Co-funded by the European Union

Supporting recovery and business transformation of lighting & furniture SMEs for the Europe Industry of Tomorrow

POOL OF TECHNOLOGY UPTAKE FACILITATORS

2° Open Call for Business Digital Transformation Projects

V 16.01.2024

Grant Agreement n° 101074564 — SILEO — SMP-COSME-2021-CLUSTER

HISTORY OF CHANGES		
Version	**Publication Date**	**Change**
V01	16.01.2024	Initial version (in total 49 technology providers)

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SILEO Pool of Technology Uptake Facilitators

During the project course, the SILEO project (GA 101074564) envisaged 5 typologies of Financial Support to Third Parties - FSTP to be activated through open calls for cascade funding.

In particular, under two typologies of Open Calls - **Business Digital Transformation Projects** and **Advanced Technology Uptake Projects** – lighting and furniture SMEs (beneficiaries of the SILEO funding opportunities) shall collaborate with experts on the field of advanced technologies, digital and green solutions to implement their projects (consultancy services).

For this purpose, the SILEO Consortium launched a specific **CALL FOR EXPRESSION OF INTEREST** (https://elcacluster.eu/our-projects/sileo/#ExpressionOfInterest) **to identify and select technology providers and digitization experts** who will assist lighting and furniture SMEs in implementing the business digital transformation projects and/or advanced technology uptake projects.

The interested organisations - who comply with the eligibility criteria indicated in the ***EOI Guidance for Applicants*** - have to submit the ***Expression of Interest FORM*** to the email address of one of the SILEO project partners – contact points for the specific country of reference, within the deadline (08.03.2024).

The received *Expression of Interest applications* will be evaluated by the SILEO Partners assessing the expertise, competence knowledge and technology transfer capacity in the target domain of advanced technologies uptake and digitalisation processes for SMEs.

Applicants who meet these criteria will be included in the list of accredited experts, the **SILEO Pool of Technology Uptake Facilitators**.

The following updated list is the European expert database, which includes all the validated technology providers and digitalisation experts who have expressed their interest in supporting lighting and furniture SMEs under the 2° Open Call for Business Digital Transformation Projects.

The following list is organized at the country level and ordered alphabetically. The document is published online and regularly updated.

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LIST OF VALIDATED ORGANIZATIONS:

Code	Organisation	Country	Sector
4	**IDEAZ e.U.**	Austria	Furniture
40	**KOMPETENZZENTRUM HOLZ GmbH**	Austria	Furniture
49	**STEFAN PROMPER**	Austria	Furniture
47	**SYNTHETIC DIMENSION GmbH (AMRAX)**	Austria	Both
42	**THORBIQ NV**	Belgium	Lighting
11	**MATEREAL**	France	Lighting
45	**PISEO SAS**	France	Both
39	**STRATE SCHOOL OF DESIGN**	France	Both
46	**ITP GMBH**	Germany	Both
48	**SKLAER GMBH**	Germany	Lighting
10	**/NUOVOSTUDIODRASLER**	Italy	Both
38	**ADV GROUP**	Italy	Furniture
21	**CUBIT S.C.A.R.L.**	Italy	Both
1	**EDALAB**	Italy	Lighting
22	**FORMA SRL**	Italy	Lighting
2	**FOXWIN SRL**	Italy	Furniture
31	**GALILEO VISIONARY DISTRICT**	Italy	Both
3	**GF TECH SRL**	Italy	Both
28	**INVENTRONICS S.R.L.**	Italy	Lighting
15	**LIGHTCUBE SRL**	Italy	Lighting
24	**MANGANELLI MARIO**	Italy	Both
27	**MATERIALLY SRL IMPRESA SOCIALE**	Italy	Both
13	**OFFICINA DIGITALE SRL**	Italy	Both
12	**Quasar srl**	Italy	Furniture
17	**RAWFISH SRL A SOCIO UNICO**	Italy	Both
9	**SKEINHOLDING S.R.L.**	Italy	Both
8	**SMACT SCPA**	Italy	Both
25	**VECTION ITALY SRL**	Italy	Both
14	**VISUP SRL**	Italy	Furniture
19	**ENLUM NIKODEM DERENGOWSKI**	Poland	Both
32	**F.P.H.U. "SEPHIA" DOMINIKA KUROWSKA DA COSTA**	Poland	Furniture
5	**CRANTEC**	Portugal	Both
41	**ASOCIAȚIA DIGITAL INNOVATION ZONE - ZONA DE INOVARE DIGITALĂ**	Romania	Furniture

