16 million people work in the sector, which contributes €603 billion to the bloc economy, accounting for about 6.4% of the GPD (Van de Velde at al, 2023). In the LAC region, Agri-food systems account for up to half of total employment and between 30% to 40% of the region's Gross Domestic Product (Food and

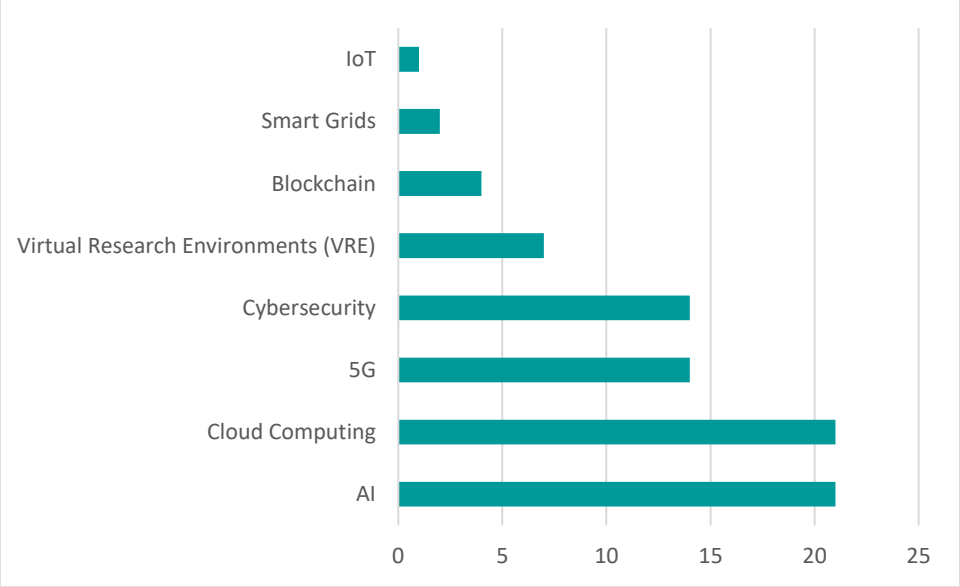
Agriculture Organization of the United Nations, 2021). Given the outsized importance of the sector in both regions, with even heavier impact in the LAC ecosystems, it is not surprising that most of the Twinned Hubs offers services for Agri-food innovation.

Digitalization technologies have also strong potential across the Automotive Industry, Mechanical Engineering, and Electrical and Electronic Industries (EEI) sector. These technologies can be applied in various ways—for example, integrating IoT and AI in vehicles, enhancing industrial simulations through AI, or developing smart grids in the energy sector. Likewise, Biotechnology can benefit from AI and IoT through improved real-time monitoring and more effective data aggregation.

3.4 SERVICE BY TECHNOLOGY COVERED

Regarding technologies covered by the services proposed, AI and Cloud Computing are the verticals mentioned more often. This is followed by 5G and cybersecurity technologies (see **table 3**). These results are in line with the interests expressed and discussions held in the WP2 Focus Groups (T2.1.2.), where AI and cybersecurity were identified as the areas of greatest interest to foster digital transformation in the EU-LAC context. Similarly, services that support the implementation of blockchain solutions are much less represented.

Table 3 - Technology Representativeness

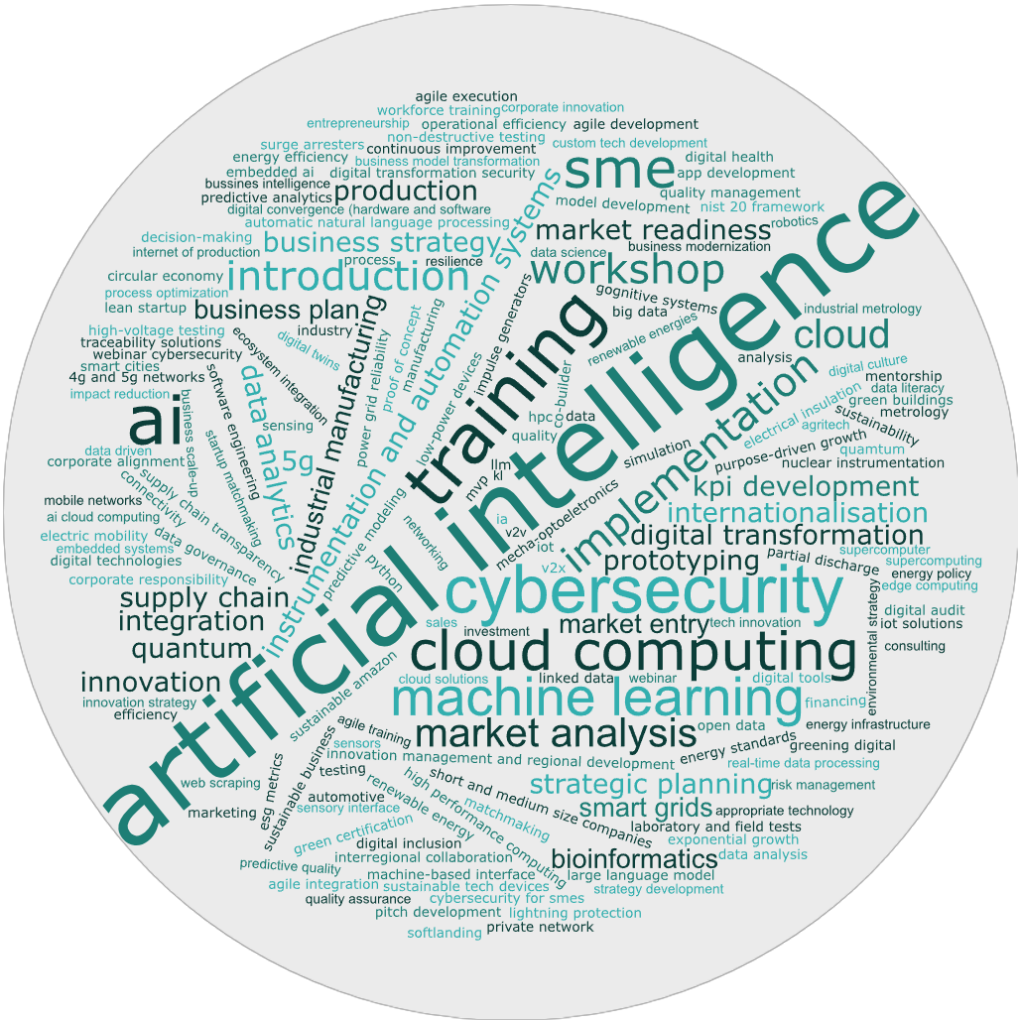


While technologies such as AI are well represented in both ecosystems, the challenges can be greater in terms of Cloud Computing for LAC, since the appropriate infrastructure (high-speed broadband, internet exchange points and peering agreements) is missing or less widespread in the territory. The efforts being made by selected DIHs to leverage innovation ecosystems in this area, especially in the case of Latin America and the Caribbean, are therefore to be encouraged.

As can be seen from **table 3**, the alignment of the selected DIHs with SPIDER priorities is quite strong, particularly in terms of verticals, since the Top 5 technologies covered match five of the ones targeted by SPIDER: AI, Cloud Computing, 5G, Cybersecurity and Virtual Research Environments.

3.5 KEYWORDS FOR SERVICES

Figure 1 - Keywords



In order to visualize the weight of the reccurence of each keyword provided by the Twinned organisations for each of their services, the programme team created a word cloud. In this graphic, the clear winner is the word "artificial intelligence", which stands at the centre of the image, with "cloud computing", "machine learning" and "cybersecurity" achieving similar prominence.

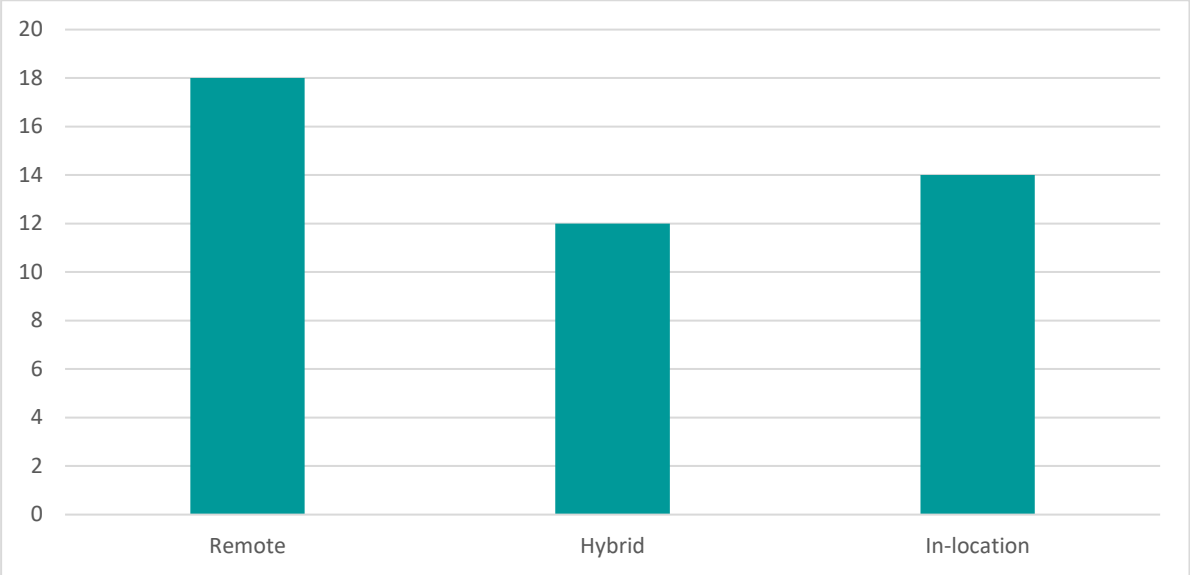
The occurrence of these terms demonstrates a high alignment between the services provided by the organisations and the technologies targeted by the SPIDER Twinning Programme.

Occurrence of keywords connected to business development, such as "internationalization", "business plan", "market analysis" and "market readiness" further reflects the types of services provided by the organisations.

4. IMPLEMENTATION OF SERVICES

4.1 FORMAT OF IMPLEMENTATION

Table 4 - Format of Implementation



Based on the mapping of services delivered by the hubs, the majority (18) supported remote implementation—an expected outcome given that these services are centered around digital technologies. It is important to note, however, that the graphic above accounts for the possibility of delivering the service in a certain format, with the large majority of services allowing more than one mode of implementation. It is also relevant to mention that services that apply digitalisation technologies in industrial settings would likely benefit from on-site implementation.

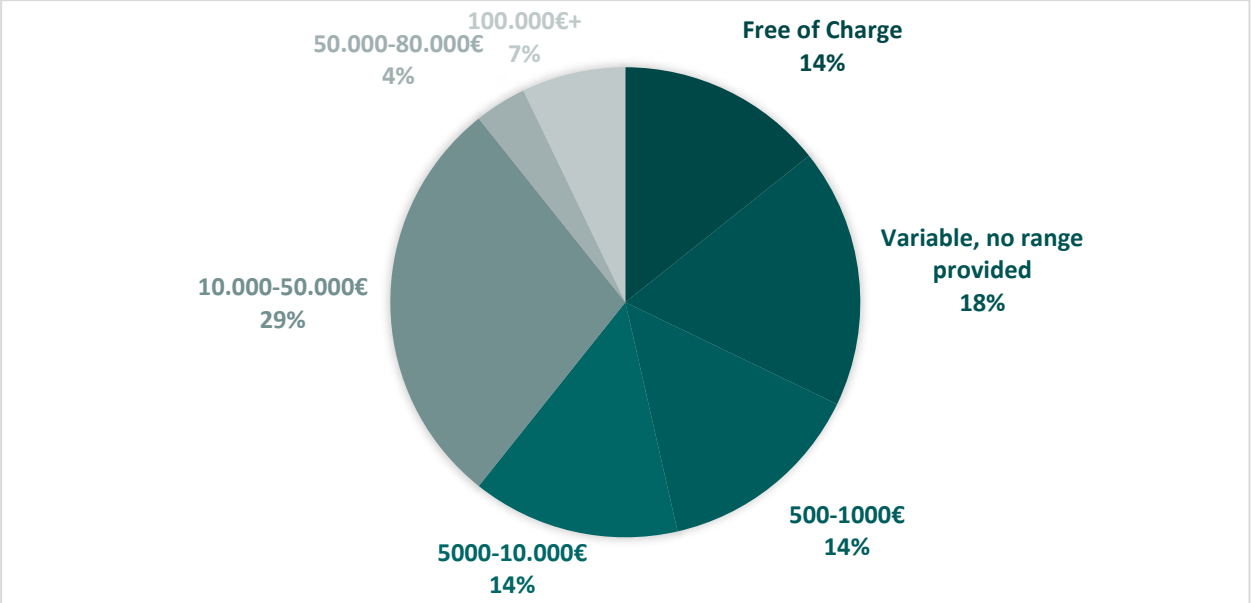
Only EdiH Paris-Saclay's "TEST AND EXPLORE WITH EXPERTS" allowed for exclusively on-site implementation. This is justified by the fact that the service is tied to the physical location of the CEA-List laboratory, which offers a support service to test and explore digital technologies.