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44	**IL-SILV SOLUȚII INGINEREȘTI SRL**	Romania	Furniture
7	**INNO ROBOTICS srl**	Romania	Furniture
6	**TESAGON INTERNATIONAL**	Romania	Furniture
16	**ACONDICIONAMIENTO TARRASENSE (LEITAT)**	Spain	Both
23	**AUMENTA SOLUTIONS**	Spain	Furniture
36	**DI3 GESTIÓN DE LA ENERGÍA S.L.**	Spain	Lighting
18	**ENLIGHTING TECHNOLOGIES SL (KUMUX)**	Spain	Lighting
30	**INNOVA IT, SL**	Spain	Both
35	**LAMÁQUINA**	Spain	Both
26	**MAQMETAL AUTOMATION SL**	Spain	Lighting
34	**NOUMENA DATA SERVICES SL**	Spain	Both
29	**ÒSCAR BEÀ TORRAS**	Spain	Both
20	**STERNA INNOVATION PROJECTS SL**	Spain	Lighting
43	**TECNICOS ECONOMISTAS ASESORES, S.A.**	Spain	Lighting
37	**TELEMATEL SLU**	Spain	Both
33	**SIGMA TECHNOLOGY SOLUTIONS GROUP**	Sweden	Furniture

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Technology providers from AUSTRIA

IDEAZ
Business Innovation

TECHNOLOGY PROVIDER NAME	IDEAZ e.U.
Code	004
Location	Rohrbach-Berg, Austria
Organization typology	Innovation Consulting
Expertise sector	Furniture
Contact person	Edith Öller Email: edith@ideaz.at Phone number: 0043681 10373347
Website	www.ideaz.at
Social media	LinkedIn
Speaking languages	German, English, French, Spanish

PRESENTATION

IDEAZ Business Innovation was founded in 2020 with the aim of helping companies to actively prepare for the future in times of dynamic change in the market and technology environment and to strengthen their position in the market. We are convinced that only companies that act sustainably will be successful in the long term. Even innovative companies often need a new perspective, new methods or a new way of thinking.

IDEAZ offers support focusing on **innovation & sustainability** including **consulting, facilitation, workshops and project** support in the field of: Product & Service Innovation (including digital & tech-innovation), Business Modelling (including Business Models for Sustainability), Circular Economy, Ecological and Social Impact, Purpose & Values, Vision & Strategy, CoCreation, User-centered Design, Design Thinking, Scrum, Agile in Hardware, Agile Leadership.

Your consultant, **Dr. Edith Öller** is the founder of IDEAZ Business Innovation.

In addition to studying International Business Administration, she graduated from the University of Fine Arts and dealt intensively with the topics of design thinking and business modelling. In her work, she combines creativity and analytics. In addition, she has many years of experience as a CEO and Business Development Manager in various companies, and she supports start-ups and young founders as a start-up mentor.

→ For more information: www.ideaz.at

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Product & Service Innovation (including digital & tech-innovation), Business Modelling (including Business Models for Sustainability), Circular Economy, Ecological and Social Impact, Purpose & Values, Vision & Strategy, CoCreation, User-centered Design, Design Thinking, Scrum, Agile in Hardware, Agile Leadership.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Facilitation, consulting & support of innovation project dealing with 3D printing in architecture as well as supporting business model processes including additive manufacturing solutions (e.g. to become more „circular“).
Augmented and Virtual Reality	Facilitation, consulting & support of innovation project using AR/VR for product demonstration, product individualization and in „virtual showrooms“ as well as supporting business model processes including AR/VR solutions.
Robotics	Facilitation, consulting & support of innovation project using robotics solutions.
Artificial Intelligence	Facilitation, consulting & support of innovation project using AI for product proposals.
Facilitation, consulting & support of innovation project using AI for product proposals	Facilitation, consulting & support of innovation projects and business model processes including digitalisation of marketing and online trading (also in combination with VR/AR or AI-tools).
Innovation Processes	Facilitation & support of product/service innovation and business modelling processes using user-centered and agile co-creation methods as Design Thinking, Scrum and including the Circular Economy and SDG framework.