It is also important to note that KrugerLabs did not provide this information regarding 3 of its services (Sustainable Innovation Lab, Exponential Strategic Planning and Tech Co-Builder & Solution Development), excluding them from this count. PCT Guamá also did not provide information on the format of implementation of any of its services, which were not taken into account in this section.

The conclusion of this analysis is that while remote implementation is doable, in-location implementation is also a possibility for most (14) of the services, while the chance to implement part of the service remotely and conduct part of it on-site (hybrid option) is the least popular (12).

4.2 PRICE RANGE

Table 5 - Price Range



The selected hubs were also asked to provide prices or, if impossible, price ranges for the listed services in euros. For 5 services, the Hubs were unable to provide a price range, indicating instead that the price varied, in some cases, depending on the "number of participants"[5] in the cohort of implementation or "characteristics of the developed solution or product"[6].

The analysis reveals a vast gap between the costs of the services, which ranged from free of charge to €100.000+.

The leading interval is €10.000 to €50.000, which covers 29% of the total services. Services in the lighter price ranges (€500-100, €5000-€10.000) represent the same percentage of the total as the free of charge ones. The free of charge and lighter price ranges constitute 42% of the sample, while the more expensive services add up to 40%. Therefore, we can say that there is a relative balance of accessible and cost-heavy services in the portfolio provided by the Hubs.

It is also important to note that all free of charge services are provided by EU organisations listed as members of the European Digital Innovation Hubs Network[7], which is supported by the European Commission. This may indicate access to alternative funding sources and explain each hub's ability to provide free services.

4.3 DURATION OF SERVICES

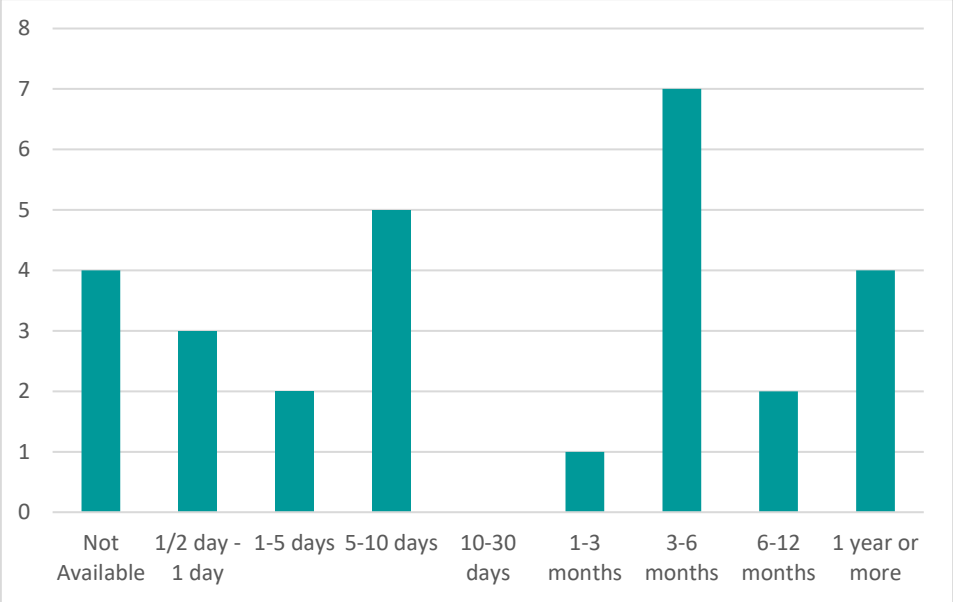
[5] Variable upon number of participants – CeNAT's Workshop Introduction to Bioinformatics Processing of Genomic and Metagenomic Data

[6] Variable upon the characteristics of the developed product – CERTI's DEVELOPMENT OF IOT PRODUCTS AND SOLUTIONS

[7] three of the free of charge services are provided DIH CONNECT5 / TICE, while one is provided by EDIH tech4efficiency.

Concerning the duration of services, there is a noticeable trend towards longer implementation spans (which is common in digital transformation processes, which require work on both the technical and cultural components). Similarly, the development of technical solutions, testing and validation are long processes that require a large allocation of human and technical resources. The prevalence of more technical services in this portfolio means that a duration of 3 - 6 months delivery process is the most common. (see **Table 6**).

Table 6 - Duration of Services



On the other hand, there is also a prevalence of services whose implementation is shorter (between 1 day and 10 days) - this is related to the existence of a significant number of Training & Coaching services, which are generally more limited in time.

5. BEST PRACTICES

Throughout the run of the SPIDER Twinning Programme, the implementing team responsible for WP4.1 fostered discussions and the exchange of initiatives and good practices between all participating Digital Innovation Hubs from the EU and LAC ecosystems. The 1st Online Networking Event, which took place on 3 December 2024, was particularly relevant to this knowledge-sharing effort, as the participants had the opportunity to present their own activities and initiatives in a way that highlighted the good practices happening in their respective ecosystems. Under this scope, the team gathered a series of good practices brought up by the participating actors from each side of the Atlantic.

Good Practices from the LAC Ecosystem:

- Cooperation between universities, companies and the government to modernise the automotive and mobility industries. Examples of programmes that embody this cooperation are the Rota 2030 Programme (Brazil)[8].
- The existence of communities that bring together various players (public and private) in the field of cybersecurity, such as LAC4[9], the CSIRT Network América Latina[10] or the OWASP Local Chapters[11] (Open Worldwide Application Security Project) whose representativeness is widespread in Latin America.
- The strategic investment that has been made in digital infrastructures (mainly in Brazil's ecosystem) will facilitate the exchange of data in real time and stimulate collaborative innovation between organisations on both continents - SPIDER and the working groups / CoPs that foster digital transformation in Latin America were highlighted as good practice initiatives.

Good practices from the EU Ecosystem:

- EU-funded (or co-funded) programmes that promote the technological integration and expansion of startups from other ecosystems into Europe. One example is the SPAIN - LATAM Scale-up programme[12] that provides soft-landing support to Latin American startups.
- As natural entry points into Europe for Latin American startups, the Iberian Hubs underline the importance and engagement that information-sharing initiatives on the national markets of Portugal and Spain have. Implementation of webinars, but also satellite events of major innovation conferences, covering legal aspects, funding opportunities or calls for projects are the most mentioned topics.

In addition to these good practices and initiatives highlighted as relevant, the Twinned Hubs have shown interest in connecting with governmental platforms that provide grants to tech-based projects and entrepreneurial activities to accelerate collaborative digital transformation, as well as the infrastructure that supports it on both continents. At this point, funded programmes targeting the implementation and development of technologies (such as those covered by SPIDER) are particularly relevant.

6. CONCLUSION

In total, 28 services were shared by 9 out of 10 Digital Innovation Hubs participating in SPIDER's Twinning Programme. Under the scope of WP4.1, the participants will now participate in a final online networking event, scheduled for 27 May 2025, and complete the Action Plan that details their collaboration with their partners. They will also be invited for a Final Twinning Event under WP4.3, during which they will present the Twinning Programme's results and their respective Action Plans.

[8]https://www.gov.br/mdic/pt-br/assuntos/competitividade-industrial/setor-automotivo/rota-2030-mobilidade-e-logistica

[9] https://www.lac4.eu/

[10] https://csirtamericas.org/

[11] https://owasp.org/about/

[12] https://www.investinspain.org/en/we-help-you/latam-scaleup

As next steps for the implementation team, the services will be promoted on SPIDER's communication channels and shared by the implementing team with 10 projects selected through the Call for Ideas under WP2.2.

The analysis of the service offer described in this deliverable shows that special care was taken to cover technologies supported by SPIDER, with AI, Cloud Computing, Cybersecurity, and 5G being the most common technologies supported by the hubs.

Regarding the typology of services, 8 categories of services were identified to classify the offer. The most representative category is Training & Coaching, covering learning programmes on a broad range of topics. In particular, these training services provide technical expertise on AI, Cloud Computing and 5G, which shows the alignment of all participants towards SPIDER's goals. R&D Support and Digital Transformation services are also well represented in the portfolios.

The sectors targeted are naturally aligned with the most important and representative industries of each region, namely Agri-food, the Automotive sector, and Electrical and Electronic Engineering Industries.

Concerning the implementation, most services have a fully online format, which will allow innovators from both continents easier access.. Moreover, a minority of these services also has a hybrid format of implementation, which could also foster interest in the services on offer.

Two factors that may hinder the interest from selected startups in the services shared by the DIHs are the price and the duration. Only 14% of services are free of charge, which may endanger the initial engagement between innovators from LAC and EU with the selected hubs. Furthermore, most services may be too expensive for early-stage projects, as 29% of services cost between 10.000€ and 50.000€. These costs are related to the technical profile of services, both in terms of human resources and equipment/infrastructure. Besides the cost factor, the duration may also be a bottleneck for the engagement between selected hubs and selected startups. Even if there is a good amount of services that have short implementation periods (up to 10 days), 13 of them have a minimum 3-month period of implementation.

As a conclusion, the 28 services analysed are a good contribution from Twinned Hubs to support digital transformation across Europe and Latin America, fostering technologies whose infrastructural gaps are addressed by BELLA and promoting cross-regional interactions between innovators and other stakeholders of both ecosystems. These services also follow and concretise the good practices acquired by all Digital Innovation Hubs in their local ecosystems, that are referenced to in Chapter 5.

7. References

Food and Agriculture Organization of the United Nations. (2021, April 16). *Latin America and the Caribbean are "pillar for world food security"*. FAO. https://www.fao.org/newsroom/detail/Latin-America-and-the-Caribbean-are-pillar-for-world-food-security-/en

Van de Velde, E., Kretz, D., Lecluyse, L., Izsak, K., Markianidou, P., & Moreno, C. (2023). Monitoring the twin transition of industrial ecosystems: Agri-food analytical report. European Commission. https://monitor-industrial-ecosystems.ec.europa.eu/sites/default/files/2023-12/EMI%20Agrifood%20industrial%20ecosystem%20report.pdf

8. Annexes

8.1. Call for Expressions of Interest - Evaluation and Excellence Criteria

A) Eligibility Criteria:

- Location (EU or LAC country connected to the BELLA network)
- Ability to use BELLA
- Services directed to early-innovators

B) Excellence Criteria:

- Uses Bella (20)
- Experience with technologies targeted by SPIDER (20 points)
- Portfolio of Services: differentiation (25 points)
- Portfolio of Services: Impact (25 points)
- Willingness to promote programme (15 points)
- Number of Projects Supported (20 points)
- Experience in participating in EU programmes (10 points)
- Participation in innovation networks (10 points)

A**pproval threshold: 80 points**

8.2. MoU Template

Memorandum of Understanding

EU Organisation & LAC Organisation

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

Due date: 31/10/2024
Actual date: 13/09/2024
Document author/s: 3ura Lda.
Version: 1.2
Dissemination level: RE
Status: Final Version

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X – Termination

XI – Signatures

This Memorandum of Understanding (hereinafter referred to as "MoU") is signed between:

a. The coordinator of the Twinning Programme under the SPIDER project:

3ura Lda.

Address: Av. da Boavista 1679 1º andar, sala 1.11, 4100-132 Porto

VAT Number: 515209686

Represented by Ricardo Greenfield

b. The selected EU Digital Innovation Hub:

Name of the organisation

Address:

VAT Number:

Represented by

c. The selected LAC Digital Innovation Hub:

Name of the organisation

Address:

VAT Number:

Represented by

This MoU was developed under the scope of the SPIDER project. SPIDER is being implemented on behalf of the European Health and Digital Executive Agency (HaDEA) through a Coordination and Support Action funded by grant agreement 101135861.

HaDEA was established by the European Commission on 16 February 2021, with the purpose of delegating certain tasks relating to the management of Union programmes, including budget implementation. HaDEA implements European programmes and initiatives for health, food safety, digital, industry and space.

I - About SPIDER

The **SPIDER** programme seeks to optimise the exploitation of the BELLA network and power the implementation of the outcomes of EU-LAC dialogues on digitalisation and R&I.

BELLA has created a direct, high-speed and secure data connection between the European Union (EU) and Latin America and the Caribbean (LAC) through submarine fibre-optic cable linking the two continents, as well as an onward terrestrial connection between several Latin American countries.

However, despite the EU's commitment to place digital cooperation at the forefront of its collaboration with the LAC regions, BELLA's full potential to enhance open science, knowledge-sharing and regional development is yet to be exploited. Likewise, a gap persists between the political agreements and commitments emerging from the dialogues between the two regions and their practical implementation.