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TECHNOLOGY PROVIDER NAME	Kompetenzzentrum Holz GmbH
Code	040
Location	Linz, Austria
Organization typology	Academia
Expertise sector	Furniture
Contact person	Andreas Haider Email: a.haider@wood-kplus.at Phone number: +43 732 2468 6771
Website	www.wood-kplus.at
Social media	LinkedIn YouTube
Speaking languages	German, English

PRESENTATION

Wood K plus is a leading research organisation in the area wood and wood-related renewable resources in Europe. Our core competences are materials research and process technology along the complete value chain – from raw material to finished products. The R&D activities can be accompanied by sustainability assessment. We develop methods and basics and perform applied research on the economy-science interface, in order to enable resource-efficient management in the circular bio economy. Wood K plus was funded in 2000 and started operational work in 2001 and is located at 3 sites in Austria (Linz/Upper Austria, Tulln/Lower Austria, St. Veit/Carinthia).

In long-term research projects and programmes the experts of Wood K plus search for innovative solutions for companies, with scientific partners providing their know-how and many years of experience. Wood K plus analyses in cooperation with the industrial partners the demand for innovation, organizes the demand in technological issues and identifies promising approaches to the problems that can be implemented in specific research projects. If necessary, Wood K plus also acts as project manager from project definition, preparation of applications for projects, integration of partners over processing to clearing and communication with sponsors. Within the framework of service agreement tests, feasibility studies, expert reports and business consultancy are provided.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Material and processing development – bio-based materials, improving of manufacturing processes, surface coatings – applying above mentioned expertise.

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ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Production of granules and filaments with own pilot line (unfilled, filled polymers, continuous fibres), FLM printing on various own printer systems, processing of granules, comprehensive characterization, formulation of polymeric materials.
Augmented and Virtual Reality	Developing assistance systems within manufacturing settings using e.g. spatial augmented reality, AR or VR glasses.
Big Data & Analytics	Application and further development of computer vision systems including e.g. classification using neural networks; Multivariate statistical models for predictive analytics.
Industrial IoT (IIoT) & sensors	Traceability of wood using markers or computer vision; developing sensors on and in wood for e.g. moisture sensing; Measurement of colour and lightness of surfaces of wood and engineered wood products;
Robotics	Expertise in using and programming collaborative robots.
Artificial Intelligence	Application of AI algorithms e.g. for classification of wood assortments, wood species or signals from wood processing etc.
Machine learning	Applications see above (improving manufacturing processes, computer vision, etc.).

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TECHNOLOGY PROVIDER NAME	Stefan Promper
Code	049
Location	Kremsmünster, Austria
Organization typology	Business Consulting
Expertise sector	Furniture
Contact person	Stefan Promper office@beratungsquartier.com +43 664 5424907
Website	www.beratungsquartier.com
Social media	LinkedIn
Speaking languages	German, English

PRESENTATION

Company founded in 2020 (one-person business).

Broad qualifications and expertise in:

- Business transformation & Change Management
- Organizational development
- Strategy & consulting
- Knowledge management
- Conflict management
- Leadership Training
- Executive coaching

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

- Strategy & consulting
- Business transformation
- Organizational development

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TECHNOLOGY PROVIDER NAME	Synthetic Dimension GmbH (AMRAX)
Code	047
Location	Puch/Salzburg, Austria
Organization typology	Deeptech Company
Expertise sector	Furniture/Lighting
Contact person	Martin Huber martin.huber@amrax.ai +43/664 22 24 944
Website	https://www.amrax.ai/
Social media	LinkedIn Facebook
Speaking languages	English, German, Italian

PRESENTATION

Characteristic activities: We develop Metaroom, a generic AI-driven technology facilitating cost- and time-efficient 3D scanning of rooms and buildings. We develop automated 3D reconstruction and segmentation approaches for facilitating a generation of building information models (BIM), based on the scan data only. While competitors use expensive dedicated devices also requiring scanning-expertise for similar services, our technology can be utilized by any person requiring only a handheld mobile device.

Main services/products: We provide functionality for scanning a room or even a building by intuitively moving a mobile device through the space. A single room can be typically scanned within few seconds. Based on the scan data, a 3D (BIM) model of the geometry and room assets is created and can be augmented with custom objects. We also provide the possibility for exporting the 3D model facilitating the integration into various workflows.