SPIDER is addressing these limitations by pursuing **five different objectives**:

1. Providing a framework for enhancing EU-LAC cooperation on R&I;
2. Maximising and promoting the potential of the BELLA network for R&I cooperation and ensuring sustainable infrastructure use by stimulating the adoption and use of digital transformation technologies;
3. Launching the EU-LAC Digital Dialogues Implementation Forum (DIF);
4. **Establishing a Twinning Programme to support the development of digital partnerships and new business opportunities benefiting from BELLA infrastructure and addressing its challenges;**
5. Increasing visibility of the project actions, raising awareness and engagement with relevant stakeholders.

The coordination of the SPIDER Twinning Programme falls under the responsibility of EurA Portugal.

II – About the Selection Process

The SPIDER Twinning Programme have selected and matched **5 digital innovation hubs in LAC** and **5 digital innovation hubs in Europe** to be engaged in digital partnerships.

The participants were selected through a selection process that included invitations to express interest to hundred of hubs in Europe and LAC. From the hubs that have expressed interest, they were shortlisted according to a comprehensive list of selection criteria and priority was given to (1) geographical diversity (hubs located in terminal points of BELLA network in EU and LAC); (2) diversity of technology areas in which SPIDER project focuses on (AI, 5G, Blockchain, Cloud Computing, Cybersecurity, and Virtual Research Environments); and (3) gender diversity of hubs' representatives.

The list of criteria that guided the selection process had 3 main categories:

- eligibility criteria, which aimed to determine which organisations were eligible to take part in the programme. Particular attention was given to the location of participants, their technological focus and type of organisation.
- general selection criteria, aimed at gauging the participant's experience, services and interest in the twinning programme.
- excellence criteria, which allowed to differentiate candidates according to their network, awards or scientific production.

The present document should serve as Memorandum of Understanding (MoU) to formalise the collaborations under the Twinning Programme. The MoU will establish the object, duration, guidelines, duties, rights and specifications which concern these partnerships.

III - Object and Duration

1. This MoU sets the conditions that will rule the participation of selected Innovation Hubs in the SPIDER Project. In particular, the MoU clarifies what is expected of each party in the development of the Twinning Programme. This Twinning Programme involves active collaboration between the parties to support:

a. the dissemination of BELLA infrastructure;

b. startups and R&I projects with the potential to contribute to BELLA's Digital Ecosystem (DE).

2. The MoU will be valid for the duration of the project, until 30.04.2026, and will enter into force after the signature of all parties.

3. The MoU will not be extended automatically and will cease by the end of the project.

IV – Scope and Characteristics of the Programme

The parties acknowledge the key objectives of the Programme and agree to implement this MoU considering those goals (see Section I). It is expected that during the lifespan of the SPIDER Project, the Twinning Programme will:

1. support the development of partnerships between EU-LAC digital innovation hubs and new research & innovation business opportunities benefiting from BELLA infrastructure while addressing its challenges.
2. promote the exchange of knowledge, experiences and best practices related to supporting digital innovation ecosystems and startups in the areas of AI, Blockchain, Cybersecurity and Virtual Research Environments (VREs).
3. support the EU-LAC digital innovation hubs on the development or refinement of services that may provide added value to innovators collaborating in BELLA's digital ecosystem, by promoting a learn-by-doing and collaborative approach, with clearly defined activities and results.
4. Detail the collaboration framework based on points 1-3 in an Action Plan with short and medium-term actions to be jointly implemented.

V – Digital Innovation Hub duties

Selected Digital Innovation Hubs recognise and accept the following duties:

1. to actively participate in the Twinning Programme developed by the project team and its consortium members and all the activities delivered under this programme.
2. to ensure an open collaboration with the partner institution during the Twinning Programme, with transparency and goodwill when sharing learnings and experiences from previous projects, and respecting differences related to the different cultural backgrounds where each hub moves in.

3. to develop a common Action Plan with the partner institution aiming to create business opportunities benefiting from BELLA infrastructure. The Action Plan will be developed with support from SPIDER's consortium members.
4. to curate a portfolio of services directed to start-ups and innovation projects that have the potential to benefit from BELLA infrastructure and address its challenges (including the development and exchange of good practices).
5. to reply and solve any query of selected innovators concerning the services being offered and implemented.
6. to actively collaborate in the development of the Digital Ecosystem around BELLA infrastructure, keeping themselves informed of its potential and sharing with their network of start-ups, universities and incubators the benefits that result from its use.
7. to appoint a representative to act as the main point of contact between the hub and the programme team. Furthermore, it is expected that selected digital innovation hubs mobilise their staff and experts in the Twinning Programme activities and in the development of the Action Plan and portfolio of services.
8. to participate in the Online Networking Events with other digital innovation hubs from the EU-LAC ecosystems. A minimum of 2 online networking events will be delivered during the project. The presence of digital innovation hubs representatives is mandatory.
9. to present the Action Plans in the Final Twinning event (onsite). Participation in this event is mandatory, but can be assured virtually in select cases.

10. to raise awareness and visibility of the Partnership celebrated through this MoU. Each hub will receive a communication package with best practices and materials to help them promote their service portfolio, as well as the supported startups, the training webinars being delivered to the companies and the overall objectives of the programme.

11. to respect and abide by the General Data Protection Rules (Regulation 2016/679) and to ensure confidentiality on the treatment of personal and professional data shared between the parties in the context of this MoU, including information deemed confidential by selected innovators participating in the services. In this respect, the Digital Innovation Hubs will inform any breach of data immediately to SPIDER's consortium members.

VI – Digital Innovation Hub benefits

Participation in the SPIDER Project and the Twinning Programme will allow:

1. for a better knowledge and understanding of each of the regional innovation ecosystems (Europe and Latin America and Caribe).
2. to be part of the SPIDER network benefiting from the connection with high-potential research projects and startups and interaction with relevant players and policy-makers from both regions.
3. to participate in one of the Working Groups of the EU-LAC Digital Dialogues Implementation Forum (DIF) – a Forum of experts that will discuss periodically around two transversal topics in the bilateral cooperation: WG1: Human-centric digital transformation (Leader: EIT Digital) and WG2: DEI - Diversity, Equality and Inclusion (Leader: INMARK).
4. for increased visibility of the selected institutions in both Europe and the Latin America and Caribe regions.
5. to be on the frontline of the interactions between the innovation ecosystems of Europe and Latin America and Caribe.
6. to take part in knowledge-sharing activities, actively contributing and learning about the state-of-the-art, challenges and contexts of innovation ecosystems in both regional ecosystems (in the areas of AI, Blockchain, Cybersecurity and VRE).
7. to co-design and implement services to selected innovators that will leverage BELLA's digital ecosystem.

VII - Confidential Information

1. confidential Information includes, without limitation, any and all information relating to each party's business, economic, financial, operational, commercial, legal and contractual functions and activities. The parties herein referenced include digital innovation hubs, startups and research projects, and SPIDER's consortium members.
2. each party shall treat all Confidential Information it receives from other parties in the course of this MoU and the Twinning Programme as strictly confidential and shall not pass it on to third parties, unless agreed in a separate written Co-operation Agreement. The third part herein referenced does not include HaDEA or other governing bodies of the European Commission.
3. both digital innovation hubs agree that none of them can be held liable for any disclosure of Confidential Information by HaDEA or other governing bodies of the European Commission.

VIII - Dispute resolution

1. the Parties shall endeavour to resolve claims, disputes or other matters related to this MoU and the Twinning Programme. Any claim, dispute or other matters in question between the parties should be resolved independently.
2. in the event of a disagreement or dispute between the Parties, no intervention or mediation should be expected from the members of the SPIDER consortium, HaDEA or other governing bodies of the European Commission.

IX - Nature of the agreement

This Memorandum of Understanding is not legally binding upon the parties. It is a statement of intent reflecting the mutual aspiration of the parties to collaborate and join efforts on the projects and activities as described herein. This MoU does not create any contractual obligations, financial commitments, or enforceable duties between the parties.

X – Termination

This Memorandum of Understanding may be terminated at any time by either party. Either party may cease participation with immediate effect upon giving written notice to the other party.

XI – Signatures

By signing this document, both involved parties confirm that they will abide by the principles of the SPIDER Twinning Programme specified in this MoU.

I agree with the above-mentioned conditions and the principles that concern my organisation.

on behalf of 3ura Lda.

I agree with the above-mentioned conditions and the principles that concern my organisation.

on behalf of Name of the EU Organisation

I agree with the above-mentioned conditions and the principles that concern my organisation.

on behalf of Name of the LAC Organisation

8.3. Full list of service portfolios

a. Featured below in the following order:

- K-Labs
- CERTI
- eDIH Paris-Saclay
- CeNAT
- PCT Guamá
- Tech4efficiency (FUNDECYT-PCTEX)
- Tecnosinos
- Connect5 (TICE.PT)
- EDIH Rheinland

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the HADEA. Neither the European Union nor the granting authority can be held responsible for them.

Funded by the European Union

K-Labs

K-Labs is Ecuador's leading corporate accelerator, dedicated to empowering both companies and startups through strategic innovation and cultivating a resilient, growth-driven ecosystem. Our vision is to create a dynamic network where resources, talent, and technology converge, allowing companies and startups alike to anticipate and shape market trends rather than simply respond to them. We believe that sustainable, impactful growth is achieved when innovation is embedded in the strategic core, fostering agility and competitiveness at every level.

Our approach extends beyond traditional consultancy; we work alongside each venture to integrate forward-thinking methodologies and agile practices tailored to their unique challenges and goals. For startups, this means establishing a strong foundation that supports scalable growth, while for established companies, we focus on helping them adapt and excel in evolving landscapes. Our aim is to create a thriving environment where both startups and corporations can push boundaries, expand influence, and lead in their industries.

International expansion is essential to our mission. By broadening our reach, we strengthen our ecosystem, connecting ventures of all sizes to diverse markets, valuable insights, and strategic partnerships that fuel growth and innovation. A global presence empowers our network to scale sustainably and adapt to new opportunities, building a cohesive environment for cross-border collaboration. Through K-Labs, companies and startups alike gain access to a world of possibilities, fostering a connected ecosystem where innovation and resilience are at the forefront of global success.

K-Labs is one of the select organizations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER's online platforms and promoted across its dissemination channels.

1. SERVICE ONE - Innovation Sprint Accelerator

This 12-week accelerator program provides high-potential startups with an intensive pathway to launch and scale in the European market. Focused on agility, innovation, and mentorship, the Innovation Sprint Accelerator is designed for rapid development and market validation, setting startups up for long-term growth and investment-readiness.

- **Modules:**
  - Initial diagnostic to assess innovation potential and European market fit.
  - Weekly workshops on agile methodologies and lean innovation strategies.
  - Tailored mentorship with top-tier European experts.
  - Demo Day, with pitching sessions for investors in the EU ecosystem.
  - A 3-month follow-up for additional guidance.
- **Deliverables:**
  - Innovation roadmap tailored to startup goals.
  - MVP adapted and tested for European market demand.
  - Investor-ready pitch deck aligned with EU standards.
  - Access to a European business network.
  - 18-month scalability strategy.

This service is delivered in full remote/hybrid/in-location format.

For inquires about this service, please contact **johan@krugerlabs.com**

Pricing: €15,000 - €25,000

Duration: 12 weeks, with a 3-month follow-up

AI

Cloud Computing **Cybersecurity**

Sectors: Technology, Agri-food, Healthcare, Creative Industries, Retail & eCommerce, Manufacturing, Finance, Tourism

Keywords: Innovation, Market Entry, Investment, Lean Startup, Agile Training, Pitch Development, Mentorship, Business Scale-Up, Networking, Ecosystem Integration

2. SERVICE TWO – Digital Transformation Blueprint

Service **Description:**
A six-month service supporting organizations in adopting a digital-first approach, optimized through audits, agile implementation, and cultural alignment. Phases include:

- **Digital Audit** – Evaluation of current digital systems and infrastructure.
- **Agile Process Integration** – Introduction of agile workflows and staff training.
- **Cultural Shift** – Development of a resilient, digital-ready company culture.
- **Deployment & Support** – Hands-on guidance to ensure seamless integration and optimization.

Available remotely or onsite. Inquiries can be sent to johan@krugerlabs.com.

Pricing: €30,000 - €50,000

Duration: 6 months

AI

Cloud Computing **Cybersecurity**

Sectors: Finance, Automotive, Manufacturing, Healthcare, Consumer Goods, Professional Services, Construction, Energy, Logistics

Keywords: Digital Transformation, Agile Integration, Process Optimization, Workforce Training, Digital Culture, Cloud Solutions, KPI Development, Business Modernization, Digital Audit, Corporate Innovation

3. SERVICE THREE – Sustainable Innovation Lab

Service **Description:**
This four-month program focuses on helping companies integrate sustainability principles and practices into their operations, enhancing both ecological responsibility and business resilience. Key phases include:

- **Impact Assessment** – Analysis of the environmental footprint and areas for improvement.
- **Circular Strategy Design** – Development of sustainable, circular business models.
- **ESG Metrics** – Establishment of robust Environmental, Social, and Governance metrics.
- **Green Workshops** – Interactive sessions to cultivate a sustainability-driven culture.
- **Certification Guidance** – Assistance in acquiring recognized certifications.

For additional information, please contact johan@krugerlabs.com.

Pricing: €20,000 - €35,000

Duration: 4 months

AI

Cloud Computing **Cybersecurity**

Sectors: Retail, Automotive, Agri-food, Manufacturing, Construction, Energy, Cosmetics, Public Sector

Keywords: Sustainability, Innovation, ESG Metrics, Environmental Strategy, Circular Economy, Impact Reduction, Green Certification, Sustainable Business, Strategic Planning, Corporate Responsibility

4. SERVICE FOUR – Exponential Strategic Planning

Service Description:
This comprehensive service equips companies with a clear roadmap to align their operations, strategy, and growth objectives. The framework is designed to foster exponential growth through innovative, efficient, and resilient business models. The process involves:

- **Awake Phase:** Organizational diagnostic and market environment analysis to understand the current state and identify opportunities.
- **Strategic Foundations:** Workshops to define a Massive Transformative Purpose (MTP), refine corporate values, and validate or enhance the business model.
- **Strategic Plan Design:** Setting strategic goals and Key Results (KRs) using the Exponential Planning (ExP) methodology, which balances innovation (X), growth (V), efficiency (C), and resilience (R).
- **Operational Implementation:** Developing a step-by-step operational plan with prioritized initiatives, timelines, and resource allocation.

Delivered through workshops, diagnostics, and collaborative tools, this service transforms vision into actionable plans that drive sustainable growth. For inquiries, please contact johan@krugerlabs.com.

Pricing: €20,000 - €40,000

Duration: 6-9 months

AI

Cloud Computing

Sectors: Finance, Technology, Energy, Education, Healthcare, Manufacturing, Retail, Creative Industries

Keywords: Strategic Planning, Exponential Growth, Operational Efficiency, Business Model Transformation, KPI Development, Innovation Strategy, Resilience, Corporate Alignment, Agile Execution, Purpose-Driven Growth

5. SERVICE FIVE – Tech Co-Builder & Solution Development

Service Description:
The Tech Co-Builder service is a tailored solution for companies seeking to develop custom technological applications or integrate advanced functionalities into their operations. This service provides two core pathways:

1. **Custom Solution Development:** Collaborate with KLabs' expert teams to co-create apps or systems tailored to your specific needs, including traceability solutions for transparent supply chains, product tracking, or regulatory compliance.
2. **Startup Matchmaking:** Connect with startups specializing in the required technologies to rapidly deploy innovative solutions that align with your business goals.

Through agile methodologies, KLabs ensures efficient development cycles, robust testing, and smooth deployment, adapting each step to meet unique organizational challenges.

- **Components:**
  - **Ideation and requirement gathering.**
  - **Prototyping and iterative testing.**
  - **Custom tech or traceability app development.**
  - **Matchmaking with vetted startups for specialized solutions.**
  - **Deployment and integration support.**

This service ensures your business receives high-quality, scalable tech solutions while reducing time-to-market. For inquiries, contact johan@krugerlabs.com.

Pricing: €2,000 - €80,000

Duration: 2-8 months, customizable

AI

Cloud Computing **Cybersecurity**

Sectors: Agri-food, Logistics, Retail, Manufacturing, Energy, Healthcare, Creative Industries.

Keywords: Co-Builder, Custom Tech Development, Traceability Solutions, Startup Matchmaking, Agile Development, Supply Chain Transparency, Tech Innovation, App Development, Prototyping, Integration

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

CERTI FOUDANTION

The Reference Centers in Innovative Technology Foundation – CERTI is a private, non-profit, technology-based institution, located in the campus of the Federal University of Santa Catarina (UFSC) in Florianópolis.- SC, southern Brazil. Founded in 1984, CERTI has been dedicating itself to the research and development of products and services and is working with enabling technologies that could provide

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Funded by the European Union

more meaningful and useful tools to improve life quality and to generate relevant business impacts in Latin America. Growing and getting more solid, today CERTI is a reference for many technology and market innovations in Brazil. Since it was born on the heart of the Federal University of Santa Catarina, this connection is still very alive today, allowing a strong connection with the academy and an easy path to government related activities. Today CERTI is a National wide institution with three offices strategically placed on: Manaus (North), Brasilia(middle-east and National District Capital) and Florianopolis(South) making it a perfect partner for product development, researches and consulting services in the following areas: Industrial Metrology, Instrumentation and Automation Systems, Mecha-Optoeletronics, Quality Assurance, Entrepreneurship, Industrial Manufacturing, Digital Convergence (hardware and software), and Edutainment, This capacity is organized in competence centers that regularly work together in end-to-end multidisciplinary projects such as manufacturing, supply chain, market analysis, business plan, product development, laboratory and field tests, innovation management and regional development. CERTI has a great capacity on digital convergence. Samsung, Philips, TPV, LG and Siemens are among CERTI global customers on smart TVs, cellular applications and medical It solutions. CERTI is accredited by the Ministry of Science, Technology and innovation for development with fiscal incentives and by EMBRAPII to provide grants for projects on Smart Systems. CELTA is CERTI's incubator composed of startup companies that work with high technology and it is based in Florianópolis, Santa Catarina State, Brazil. This is the most advanced centre of technology-based companies in Latin America.

CERTI FOUNDATION is one of the select organizations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER's online platforms and promoted across its dissemination channels.

1. PRODUCT DEVELOPMENT

The projects of product development can include various competences, such as the development of hardware, software, firmware and systems. However, to achieve good results with research, development and innovation projects, a disciplined and a systematic approach is necessary.

The development of a project from start-to-finish can be divided into five major phases, starting with the analysis of an opportunity, with the realization of strategic analysis of the business, to the validation of the solution after the implementation of the project or its pilot. Thus, business and technology are united as unique components of the innovative process. Between each of the phases we define stages for critical analysis and decision-making, thus reducing risks in the innovation process. These stages of passage from one phase to another take place in the form of workshops involving the project's main stakeholders.

CERTI, in addition to relying upon its staff's extensive experience in generating solutions in electronics, has strategic partnerships in Brazil and abroad in the format of an R&D technology consortium for the creation of innovative solutions.

A product can be defined as a good developed into the form of a prototype or a final product, which combines all of the technical, functional and design characteristics that, when put into operation, allow the client to see the results before the product is released in the market.

CERTI uses its multidisciplinary and specialized structure to offer clients complete development solutions in a number of technological fields, including: machinery, electronics, systems, applications, embedded software, system and device integration, advanced manufacturing and pilot production (for production analysis).

For inquiries about this service, please contact **las@certi.org.br**

Price is provided case by case.

Duration of the service depends upon the analysis of its complexity.

Digitalization technologies targeted/involved in the delivery of this service:

AI
Cloud Computing
Blockchain

5G
Cybersecurity

Sectors targeted by this service:
Automotive industry; Biotechnology; Cosmetics; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Pressure equipment and gas appliances; Raw materials; metals, minerals and forest-based industries; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Industrial Metrology, Instrumentation and Automation Systems, Mecha-Optoeletronics, Industrial Manufacturing, Digital Convergence (hardware and software), manufacturing, supply chain, market analysis, laboratory and field tests.

2. INDUSTRIAL PROCESS DEVELOPMENT

Innovation in processes has a strategic role at companies beginning at the moment a company raises its level of competitiveness, whether by adopting new production methods, or by making a major improvement that enables the creation of products and services with a significant difference in cost, agility, productivity, quality or increase in the useful life of equipment and processes, thus, providing a competitive advantage in the marketplace.

CERTI can be a powerful ally in process innovation for companies. It has management and operation experience in the manufacture of electronic products in small series, quality management and has conducted various planning projects for industrial parks already completed in Brazil and abroad. The institution is qualified to execute development/optimization projects for existing production processes:

- Development and transfer of new processes and know-how;
- Industrial traceability and lean manufacturing solutions;
- Factory floor information management systems;
- EcoDesign and reverse logistics;
- Study of the post-consumption chain for industrial waste.

For inquiries about this service, please contact las@certi.org.br

Price is provided case by case.

Duration of the service depends upon the analysis of its complexity.

Digitalization technologies targeted/involved in the delivery of this service:

AI
Cloud Computing
5G
Cybersecurity
Virtual Research Environments (VRE)

Sectors targeted by this service:
Automotive industry; Biotechnology; Construction sector; Cosmetics; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Pressure equipment and gas appliances; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Instrumentation and Automation Systems, Quality Assurance, Industrial Manufacturing, Supply Chain, Market Analysis, Business Plan, Innovation Management and Regional Development, Entrepreneurship.

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

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Funded by the European Union

eDIH Paris-Saclay

A team of experts to integrate digital technologies for industrial SMEs! The eDIH Paris-Saclay is a consortium co-financed by the «Digital Europe» programme of the European Commission and the Île-de-France Region. The project partners offer various services to exploit new digital technologies such as artificial intelligence, cybersecurity, high-performance computing, robotics, digital twins and additive manufacturing.

The CEA-List, the University Paris-Saclay, the National Research Institute for Digital Sciences and Technologies (INRIA), the Mines-Telecom Institute (IMT), the Technological Research Institute (IRT) SystemX, the Systematic Paris-Region competitiveness cluster and the Paris Île-de-France Chamber of Commerce and Industry (CCI), are members of the eDIH Paris-Saclay consortium.

The integration of digital technology into products and services is a vital issue for small and medium-sized enterprises. To support them, the eDIH (European Digital Innovation Hub) Paris-Saclay offers companies in the Île-de-France region a range of services ranging from training to the development of proof of concept, and networking, to the search for partners and investors.

The services offered are 100% supported by the Commission European and the Île-de-France region, for industrial SMEs in the European sense of the term*, having at least one establishment in the Île-de-France.

* Small and medium-sized enterprises in the European sense: up to 250 employees, with annual turnover not exceeding EUR 50 Million and a total balance sheet of not exceeding EUR 43 Million.

For French SMEs that do not meet these criteria and for SMEs outside the Île-de-France Region but still in the European Union, services are supported by the European Commission at 50% only.

The eDIH Paris-Saclay is one of the select organisations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER’s online platforms and promoted across its dissemination channels.

1. ADVANCED TRAINING IN DIGITAL TECHNOLOGIES

Continuing training for enterprises in Artificial Intelligence, Cybersecurity, Greening digital, Quantum, Digital Health, 5G, Cloud. Inria Academy training catalogue consisting of DeepTech, State of the Art and Executive Education ranges. https://www.inria-academy.fr/

Training in digital Deep Tech technologies at Best international level:

- Access to world-class scientists at the heart of Development of advanced technologies.
- A pedagogy favouring short cycles.
- Scalable modules for progressive skills.
- Inria's exceptional infrastructure provision.
- Independence from industrial solutions.

This service can be in full remote, hybrid or in-location format depending on the service.

For inquires about this service, please contact **anne.leroy@cea.fr**

Around 800 Euros.

Executive Education modules: 1h/2h.

DeepTech Modules: 1 day to 2 days.

State of the art: 1 day to 10 days.

AI

Cloud Computing

5G

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Training, Artificial Intelligence, Cybersecurity, Greening digital, Quantum, Digital Health, 5G, Cloud.

2. TEST AND EXPLORE WITH EXPERTS

The CEA-List offers a support service to test and explore digital technologies such as Artificial Intelligence, Cybersecurity, High Performance Computing, Non-Destructive Testing, Digital Twins, robotics, embedded AI, software engineering, Machine-Based Interface, Sensory Interface, Big Data, Cloud, Nuclear Instrumentation, Automatic Natural Language Processing,... This service is a preliminary demonstration of the feasibility or operation of digital technologies proposed to CEA-List for your company.

The CEA-List brings together nearly 1000 engineers and technicians around one of their fields excellence: intelligent digital systems. The service allows testing and appropriation of digital technologies by being accompanied by experts from the CEA-List, to come up with a proposal technical and financial before investing.

This service is delivered in-location format.

For inquires about this service, please contact **anne.leroy@cea.fr**

Around 800 Euros.

From 1 hour to 5 days, depending on the needs.

AI
Cloud Computing
Blockchain
5G
Cybersecurity
Virtual Research Environments (VRE)

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Digital technologies, Artificial Intelligence, Cybersecurity, High Performance Computing, Non-Destructive Testing, Digital Twins, robotics, embedded AI, software engineering, Machine-Based Interface, Sensory Interface, Big Data, Cloud, Nuclear Instrumentation, Automatic Natural Language Processing.

3. DEVELOPMENT AND ACCELERATION

Systematic Paris-Region provides support for SMEs and startups wishing to develop operational through a range of services structured around five axes: visibility, access to market, access to finance, management consulting, Skills and HR. By intervening at a decisive moment development, Systematic helps its members to identify partners and funding tools specific to best prepare their strategy for growth.