Advantages/benefits: Our technology provides accurate and flexible parametric models (BIM), which can be easily adapted and exported into diverse data formats. Any relevant objects of interest can be manually or semi-automatically annotated based on image frames. All annotated objects are automatically translated into the 3D room model. Competitors use dedicated and less portable devices and do not provide a parametric model, but huge point clouds which often need to be processed manually leading to much higher overall costs.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

The generated digital 3D building models can also be used for furniture planning. A furnished or unfurnished room can be scanned and 3D reconstructed within seconds. We allow different modes for reconstructing empty rooms, items of furniture and material textures and colors. The digital twin of the room can then be virtually (re)designed in 3D with arbitrary tools. We provide several export formats for this use-case.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

The generated digital 3D building models can used for light planning. On top of geometry and material information, the location and segmentation of assets such as plugs, switsches and connecting cables can be obtained and incoporated into the 3D model. Various export formats are possible to enable the import into light simulation software.

EXPERTISE

Artificial Intelligence	Our team hosts machine learning experts developing computer vision applications dedicated for 3D building reconstruction.
Machine learning	Our team hosts machine learning experts developing computer vision applications dedicated for 3D building reconstruction.
3D room reconstruction	Our main expertise consists in the generation of 3D building models (BIM) based on scans performed with a smartphone.

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Technology providers from BELGIUM

TECHNOLOGY PROVIDER NAME	ThorbiQ NV
Code	042
Location	Lokeren, Belgium
Organization typology	Technology company
Expertise sector	Lighting
Contact person	Wim Tas Email: wim.tas@thorbiq.com Phone number: +32 472 53 52 30
Website	www.thorbiq.com
Social media	LinkedIn
Speaking languages	Dutch, English, French

PRESENTATION

ThorbiQ was founded in December 2016 as a spin-off of an engineering office for technical installations in Belgium.

ThorbiQ is a "technology as a service" company active in the digital transformation within the construction industry. Our primary target market is the group of manufacturers of building products. We help them in deploying a digital sales and marketing channel as a lead generation machine, improving their brand awareness, increasing their sales and improving their internal efficiency.

ThorbiQ is a technology provider that enables a web-based application plaGorm where both humans and machines can interact with to get reliable content, data and applications straight from the source.

ThorbiQ provides a technology as a Service (TaaS) for establishing their own sales and marketing channel towards all actors in the building industry. It consists of Digital Catalogues that integrate with BIM (Building Information Modelling). ThorbiQ offers services to manufacturers for structuring their data and content online with the standards in that digital world.

Fully integrated approach for setting up an environment to interact as a manufacturer of technical installation products with your customers throughout the whole lifecycle of a building. The environment can be setup in weeks rather than months or even years.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Expertise in lighting design as a former engineering office working with Dialux and writing specification texts for project tenders. BIM Object Creation for Etap, Deltalight, Kreon, Orbit.

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ORGANIZATION EXPERTISE

Augmented and Virtual Reality	With our technology, we can provide AR Objects of the products of a manufacturer foruse in VR and AR environments.
Digitalisation of marketing and online trading	ThorbiQ enables a manufacturer to create its own digital catalogue which serves as sales and marketing channel towards all building professionals.
BIM / Digital Catalogues	Building Information Modelling. To participate as a manufacturer in digital construction with a cloud-based digital catalogue that integrates seamlessly with the digital world.

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Technology providers from FRANCE

TECHNOLOGY PROVIDER NAME	MATEREAL
Code	011
Location	Vaulx en Velin, France
Organization typology	SME research and innovation company
Expertise sector	Lighting
Contact person	Christophe MARTY Email: c.marty@matereal.net Phone number: +33 6 71 17 88 73
Website	www.matereal.net
Social media	LinkedIn
Speaking languages	French, English, Spanish

PRESENTATION

MATEREAL provides a wide range of spectral SVBSDF files from a patented measurement method of real materials. The digitized materials can then be utilized in different renderers, with enhanced results obtained by spectral software and with calculators allowing BSDF extended exploitation. Complex materials such as sparkle paints, polarized materials, anisotropic materials, and texturized materials can now be characterized by MATEREAL and converted into a PBR material, making movies and video games even more realistic with physical based light effects brought by new categories of materials, and by renewal of previously existing ones. More and more materials are being characterized, making MATEREAL a key player in world's digitization.