- Increased visibility
- Market access opportunities
- Access to finance
- Human resources

This service is delivered in full remote, hybrid or in-location format.

For inquires about this service, please contact **anne.leroy@cea.fr**

Around 800 Euros.

From 1 hour to 5 days, depending on the needs.

HR

Management consulting

Skills

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Visibility, access to market, access to finance, management consulting, skills and HR.

4. SUPPORT IN THE SEARCH FOR FUNDING

Paris Île-de-France Chamber of Commerce and Industry provides support for SMEs to assess the company's strategy and determine the funding tools to be used as well as support in the preparation of application files of financing and identification of financial tools adapted to projects (innovation and growth).

This service is delivered in full remote, hybrid or in-location format.

For inquires about this service, please contact **anne.leroy@cea.fr**

Around 800 Euros.

2 to 5 days, as required.

Funding

Files

Financial tools

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Funding, files, financial tools.

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

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Funded by the European Union

National High Technology Center

The National High Tech Centre is one of the selected organisations participating in the SPIDER Twinning Programme, to connect key actors from EU and LAC ecosystems to establish networks, share best practices, work on joint action plans and explore opportunities around BELLA infrastructure.

CeNAT was formed as an inter-university space for meeting between academia, the Government and the productive sectors in different fields of high technology, joining efforts to enhance the country's possibilities and be able to take advantage of the opportunities that technological development offers to countries that, like Costa Rica, have invested significantly in the education of their population at all levels.

CeNAT has consolidated a work platform based on the high technical-professional capacity of the personnel of its areas and laboratories, its equipment and facilities, which has allowed it to promote various research projects and knowledge transfers, focused on the vision of transforming them into development.

We are an inter-university coordination body that facilitates and promotes the proper functioning and systemic development of scientific research in higher education, in various areas of high scientific-technological content, oriented to the development of research, linkage and extension within the framework of innovation, development with the public sector and the private sector with a national and international scope.

Objective of CeNAT's development in the country: To carry out research activities that allow the country to provide the country with the necessary, relevant and strategic technology for a competitive development of the different sectors of society, in the economic, social and environmental fields, through innovation, development, training and services in science and technology. (Inspired by the constitutive act of CeNAT).

1. PRIAS

We are a Geomatics laboratory with an emphasis on Earth Observation. We are a national liaison for scientific airborne missions. Using Earth Observation techniques, the PRIAS Laboratory carries out environmental and cartographic studies in order to generate relevant information for decision-makers and creators of national and international public policies.

The applicability of Earth Observations is so broad that it can be used in a wide variety of fields. Therefore, some success stories corresponding to paid research services that the PRIAS Laboratory can perform are presented.

ArcGIS Introductory - Basic

This course introduces Geographic Information Systems (GIS) and Remote Sensing (TD). It is designed to provide the foundation needed to work with ArcGIS, including:

Familiarization with the interface and configuration of projects. Connection to folders and management of file properties. Display, manipulation, and combination of raster bands.

Management of projections and coordinate systems. Geospatial data export. Through hands-on exercises, participants will gain foundational skills in managing geographic information and developing basic projects with ArcGIS

Price for a group of 20 people: ₡2.610.997

3 hours

AI

Virtual Research Environments (VRE)

Mechanical engineering, equipment.

Agisoft Metashape Basic

This course introduces participants to the use of Agisoft Metashape, a software specialized in photogrammetry. Throughout the course, you will learn how to: Familiarize yourself with the basic interface and tools. Import images and manage the entire workflow. Perform image alignment and add control points to improve accuracy. Generate and classify dense point clouds. Create high-quality orthomosaics from the processed data. With a hands-on approach, the course will give you the skills needed to carry out 3D mapping and modelling projects.

Price for a group of 20 people: ₡3.574.383

8 hours

Virtual Research Environments (VRE)

Mechanical engineering; metals, minerals and forest-based industries.

Google Earth Engine Basic

This introductory course aims to teach participants the fundamentals of geospatial data analysis and processing using the Google Earth Engine platform. Throughout the course, you will learn how to:

Visualize and explore satellite and geographic data in a cloud environment.

Handle large volumes of geospatial data efficiently.

Perform basic analysis using practical and technical tools.

The course combines theory and practical exercises

Price for a group of 20 people: ₡2.342.526

4 hours

AI

Virtual Research Environments (VRE)

Mechanical engineering; metals, minerals and forest-based industries.

2. CENIBiot

CENIBiot is a laboratory of the National Center for High Technology (CeNAT-CONARE) that works on biotechnological scaling, with the purpose of promoting the development of biotechnology in the region. It is equipped with state-of-the-art facilities, which adjust to the modern needs of applied biotechnological research. It has an area of 1,690 m2, which is distributed in the following enclosures: materials reception area, units for: microbial fermentation, bioprocess scaling, plant cell culture, chemistry and fine analysis, genomics, microorganisms laboratory, culture media preparation areas, chromatography, microscopy and balance rooms, gas room, warehouses for glassware and reagents, among others.

The CENIBiot Laboratory promotes accessibility to installed capacity, in three fundamental sectors: academia, government and industry; supporting initiatives that strengthen entrepreneurship, technology transfer and university-business linkage. In addition, it works on the approach and linkage of the different biotechnology managers at the regional level.

Preparation, quantification and characterization of extracts of material of plant origin on a semi-industrial scale

With the extraction plant, extracts can be generated on a semi-industrial scale. The extraction tank has the capacity to process up to 15 kilos of material. The generated extracts can be filtered with the equipment and also concentrated by means of a heating and vacuum system. The volatile organic solvents used are recovered separately. The concentrated extract can be further worked and characterized at laboratory level. Characterization of the extract may include determination of water activity, for example.

$1100 (160 L of extract, includes filtration, concentration, and other operations at the laboratory level), $6700 (600 L of extract, includes concentration, freeze-drying, and characterization at the laboratory level)

30 days

Health, Biotechnology; Chemicals.

Cytotoxicity Assay

Cytotoxicity assay is a technique used to evaluate the impact of a compound, natural extract, or formulation on cell viability. This service makes it possible to determine the toxicity of various substances in specific cell lines, providing crucial information for research in areas such as drug development, biotechnology and environmental toxicology. The assay includes the use of positive and negative controls to ensure the validity of the results, as well as technical and biological replications to improve statistical accuracy. The results are delivered in a detailed format, including graphs and statistical analysis.

$400 per sample

10 days

5G

Virtual Research Environments (VRE)

Health, Biotechnology; Chemicals.

3. CNCA

The CNCA is a research laboratory that is dedicated to the management of complex information and the performance of studies with the highest scientific standards, specializing in advanced computing and scientific computing. The CNCA aspires to provide two pillars of scientific development to the Costa Rican community. In addition to theory and experimentation, simulation and data analysis are the fundamental pieces in the exploration of the frontier of knowledge. To achieve this aspiration, computational hardware and software tools are essential. The work of the members of the CNCA then revolves around the computational cluster and the applications installed in it.

Introduction of Python

This program aims to teach participants about the basic concepts of programming with Python, as well as its application in the development of solutions in the fields of scientific computing and machine learning.

Module I: Introduction to Python Programming

Module II: Scientific Computing with Python

Module III: Machine Learning with Python

₡300.000,00

18 Hours per module

Mechanical engineering; metals, minerals and forest-based industries.

Workshop Introduction to Bioinformatics Processing of Genomic and Metagenomic Data

This course presents an introduction to the bioinformatics processing of biological data from genomic and metagenomic analyses, with which it is intended that participants obtain knowledge in the use of the main bioinformatics tools and the CeNAT supercomputing platform.

Price depends of the number of people

6 days

5G

Virtual Research Environments (VRE)

Biotechnology; Chemicals.

Kabré supercomputer

Storage 300 GB, Execution of: Data Science, Bioinformatics, Simulation, Artificial Intelligence.

$500/semester

6 months.

Biotechnology; Chemicals; Construction sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Mechanical engineering; Pressure equipment and gas appliances; metals, minerals and forest-based industries;

4. Environmental Management

Agromatics, Food Security and Slow Food Program:

Support for producers in terms of product quality, Designation of Origin and strengthening of the production chain.

Price depends on the number of people (Base price US $60/hour + Supplies)

5 days

Agri-food Industrial Ecosystem.

Improvement in the nutritional value of products, safety and fair price.

Price depends on the number of people (Base price US $60/hour + Supplies)

5 days

Agri-food Industrial Ecosystem.

Climate Observatory Programme:

Training on issues of climate perspectives and hydrometeorological phenomena for associations, cooperatives and/or organized groups.

Price depends on the number of people (Base price US $60)

2 hours

minerals and forest-based industries.

Advice on capacity building issues for estimation of climatic and atmospheric variables.

Price depends on the number of people (Base price US $60)

1 hour

minerals and forest-based industries.

Short- and medium-term atmospheric and temporal projections.

Price depends on the number of people (Base price US $60)

1 hour

minerals and forest-based industries.

5. LANOTEC

The National Nanotechnology Laboratory (LANOTEC) is dedicated to the development of innovative technologies that improve products, processes and services in the productive sector. LANOTEC has a team of experts and equipment specialized in spectroscopic techniques, microscopic, thermal analysis and mechanical, among others, for the physicochemical and biological characterization of materials. This allows us to provide specialized and personalized services according to the needs of the national productive sector.

Thermal and mechanical analysis

• Differential scanning calorimeter: US$150/sample/I cycle: heating/cooling. US$ 75 II additional cycle.

• Thermogravimetric analyzer: US$180/sample for standard 2h run.

• Isothermal calorimeter-titrator: US$ Customized according to customer's requirements.

Spectroscopy

• Ultraviolet visible spectroscope: -US$100 simple determination of absorbance at a given wavelength in triplicate.

• Fourier transform infrared spectroscope (FT-IR): -US$120 per sample for identification -US$150 per sample for quantification.

Microscopies

• Scanning Electron Microscope (SEM) with energy-scattered X-ray fluorescence (EDS) detector: US$120/sample uncoated.

• Transmission Electron Microscope (TEM) with Scattered Energy X-ray Fluorescence (EDS) detector: US$120/sample

• Atomic Force Microscope (AFM): US$200/biological sample US$150/non-biological sample.

Chromatography

• Liquid chromatograph with diode array detector and refractive index: US$ Customized according to customer requirements.

• Gas chromatograph with flame ionization detector: US$ Customized according to customer's requirements.

Others

- Dynamic Light Scattering (DLS) nanoparticle analyzer: US$120/sample/temperature.
- Moisture analyzer by Karl Fisher: US$100/sample.
- Surface tension: US$100/sample.
- Viscosity: US$120/sample/temperature.

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

Funded by the European Union

GUAMÁ SCIENCE, TECHNOLOGY AND SUSTAINABLE DEVELOPMENT FOUNDATION

Founded in 2009 by a multidisciplinary academic group, the Guamá Research Foundation Park, is a non-profit private organization committed to advancing innovation, technology, and sustainable development in the Amazon region. Based in Pará, the Foundation plays a pivotal role in driving scientific research, fostering entrepreneurship, and developing the regional ecosystem.

Key Initiatives:

- **Guamá Science and Technology Park**: As the management body of this state-of-the-art park, the Foundation creates a dynamic environment for research, development, and innovation, bringing together academic institutions, startups, and companies to collaborate on technology-driven solutions;
- **StartUP Pará**: This funding program is designed to support knowledge-based and innovation-driven startups in the region, providing financial resources and expertise to accelerate their growth and integration into the global economy;
- **Tapajós Innovation Center**: Located in the city of Santarém, the Tapajós Innovation Center is a collaborative project with the local Commercial Association, aimed at promoting technological innovation and entrepreneurship in the western part of the state.

Strategic Partnerships:

- **State Bureau for Science and Technology / Government of Pará**: The Foundation maintains a strong connection with state authorities, contributing to the development of science, technology, and innovation policies that align with local needs;
- **Federal Government**: The Foundation is also a key partner in the **PEIEX** (Brazilian Exporting Qualification Program) in the states of Pará and Amapá, helping local businesses qualify for international exports;

International Collaboration:

The Guamá Foundation is one of the select organizations participating in the **SPIDER Twinning Programme**. This initiative connects key actors from the European Union (EU) and Latin America and the Caribbean (LAC) ecosystems, fostering networking, the sharing of best practices, joint action plans, and exploring opportunities around the **BELLA**infrastructure. The Foundation's service portfolio was curated under this framework, hosted on SPIDER's online platforms, and promoted across its dissemination channels.

With its strategic initiatives, international partnerships, and collaborations, the Guamá Foundation is driving sustainable innovation and economic growth in the Amazon region.

Service Portfolio

1. LASSE– Embedded Sensors and Systems Laboratory

A research and development lab focused on creating technological solutions involving the design and construction of electronic equipments, combining customized hardware and software into innovative embedded systems.

Innovative Projects: CELCOM (Community Cellular Telephony)
CELCOM is a groundbreaking initiative designed to bridge communication gaps in underserved communities. The project enables individuals in shared spaces to interact efficiently, overcoming small but critical distance barriers that often prevent timely information exchange.

Service Details:

Price: Customizable;

Duration: According to the project or service;

Technology: 5G, Cloud, Embedded systems;

Target Sectors:

- Proximity and social economy ecosystem;
- Agri-food Industrial Ecosystem;
- Electrical and Electronic Engineering Industries (EEI);
- Automotive industry;
- Postal service (Logistics);

Keywords: 4G and 5G networks, smart cities, embedded systems, low-power devices, appropriate technology, mobile networks, digital inclusion, sustainable tech devices;

Contact: bonifacio.sena@fundacaoguama.org.br

For collaboration inquiries:celcom@lasse-lab.org/sec.exec@fundacaoguama.org.br

Service Portfolio

2- CEAMAZON Amazon Center of Excellence in Energy Efficiency

Research hub dedicated to advancing sustainable energy solutions through innovation, technology development, and multidisciplinary research in energy efficiency.

Core Focus:

- Energy efficiency optimization;
- Renewable energy integration;
- Smart grid technologies;
- Smart Cities Technologies;

Key Projects:

- Ubiratan Cluster: High-performance computing for energy research;
- SIMA: Multimodal smart mobility system (electric buses/boats + solar infrastructure);

Services Offered:

- Energy audits & performance assessments;
- Custom software/hardware solutions;
- Cloud Computing;
- Technology transfer programs;

Service Details:

Price: Customizable;

Duration: According to the project or service;

Technology: Cloud Computing | IoT | Smart Grids I 5G

Target Sectors:

- Energy & Utilities
- Transportation
- Construction
- Public Infrastructure

Keywords: Energy efficiency, smart grids, renewable energy, HPC, electric mobility, sustainable Amazon, cloud computing, IoT solutions, green buildings, energy policy

For collaboration inquiries:contact@ceamazon.org/sec.exec@fundacaoguama.org.br

Service Portfolio

3- LEAT High and Extra-High Voltage Research Lab

LEAT serves as a cutting-edge facility for Latin America's energy sector (generation, transmission, and distribution) and electrical equipment manufacturers, offering comprehensive high-voltage electrical testing under both industrial frequency and impulse conditions.

Key Services:

- Lightning impulse withstand tests (1.2/50 µs wave) up to 2400 kV (dry/rain conditions)
- AC voltage tests up to 800 kV for overhead line insulators (>1kV porcelain/glass)
- Surge arrester testing (8/20 µs wave, leakage current, residual voltage)
- Partial discharge measurements
- Radio interference voltage (RIV) testing

Certifications:

- Measurement system traceable to PTB (Germany)
- Compliant with ABNT NBR ISO/IEC 17025:2017
- Energy Standards Creditation

Service Details:

Price: Customizable;

Duration: According to the project or service;

Technology: Smart Grids | High-Voltage Engineering I Smart Cities;

Target Sectors:

- Energy Transmission & Distribution;
- Electrical Equipment Manufacturing;
- Power Infrastructure;

Keywords: High-voltage testing, impulse generators, power grid reliability, surge arresters, partial discharge, electrical insulation, smart grids, metrology, lightning protection, energy infrastructure, Energy standards

For testing inquiries: contact@leat.ufpa.br / sec.exec@fundacaoguama.org.br

SPIDER

EU-LAC Digital Partnership

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the HADEA. Neither the European Union nor the granting authority can be held responsible for them.

Funded by the European Union

FUNDECYT-PCTEX: European digital Innovation Hub (EDIH) Tech4efficiency

The Foundation FUNDECYT Scientific and Technological Park of Extremadura is a non profit organisation based in Extremadura (Spain). Fundecyt's aim is to contribute to the social and economic exploitation of science and technology in the region, supporting and promoting scientific and technological development and a better use of research and innovation outcomes, and encourage the participation of civil society mobilizing its resources.

Some examples of FUNDECYT's work are:

- Supporting Regional Government in the design of the Smart Specialization Strategy in Extremadura, the Regional Digital Agenda and other European matters such as Health and Well Ageing.
- Supporting Regional Government in the implementation of the Office for Innovation (O4i), establishing bridges between Science, Technology and Innovation of Extremadura (SECTI) and business.
- At international level, the Foundation promotes knowledge transfer to third countries, collaborating through tenders and international cooperation projects in strategies of development of science and technology in Latin America.

EDIH Tech4efficiency (Tech4E) is a joint competence centre constituted by a cohesive group of 11 entities, integrated by competence centres, business support organizations and innovation facilitators fully connected at the EU level to foster fruitful interactions with external SMEs to lead the digitalization and business journey of companies and services to the society in the above described areas. Tech4E EDIH aims is entirely aligned with the transformation of a greener and more digitalized Europe with the use of Cybersecurity, Artificial Intelligence and High-performance computing. In the project time framework, multiple services for EU SMEs will be provided in the types of Testing and experiments, Training services, Financing search support and Innovation ecosystems and networks.Tech4effciency is coordinated by FUNDECYT-PCTEX

EDIH Tech4Effciency is one of the select organisations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER's online platforms and promoted across its dissemination channels.

1. SERVICE ONE – Test before invest

The Service Test Before Invest service provides access to specialized expertise in digital transformation, as well as data resources and facilities for testing and experimentation. It offers a range of activities conducted within physical, digital, and living labs, including proof-of-concept development, pre-engineering studies, evaluations, and short-term pilot projects. These activities aim to showcase the value and potential of new products, methods, and technologies with advanced digital features, helping companies and public sector organizations assess their impact and make well-informed investment decisions.

EXAMPLE: Jaippy experience: A Success Story in Hotel Digitalisation

Jaippy is a tool for hotels that leverages data to focus on key guest information, revolutionizing the guest experience and operational efficiency. This advanced system captures a wide range of data, such as guest preferences, behaviors, and feedback. By utilizing this tool, hotels can personalize services to meet the unique needs of each guest, enhancing their overall stay.
Designed to visually and narratively communicate the insights from analyzed data, Jaippy facilitates agile decision-making. By measuring results in real time, it transforms the hotel into a node of innovation, where the guest experience becomes a valuable asset. Jaippy is also designed to improve business results through the differentiation of services targeted to high-profitability customers. The tool allows visualization of the Jaippy Index, which emulates key hotel industry indexes, including the Booking.com index, offering insights into customer feedback.
From the early stages of Jaippy's development, the EDIH has been supporting Ux Hoteles. To continue enhancing Jaippy, the EDIH is working with Ux Hoteles to evaluate and improve its technological capabilities through the implementation of an advanced web scraping system and technical team training. The goal is to build a system that collects relevant data from the hotel and climate sectors, creating a structured dataset for a proof of concept (PoC). This data will be used for market analysis and predictive modeling. Websites and APIs that provide the necessary information will also be identified. The team will be trained in web scraping and dataset management, with the goal of incorporating this data into dashboards. Additionally, they will develop skills in creating interactive PowerBI dashboards, effectively integrating and visualizing data from multiple sources.

Lessons learned

EDIH's service portfolio proved highly effective, largely due to the expertise and value added by EDIH's technical staff who managed this case. The technical staff brought a wealth of knowledge and experience to the table, enabling them to navigate complex challenges and offer tailored solutions.

An in-depth knowledge of the business ecosystem is essential for delivering impactful services. Understanding the nuances of the industry, the competitive landscape, and the unique challenges faced by businesses within the ecosystem allows EDIHs to craft strategies that are both innovative and practical for the customer. This comprehensive understanding ensures that the services provided are not only relevant but also highly effective in driving growth and development.

Additionally, leveraging other ecosystem instruments, such as a regional startup accelerator and its mentors, further enhanced the support provided. The startup accelerator can offer a robust platform for nurturing new businesses, providing them with the resources, guidance, and networks needed to thrive, while the mentors, with their extensive experience and insights, can play a crucial role in advising startups, helping them to avoid common pitfalls and capitalise on opportunities. This collaborative

approach is fundamental to ensure that the support provided is holistic, addressing various aspects of business development and innovation.

Our support has enabled the company not only to improve its technological solution but also to access funding sources for the development of a more advanced prototype, which will allow them to expand their tool on a much larger scale. We recommend that other EDIHs adopt a continuous support approach, combining technical advice with access to funding. This approach not only strengthens companies in their local growth but also facilitates their expansion into new markets, helping SMEs to scale innovative solutions with a significant impact on their sector.

This service is delivered in full remote format. You can see more here https://european-digital-innovation-hubs.ec.europa.eu/knowledge-hub/success-stories/jaippy-experience-success-story-hotel-digitalisation#solutions

For inquires about this service, please contact anto.recio@fundecyt-pctex.es

20.000€

5 months

Please **bold** one or more of the digitalization technologies targeted/involved in the delivery of this service and delete the others:

AI	5G
Cloud Computing	Cybersecurity
Blockchain	**Virtual Research Environments (VRE)**

Please add the sectors targeted by this service.

Hotel, tourism, hospitality, restaurant sector

Keywords Business Strategy, Market Readiness, Training,proof of concept,open data, linked data, market analysis, predictive modeling, Bussines intelligence, web scraping

2. SERVICE TWO – Advanced Trainings

Adopting digital technologies requires skill development across all levels of an organization. It's crucial to identify the value digital solutions can bring to the company's operations while understanding current and future technical possibilities. Employees must also develop the competencies needed to effectively use these digital tools in their roles.

Tech4efficiency EDIH offers skills development and consulting services, including online short courses and customizable informational sessions designed to meet the specific needs of organizations.

You can see our training plattform https://www.dih4e.eu/trainings/

EXAMPLE: Triangular Series. The ultimate collaboration programme on Digital Skills and beyond

Triangular Series is a **collaboration scheme being piloted by three EDIHs** in Europe, CIDIHUB in the Canary Islands, ARAGON EDIH in Aragon and T4E in Extremadura. It is an experimental response to the main collaboration challenges introduced before. It has been designated by EDIHs focused on complementary technologies and with vast experience in different industries. In this respect, the initial situation is conducive since the complementarity is evident and provokes a more productive response for the participant EDIHs.

We together designed and detailed the **common protocol and boosted an initial service together to validate the common approach.** Additionally, we designed a joint and shared communication plan, to maximize the results of both the initial service and the common protocol.

The initial service to validate the approach was **a collaborative and shared training programme**. The programme itself was conceived around two main pillars:

1. Digital Skills for SMEs
2. Industry-specific digital tools and methodologies.

Results and Benefits

The main result of this collaboration initiative is the detailed collaboration scheme itself together with the exponential growth in the number of services provided by each participating EDIH, given that TRIANGULAR SERIES precisely seeks to increase the number of SMEs that receive "test before invest" services. On top of that, we expect that this collaboration programme will also impact in the number of Digital Maturity Assessments that the three EDIHs will be doing in the next 12 months.

Additionally, TRIANGULAR SERIES also proposes a joint communication programme together with the validation action focused on a common digital skills programme that is shown below.

As the validation action is centred on two main pillars: (1) Digital Skills for SMEs and (2) Industry-specific digital tools and methodologies, the details of the programme are presented below:

Digital Skills for SMEs	**Organisation**
1. **Cibersecurity** oriented to SMEs	CIDIHUB
2. **Artificial Intelligence-Cognitive systems**: principles, services and practical use for SMEs	EDIH ARAGON
3. **Quantum service oriented computing** for the benefit of SMEs	T4E DIH
4. **High performance computing** to support the design of solutions to meet the requirements of SMEs	CIDIHUB
5. **AI language processing**; principles and success stories of SMEs	EDIH ARAGON
6. **Industrial Robotic Process Automation (RPA)** for SMEs	T4E DIH

Industry-specific digital tools and methodologies.	**Organisation**
1. Tourism Industry. Digital tools and methodologies for SMEs	CIDIHUB
2. Health Industry. Digital tools and methodologies for SMEs	EDIH ARAGON
3. Smart Agrofood Industry. Digital tools and methodologies for SMEs	T4E DIH
4. Creative Industries. Digital tools and methodologies for SMEs	CIDIHUB
5. Transport Industry. Digital tools and methodologies for SMEs	EDIH ARAGON
6. Renewable Energies Industry. Digital tools and methodologies for SMEs	T4E DIH

This service is delivered in full remote.You can see more info https://european-digital-innovation-hubs.ec.europa.eu/knowledge-hub/success-stories/triangular-series-ultimate-collaboration-programme-digital-skills-and

For inquires about this service, please anto.recio@fundecyt-pctex.es

10.000

4 months

AI

5G

Cloud Computing

Cybersecurity

Blockchain

Virtual Research Environments (VRE)

Please add the sectors targeted by this service.