MATEREAL is a start-up created in May 2021, with the support of Ingelux lighting Design and national laboratory ENTPE in France. MATEREAL exploits and develops a patent by ENTPE, and has reached maturity for presenting its spectral material database and the corresponding PBR formats of it.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Characterization of the optical behaviour of complex materials. Digitization of materials for PBR description: production of SVBRDF files to be used in light simulation software. Spectral, anisotropic, polarized, texturized materials.

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ORGANIZATION EXPERTISE

Augmented and Virtual Reality	We provide SVBRDF files to be used in VR simulations, allowing actors to create scientific-based environments for the simulations.
Artificial Intelligence	Our SVBRDF files can be used to run multiple simulations of different situations, allowing to train AI displays in scientifically-based environments. Matereal is a support to train AIs with high number of simulates situations, without need of real samples or environments.
Digitalisation of marketing and online trading	Matereal can digitize most type of materials (texturized / polarized/ spectral/..) to be used for simulation in any type of application, including marketing and online trading
Image scripting technologies	Matereal provides the data files describing the materials of the simulated scenes, with scientifically-based measurements. The file include the complex behaviour of materials such as spectral/diffraction/polarization/etc. SVBRDF can be used to create Virtual twins and link to AI for instance.

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TECHNOLOGY PROVIDER NAME	PISEO SAS
Code	045
Location	Venissieux, France
Organization typology	Innovation Platform
Expertise sector	Lighting/Furniture
Contact person	Marie-Eve Fraisse. Email: commercial@piseo.fr +33 (0)4 26 83 02 25
Website	http://www.piseo.fr/
Social media	LinkedIn
Speaking languages	French, English, German

PRESENTATION

PISEO is an Innovation Platform specializing in the integration of optics-photonics technologies (LED, LASER, IMAGERS, DETECTORS, OPTICAL MATERIAL…).

The company has been created in November 2011 under the leadership of Cluster Lumiere, Yole Développement and CEA-Leti to help lighting manufacturers to integrated LED as new light sources in their luminaires. PISEO is a unique combination of expertise and cutting edge testing facility. It has its own accredited lab (www.cofrac.fr).

The company provides consulting, engineering and testing servicesto support industrial companies in their innovation projects such as:

- Feasibility studies
- Optical design (illumination and imaging) and simulation
- System development including electronics, software and mechanics
- Algorithm development and coding (Python, C++)
- Regulation and standards analysis and support
- Technology scouting
- Failure analysis and correction support
- Optical risk assessment (accredited)
- Spectral measurement (UV, VIS, IR)
- Goniophotometry, photometry and colorimetry (accredited)
- Luminancemetry
- Image quality measurement
- Training (Lighting, LED systems, Imaging systems)

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PISEO's customers benefit from the long lasting industrial expertise of its leadership team and independent lab which allow to develop and qualify new products in an accurate and timely manner. The company has a very strong command of simulation software as LightTools and Zemax.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Integration of light sources in furnitures.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

PISEO's experts benefit from a long lasting experience in the lighting sector. Most of its leadership team members have worked at Philips Lighting for many years developing LED-based systems at global level.

They have a very strong understanding of LED, LASER and sensing technologies and capabilities in system design, simulation and testing.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Realization of system prototypes
Augmented and Virtual Reality	Visual performance testing of AR and VR systems Advising for US FDA clearance
Cybersecurity	Development of Li-Fi solutions
Industrial IoT (IIoT) & sensors	Integration and testing of image sensors and cameras Development of UV-VIS-IR sensing equipment
Robotics	Specification and integration of lighting, sensing and imaging equipment on robots (machine vision, LiDARs)
LED light sources	Scouting and comparative test of LED light sources. LED light source integration for highly efficient luminaires.
LASER light sources	Scouting and comparative test of LASER light sources (laser diods). LASER light sources integration in sensing systems such as LiDARs.

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TECHNOLOGY PROVIDER NAME	STRATE School of design
Code	039
Location	Lyon, France
Organization typology	Academic
Expertise sector	Lighting/Furniture
Contact person	Paul Colombat Email: p.colombat@strate.design Phone number: +33 6 46 80 73 85
Website	**www.strate.design**
Social media	Strate, Ecole de Design : mon employeur | LinkedIn
Speaking languages	English, French

PRESENTATION

Strate, School of Design, renowned in France and internationally by both the academic ecosystem and companies, trains design professionals who will have a positive impact on the future. It is established on three campuses: Paris, Lyon, and Bangalore, covering the Ile-de-France region and Africa with short courses. Strate, School of Design offers ambitious multidisciplinary programs to meet the challenges of the 21st century. A designer's role falls between that of a marketer and an engineer. Designers must be able to identify people's needs while mastering technology to execute their skills in the service of others.