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Training, Webinar. Cybersecurity, IA, IOT, Cloud, Industry, Agritech, digital tools, Quamtum, Gognitive systems, renewable energies

3. SERVICE THREE – Ecosystem connection

It consists of facilitating the transfer of experience and know-how between regions, in particular by linking SMEs established in one region with HIEIs established in other regions that are better placed to provide the relevant services, encouraging the exchange of skills and knowledge, joint initiatives and good practices.

EXAMPLE: Promote interregional collaboration through matchmaking

The **matchmaking event organised by EDIHs IRIS and Tech4efficiency** aimed to address the technological challenges of SMEs in both regions through a structured, collaborative approach. This process started with a meeting between the EDIHs to explore potential collaboration, focusing on connecting their respective business ecosystems. Each EDIH then identified SMEs with specific technology challenges and sought solution providers for the SMEs with challenges presented by the other EDIH.

The event was conducted as an online webinar, following this agenda:

11:00 - 11:15: Welcome and introductions by both EDIHs.

11:15 - 11:45: Presentation round with SMEs from Extremadura and Navarra, where they presented their technological challenges in brief pitches.

11:45 - 12:30: Bilateral meetings in parallel sessions, pairing SMEs with solution providers to discuss potential solutions.

12:30 - 13:00: Discussion of next steps and follow-up actions.

The format **combined brief presentations with focused bilateral meeting**s, allowing each SME's challenges to be addressed with innovative solutions.

During the bilateral meetings, available funding resources were explored to support the development of proofs of concept and the eventual implementation of the solutions, promoting technological advancement and economic growth in both regions.

After the event, bilateral meetings continued, during which EDIH Tech4efficiency presented the type of public funding that could be requested: the PADIH Program (Financing for Spanish SMEs to obtain the following services through collaborating entities of the EDIH network centers). Additionally, continuous monitoring was carried out throughout the process to ensure that the companies with challenges could apply for testing and experimentation support through the PADIH program.

Results and Benefits

These events **allow SMEs to identify advanced technological solutions**, such as artificial intelligence (AI) for predictive maintenance and IoT connectivity, among others, by collaborating with specialised providers. This direct interaction provides them with access to knowledge and innovative approaches that were not previously available.

Thanks to the public funding available through the PADIH Program, SMEs can mitigate financial risks by covering key costs associated with the research, development, and initial testing of technological solutions. This combination of public and private resources

enables SMEs to implement technologies that optimise operational efficiency, reduce costs, and open new market opportunities. These projects, once implemented, are expected to generate a significant return on investment, strengthening competitiveness and ensuring sustainable long-term growth.

By following this practice, EDIHs can enhance efficiency and productivity within their own networks, facilitating the adoption of advanced technologies by SMEs and promoting regional economic growth.

This service is delivered in full remote, you can see more info here https://european-digital-innovation-hubs.ec.europa.eu/knowledge-hub/success-stories/promote-interregional-collaboration-through-matchmaking

For inquires about this service, please contact anto.recio@fundecyt-pctex.es

Free of charge for SME

Please add the **duration of this service** provision. One year

Please **bold** one or more of the digitalization technologies targeted/involved in the delivery of this service and delete the others:

AI	**5G**
Cloud Computing	**Cybersecurity**
Blockchain	**Virtual Research Environments (VRE)**

Please add the sectors targeted by this service.

Automotive industry; Biotechnology; Chemicals; Construction sector; Cosmetics; Cultural and Creative Industries; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering; Postal services; Pressure equipment and gas appliances; Proximity and social economy ecosystem; Raw materials; metals, minerals and forest-based industries; Tourism; Toys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Keywords: Quantum, Business Strategy, Market Readiness, Training, Webinar, matchmaking, interregional collaboration,

More service portfolio

Category	Service	Sub-services	Nº of services	Price in €
Test before Invest	Strategic Support to Research Development and Innovation RDI	High Performance Scientific Computing	5	3000
		Computing accelerators	5	2500
		Big Data Services	5	3000
		Genetic analysis services	3	4500
		Monitoring and modelling of the carbonization process in industrial charcoal kilns	6	5000
		Cork production estimation service based on digital cartography	4	3000
		Oak decline disease detection and mapping program	6	4000
		Technical support for the validation e integration of technologies for the digitisation of irrigation and crop water status	6	6000
		Technical support for the validation and integration of technologies for the digitisation of fertigation and crop nutritional status	6	6000
		Technical audit of efficient irrigation management in horticultural crops (water footprint).	6	2500
		Decision support systems for efficient irrigation and fertilisation management programmes in crops.	6	2500
	Contract research	Consulting, technical support and other services	25	1500
	Technical support on scale up	Customised scaling plan	25	2800
	Testing and validation	Cloud infrastructure: server hosting	5	3000
		Cloud infrastructure: server hosting (cloud computing)	4	1200
		Maths Modelling	3	12000
		Machine learning	3	12000
		Robotics and Artificial Vision	3	12000

		Design and assembly of electronic prototypes	3	12000
		Electronic Technology	3	12000
	Provision of Infrastructure	Software: libraries, operating Systems and technical computing	4	1200
	Client referrals & matching: EEN services	From EENs to regional & inter-regional EDIHs to increase SME outreach of the hubs	30	900
		From EDIHs to EENs for specialised EEN services (e.g., internationalisation, innovation)	20	1200
	Digital Assessment: EEN service	Joint digital assessments	15	2000
		Joint digital action plan	15	3000
Support to find investment	Strategic and business development	Assistance in business plan development	45	900
		Design of new products and services	45	900
	Support Facilities/ incubation and accelerator support	Pilot acceleration programme	3	12000
		Incubation and advanced services	10	2000
	Funding lifecycle management support	Investment readiness	30	1500
	Legal support	Technology law and Intellectual property	20	750
Innovation ecosystem & Networking	Ecosystem scouting engagement and management	Joint events through EEN	50	400
	Ecosystem Coordination for projects	Connection with strategic partners	10	1500
Skills and Training	Trainings	Advanced courses; Development Bootcamps; In-house training	9	15000
	Talent and skills matchmaking	Recruitment and matchmaking services	100	200
	Awareness raising	Community building	10	1500

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

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Funded by the European Union

TECNOSINOS

Tecnosinos is an innovation-promoting environment anchored by UNISINOS, one of the best universities in Brazil. Its objective is to foster innovation, research, and the development of technologies, primarily in the field of information and communication technology. It seeks to integrate companies, research centers, and educational institutions, promoting collaboration among them to generate new solutions and drive regional development.
In addition, it offers infrastructure and support services in areas such as fundraising, intellectual property, technology transfer, internationalization, and contact with potential investors. It also provides training, mentoring, networking, and the necessary support for the development of projects for startups and innovative companies.
Through its Technology-Based Incubator, it provides a conducive environment for the creation and acceleration of new businesses, focusing on promoting innovation and technology. Taking on the role of a hub in intelligent hardware platforms for different industries, such as metalworking, healthcare, and oil and gas, it encompasses areas such as data analysis, smart automation, and sensor-based industrial solutions. This initiative not only contributes to the growth of startups and innovative companies but also strengthens their capacity to adapt to market demands and technological evolution.

TECNOSINOS is one of the select organisations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.
This service portfolio was curated under the framework of the programme, to be hosted in SPIDER's online platforms and promoted across its dissemination channels.

1. DEVELOPMENT OF IOT PRODUCTS AND SOLUTIONS

We provide tailored services for the development of Internet of Things (IoT) products and solutions. Our approach encompasses all stages of the product lifecycle, from conception to implementation and ongoing maintenance.

Service Phases:

Conception and Planning:
- Analysis of client needs and definition of project objectives.
- Drafting an initial prototype and creating a development roadmap.

Development and Prototyping:
- Creation of the necessary hardware and software, including sensors, connectivity, and user interface.
- Functionality testing and iteration based on feedback received.

Implementation and Integration:
- Installation and configuration of devices in the field.
- Integration with data management platforms and existing technological solutions.

Maintenance and Support:
- Continuous monitoring and maintenance of IoT devices.
- Software updates and improvements based on usage data and user feedback.

Our goal is to deliver innovative solutions that enhance efficiency and connectivity, addressing the specific demands of each client in the dynamic IoT landscape.

This service is delivered in full remote/hybrid/in-location format.

For inquires about this service, please contact **unitec@unisinos.br**

The price is available upon request and varies according to the characteristics of the developed solution or product.

The duration of the service is available upon request and varies according to the characteristics of the developed solution or product.

Cloud Computing
Cybersecurity
AI

Automotive Industry; Biotechnology; Construction Sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Food & Beverage; Chemical Industry; Maritime Industries; Mechanical Engineering; Tourism; Textiles Ecosystem – TCLF (Textiles, Clothing, Leather, and Footwear) Industries; Healthcare; Metalworking (Metalomecânica); Oil & Gas.

Keywords: Sensors, Connectivity, Cloud Computing, Data Analytics, Machine Learning, Artificial Intelligence, Edge Computing, Cybersecurity, Prototyping, Implementation

2. DATA-DRIVEN CULTURE

A data-driven culture refers to an organizational environment where decisions are made based on data analysis and interpretation rather than intuition or personal experience. Our service in fostering a data-driven culture includes the following phases:

- **Assessment**: We conduct a thorough evaluation of your current data capabilities, including data management, analytics tools, and the overall decision-making process within your organization.
- **Strategy Development**: We help you formulate a comprehensive strategy to integrate data into your business processes. This involves defining key performance indicators (KPIs), data governance policies, and identifying the relevant data sources.
- **Implementation Support**: Our team assists in the implementation of analytics tools and platforms, ensuring that data collection processes are efficient and standardized across departments.
- **Training and Development**: We offer tailored training programs to upskill your staff on data literacy and analytics use, empowering them to leverage data insights in their everyday decision-making.
- **Continuous Improvement**: We establish a feedback loop to continuously enhance your data strategy, incorporating new tools and methodologies as they become available.

By promoting a data-driven culture, organizations can improve efficiency, enhance customer experiences, and drive strategic growth through informed decision-making.
This service is delivered in full remote/hybrid/in-location format.
For inquires about this service, please contact **unitec@unisinos.br**

The pricing for our data-driven culture services varies based on the specific needs and requirements of each organization. You will receive a tailored proposal after the initial assessment phase.

- **Initial Assessment**: Free of charge
- **Full-Service Implementation**: Pricing starts at €5000, with costs depending on the scope and scale of the project.
- **Training Programs**: Pricing begins at €2000 based on the number of participants and customization needed.

We discuss pricing details further following the preliminary diagnosis to ensure we model the project to meet your unique goals and requirements.

The duration of our service provision varies based on the specific phases and the organization's requirements. Here's a general outline:

- **Initial Assessment**: 2-4 hours
- **Strategy Development**: 1-2 weeks, depending on complexity

- **Implementation Support**: 2-4 weeks, tailored to the scope of the project
- **Training Programs**: Typically 1-3 sessions, each lasting 2-4 hours
- **Continuous Improvement**: Ongoing, with regular check-ins every 3-6 months

These timeframes can be adjusted based on your organization's needs and the specific services selected.

AI
Cloud Computing

Automotive Industry; Biotechnology; Construction Sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Food & Beverage; Chemical Industry; Maritime Industries; Mechanical Engineering; Tourism; Textiles Ecosystem – TCLF (Textiles, Clothing, Leather, and Footwear) Industries; Healthcare; Metalworking (Metalomecânica); Oil & Gas.

Keywords: Data Analytics, Artificial Intelligence, Cloud Computing, Decision-Making, Training, Strategy Development, Implementation, Continuous Improvement, Data Governance, Data Literacy.

3. ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING SOLUTIONS

We provide comprehensive services in artificial intelligence (AI) and machine learning (ML), developing customized solutions tailored to meet the specific needs of each client. Our goals include improving operational efficiency, driving product innovation, and enhancing customer satisfaction.

Our service phases include:

- **Initial Consultation:** We analyze the client's needs and identify opportunities for AI and ML applications.
- **Model Development:** We create and train models based on the client's specific data using advanced machine learning techniques.
- **Implementation and Integration:** We implement the developed solutions and ensure their integration with the client's existing systems.
- **Testing and Validation:** We conduct rigorous testing to validate the effectiveness of the models and ensure their accuracy.
- **Monitoring and Maintenance:** We provide ongoing support to monitor the solution's performance and make updates or adjustments as necessary.

Our services are designed to promote digital transformation, enabling companies across all sectors to maximize the value of their data through artificial intelligence.
This service is delivered in full remote/hybrid/in-location format.
For inquires about this service, please contact **unitec@unisinos.br**

Our AI and Machine Learning solutions are tailored to fit the specific needs of each client, and therefore, pricing may vary based on the scope and complexity of the project.

For general reference, our pricing structure typically ranges from:

€10,000 to €50,000 depending on the project's requirements and duration.

If you would like a more detailed quote or have specific project needs in mind, please feel free to contact us for a custom proposal.

Free of charge initial consultation available to discuss your project's needs.

The duration of our AI and Machine Learning service provision typically varies based on the project's complexity and scope. Here's a general estimate:

Initial Consultation: 1-2 hours
Model Development: 4-12 weeks, depending on data availability and complexity
Implementation and Integration: 2-4 weeks

Testing and Validation: 1-3 weeks
Monitoring and Maintenance: Ongoing support, typically requiring 1-2 hours per week

Overall, from consultation to full implementation, projects may take approximately **2 to 6 months**. For a more precise timeline, we recommend discussing your specific needs during the initial consultation.

AI

Automotive Industry; Biotechnology; Construction Sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Food & Beverage; Chemical Industry; Maritime Industries; Mechanical Engineering; Tourism; Textiles Ecosystem – TCLF (Textiles, Clothing, Leather, and Footwear) Industries; Healthcare; Metalworking (Metalomecânica); Oil & Gas.

Keywords: Artificial Intelligence, Machine Learning, Data Analysis, Model Development, Implementation, Integration, Consulting, Testing, Digital Transformation, Predictive Analytics.

Service Portfolio

Grant Agreement Number: 101135861
Project Acronym: SPIDER
Funding Scheme: Coordination and Support Action

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Funded by
the European Union

TICE.PT

The National Portuguese ICT Cluster - TICE.PT was created in 2008, with headquarters in Aveiro. It engages and mobilizes relevant actors throughout Portugal, and in particular in the regions of Braga, Porto, Coimbra and Lisbon, covering the entire value chain in the area of ICT. The concertation platform TICE.PT ensures and promotes the interfaces between the academic world, represented by universities and institutes R&D, the business world, represented by the affiliates and also through networks, in particular of SMEs, represented by their associations.

TICE.PT leads the Digital Innovation Hub (DIH) CONNECT5 which is part of the European Network of DIHs (EDIH Network). DIH CONNECT5 provides Digital Transformation acceleration services to SMEs and entities of the Public Administration.

TICE.PT is one of the select organizations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER's online platforms and promoted across its dissemination channels.

1. SERVICE ONE – Mobility "Cooperative Intelligent Transport Systems"

This short introductory course will show the fundamentals of Cooperative Intelligent Transport Systems (C-ITS) and their contribution to road mobility. Cooperative Intelligent Transport Systems encompass technologies and standards for interconnecting vehicles with each other (V2V) and with roadside infrastructure (V2X). This concept, originating in the automobile industry, is primarily intended to increase road safety. However, with the same technologies and standards, it is possible to implement a series of functions in the field of mobility, namely prioritization of emergency vehicles and public transport, better information for motorists and autonomous vehicles, etc.

The training will be structured in the following modules:

- Main technologies and functions of C-ITS
- Latest developments in C-ITS and distinction between day 1 and day 1.5 services
- Examples of good practices for using C-ITS

This service is delivered in full remote format.

For inquiries about this service, please contact *geral@tice.pt*

Free of charge

4 hours

AI

Cloud Computing

5G

Cybersecurity

Industrial sectors targeted by this service:

Automotive industry; Public Emergency; Public Transport; ..

Keywords: V2V, V2X, Automotive, AI Claud Computing, Cybersecurity.

2. SERVICE TWO – 5G Private Networks

This introductory course on 5G private networks will explore the technology's transformative potential for businesses and industries. Participants will gain a clear understanding of what 5G private networks are, how they differ from public 5G, and their unique benefits, including enhanced security, ultra-low latency, and customization. We'll examine practical applications across sectors such as manufacturing, healthcare, logistics, and smart cities, where 5G enables advanced automation, IoT integration, and real-time data processing. Through case studies and interactive discussions, attendees will see how private 5G networks support business agility, improve operational efficiency, and open new avenues for innovation. The session will also cover key challenges, such as deployment costs and security considerations, equipping participants with insights to assess the feasibility of adopting 5G private networks for their organizations.

This service is delivered in full remote or in-location format.

For inquiries about this service, please contact *geral@tice.pt*

Free of charge

4 hours

Cloud Computing

5G

Cybersecurity

Industrial sectors targeted by this service:

Manufacturing, healthcare, logistics, and smart cities, ..

Keywords: 5G, Private Network, Cloud Computing, Cybersecurity, Real-time data processing.

3. SERVICE THREE – Cybersecurity and NIST 2.0 for SMEs

This introductory course addresses the essential understanding of cybersecurity principles, emphasizing the role of the NIST 2.0 framework in securing digital processes. As SMEs increasingly adopt digital technologies, they face rising cybersecurity risks. This course will explore how the NIST 2.0 framework, widely recognized for its adaptability, can support SMEs in managing these risks, enabling a safer and more resilient digital transformation.

The training will be structured in the following modules:

1. Introduction to Cybersecurity (30 mins): Basics of cybersecurity.
2. Understanding NIST 2.0 (60 mins): Framework overview, five core functions.
3. Applying NIST 2.0 for SMEs (90 mins): Practical guidance on implementing the framework, building resilience.
4. Case Studies and Discussion (60 mins): Real-life scenarios and interactive Q&A

This service is delivered in full remote format.

For inquiries about this service, please contact *geral@tice.pt*

Free of charge

4 hours

Cybersecurity

Industrial sectors targeted by this service:

All sectors

Keywords: Cybersecurity for SMEs, NIST 2.0 Framework, Digital Transformation Security, Risk Management.

Service Portfolio

Grant Agreement Number: 101135861
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Funded by
the European Union

European Digital Innovation Hub (EDIH) Rheinland

The EDIH Rheinland is one of over 150 innovation centers and more than 400 project sites selected by the European Union to drive the digital transformation of the European economy. We offer access to skills, knowledge and experience in innovative and future-oriented application research.

The EDIH Rheinland is an association of chairs at RWTH Aachen University, research institutions, non-profit organizations and public administration. Together, we want to actively contribute to the digital transformation by ensuring easy access to research findings and future-relevant technologies. We are mainly located in the border triangle of Germany, Belgium and the Netherlands, but have a wide range till the river Rhein.

The main focus of the EDIH Rheinland is on knowledge transfer. We want to make findings from research and experience with the latest technologies accessible to as many companies and organizations as possible. Our aim is to support small and medium-sized enterprises (SMEs), start-ups and the public sector in particular in the digitalization of processes, services and products.

Our broad range of services includes training, promoting cooperation and networking as well as implementing specific measures to increase the digital maturity of companies. After recording existing processes and technical conditions, the focus is on recommendations for digitizing these processes. The use of artificial intelligence can improve the quality of data analysis and accelerate business processes through high-performance computing. This leads to greater efficiency, cost reductions and positive effects for operations and the environment.

We promote dynamization effects to make the economy from the Rhineland to Limburg and East Belgium more resilient and sustainable. By stimulating innovation, we contribute to long-term structural change in the region. Together, we can clarify uncertainties in planning, reduce inhibitions in implementation and meet the opportunities of digitalization.

EDIH Rheinland is one of the select organisations taking part in the SPIDER Twinning Programme, to connect key actors from the EU and LAC ecosystems to network, share best practices, work on joint action plans and explore opportunities around the BELLA infrastructure.

This service portfolio was curated under the framework of the programme, to be hosted in SPIDER’s online platforms and promoted across its dissemination channels.

1. Concepts for AI in the sensor/quality area

We offer concept / implementation consulting for the introduction of AI in the production environment. In initial discussions, we first determine where problems occur in the production process and how AI could be helpful here. The prerequisites are then analyzed and the next steps are agreed.

The consultation can, but does not have to, consist of the following points:

Objective and Benefit Analysis

Define main objectives; Estimate benefits:

Data Foundation and Infrastructure

Data collection and preparatio ,Provide IT infrastructure:

Selection and Training of AI Models

Identify model types; Create data sets;Model training and validation:

Application and Integration

Real-time analysis; Alarm and feedback system:

Pilot Project and Scaling

Pilot implementation; Scaling

This service is delivered in full hybrid/in-location format.

For inquires about this service, please contact Projektkoordination@edih-rheinland.eu or ole.stocks@wzl-iqs.rwth-aachen.de

Within the EDIH project this service is free of charge. Otherwise the costs can vary between 10.000 and 50.000 €.

8 hours, 10 – 30 sessions

AI **5G**

Cloud Computing

Automotive industry; Biotechnology; Chemicals; Construction sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering;; Pressure equipment and gas appliances; Raw materials; metals, mineToys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

Internet of Production, Predictive Quality, AI, Artificial Intelligence, Quality management, Quality Sensing, Data driven,

2. KI & Machine Learning Basics

This foundational course provides a hands-on introduction to Artificial Intelligence (AI) and Machine Learning (ML) for beginners. Its goal is to build an understanding of concepts, applications, and tools. Participants will learn the basics of ML methods, including supervised and unsupervised learning, and how to use common tools.

Modules cover data preparation, model training and evaluation, as wel as basic ethical and legal aspects. The interactive approach combines theory with practical exercises, such as building a classification model or analyzing datasets.

Key topics include applying ML in real-world projects, such as predictive models, and discussing AI's broader impacts. The course concludes with an overview of current trends and recommendations for further learning opportunities.

The course runs for 2–3 days or can be spread over 8 weekly sessions. Participants receive a certificate upon completion. This course is ideal for managers, SME employees, and professionals seeking an initial understanding of AI and ML.

This service is delivered in usually in in-location format, but remote options might be possible.

For inquires about this service, please contact Projektkoordination@edih-rheinland.eu or ole.stocks@wzl-iqs.rwth-aachen.de

Within the EDIH project this service is free of charge. Otherwise the costs can vary between 3.000 and 5.000 €.

4-8 hours, 3 – 8 sessions

It is possible to add a moderate level course at the end.

AI

Cloud Computing

5G

Virtual Research Environments (VRE)

Automotive industry; Biotechnology; Chemicals; Construction sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering;; Pressure equipment and gas appliances; Raw materials; metals, mineToys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

AI, Artificial Intelligence, KL, Machine Learning, Production, Workshop, Introduction, SME

3. Introduction of LLMs in SMEs

This series of workshops provides small and medium-sized enterprises (SMEs) with a practical introduction to the basics and possible applications of Large Language Models (LLMs). The aim is to identify specific use cases and take the first steps towards implementation.

- Understanding the basics (4h): What are LLMs? How do they work?
- Recognizing potential (4h): Applications in processes such as customer support, marketing or data analysis.
- Data security and ethics (3h): DSGVO-compliant use and ethical aspects.
- Technical implementation (8h): Introduction to tools such as OpenAI or Microsoft Copilot.
- Planning pilot projects (4h): Development of an application plan.

The workshop series can take place over two full days or spread over several weeks. Participants receive handouts and access to supporting resources to continue working independently.

This service is delivered in full hybrid/in-location format.

For inquires about this service, please contact Projektkoordination@edih-rheinland.eu or ole.stocks@wzl-iqs.rwth-aachen.de

Within the EDIH project this service is free of charge. Otherwise the costs can vary between 5.000 and 10.000 €.

4-8 hours, 5 – 10 sessions

It is possible to add a moderate level course at the end.

AI

Cybersecurity

Cloud Computing

Automotive industry; Biotechnology; Chemicals; Construction sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering;; Pressure equipment and gas appliances; Raw materials; metals, mineToys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

AI, Artificial Intelligence, Large language Model, LLM, SME, Short and Medium Seize Companies, Workshop, Introduction, SME

4. Process Analysis in Companies

In this coaching/workshops we identify weaknesses, optimization potentials, and efficiency gains in a company's operations. The procedure may follow these steps:

1. Objective Definition: Specify the processes to analyze, e.g., production or customer service.
2. Data Collection: Gather information via interviews, process documentation, and observations.
3. Process Visualization: Create process models (e.g., flowcharts) to map workflows clearly.
4. Weakness Identification: Detect bottlenecks, redundancies, and unnecessary interfaces.
5. Evaluation: Assess processes using KPIs like time, cost, or quality.
6. Optimization Suggestions: Develop measures for improvement, e.g., automation or restructuring.

Example:
A production process faces long delays. The analysis reveals that insufficient material availability is the cause. Suggestion: Implement AI-driven inventory management.

The analysis concludes with a report outlining identified issues, potentials, and actionable steps.

This service is delivered in full hybrid/in-location format.

For inquires about this service, please contact Projektkoordination@edih-rheinland.eu or ole.stocks@wzl-iqs.rwth-aachen.de

Within the EDIH project this service is free of charge. Otherwise the costs can vary between 10.000 and 30.000 €.

8 hours, 8 – 10 sessions + additional work

It is possible to add a moderate level course at the end.

AI

Cloud Computing

Cybersecurity

5G

Automotive industry; Biotechnology; Chemicals; Construction sector; Electrical and Electronic Engineering Industries (EEI); Agri-food Industrial Ecosystem; Maritime Industries; Mechanical engineering;; Pressure equipment and gas appliances; Raw materials; metals, mineToys; Textiles Ecosystem – TCLF (Textiles, clothing, leather and footwear) industries.

AI, Artificial Intelligence, Production, Workshop, Introduction, SME, Process, Analysis, Efficiency