To achieve this, a designer at Strate, School of Design focuses on what we like to call "the design mix," which combines:

- Specific technical skills
- Knowledge of social sciences,
- marketing, and engineering Project
- management skills
- Creativity

Design constitutes a strategic lever for corporate development. Strate, School of Design trains the actors in their development, and the pedagogy is built upon a strong relationship with market players.

Strate, School of Design is a place of continuous dialogue and collaboration with companies. Through "Design" industrial partnerships, Strate, School of Design combines energy, passion, creativity, and freedom for prospective projects.

Once specifications and requirements have been defined, a group of 15 to 25 students at Strate, School of Design will utilize the school's resources (IT, Fab Lab, Workshops) to propose the best possible solution. Supervised by a professional designer, they will employ the methodology and expertise of a designer at

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Strate, School of Design to provide an innovative answer to your problem. What they deliver are essential design elements: trend surveys, concepts, mock-ups, use scenarios, videos, 3D models, and more. In any case, the school and all parties involved in the project agree to a confidentiality clause, and a transfer of copyright contract is signed between the partner and Strate, School of Design.

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:

Trend surveys, concepts, mock-ups, use scenarios, video, 3D and others

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Trend surveys, concepts, mock-ups, use scenarios, video, 3D...
Augmented and Virtual Reality	
Big Data & Analytics	
Cybersecurity	
Industrial IoT (IIoT) & sensors	
Robotics	
Artificial Intelligence	
Digitalisation of marketing and online trading	
Image scripting technologies	
WebAR	
Machine learning	

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Technology providers from GERMANY

TECHNOLOGY PROVIDER NAME	ITP Geselschaft für intelligente Textil Produkte GmbH
Code	**046**
Location	Weimar, Germany
Organization typology	Tech Company/ R&D Department
Expertise sector	Furniture/Lighting
Contact person	Dr. Daniela Zavec daniela@itp-gmbh.de + 49 (0) 159 0275 0673
Website	www.itp-gmbh.de
Social media	LinkedIn
Speaking languages	English, German, Slovene, Croatian, Serbian

PRESENTATION

ITP GmbH is an engineering company and developer of smart textile components. We specialise in providing customised smart solutions that make flexible products sensitive and interactive. ITP is an interdisciplinary team of engineers from the fields of materials science, mechanical engineering, textile technology and electronics. We provide solutions to technical problems that need to be solved. Our expertise is in advanced development, bringing together materials and innovative technologies, validating these functionalities and making prototypes attractive to our customers.

Our main services are problem solving, idea generation and prototyping for various end applications such as interior design, automotive interiors, design solutions combining ambient lighting effects, heating and cooling solutions, motion monitoring, proximity sensing, all as standalone or embedded in an end product.

The biggest advantage of using our services is a fully customised solution. Our development starts with understanding the customer's requirements, the technical conditions of the application area and bringing the functional prototype. In addition, we take care of the upscaling process and supply chain, which is relevant for business growth for us and our customers.

The CEO of ITP GmbH is involved in several EU working groups, such as standardisation, smart materials community, coaching of start-ups in the EU framework of EIC and EASME. Within these initiatives we also act as a door opener for our customers.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

ITP has developed an ultra-light heating material that is embedded between layers of wood to make wooden surfaces heatable. In addition to this solution, a temperature sensor yarn has been developed to measure the surface temperature

Further, with embedded proximity sensors the designed surface on the piece of the furniture can be used as sensor surface; the use case is foreseen in elderly homes.

Pressure sensors integrated into the chairs help to determine the ergonomic sitting position. They can be used in office chairs as well as in wheelchairs.

Moisture sensors developed at ITP are used to indicate whether the wooden surface is wet, which helps to prevent major damage to the furniture.

The combination of sensors is extremely important for a specific technical solution.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

ITP has strong expertise in surface lighting, designing different ambient lighting effects for car interiors, lighting effects in fashion and lighting effects for different shields. In all cases, the effects and text on these signs can be changed.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	ITP GmbH has expertise in the development of electronic housings using additive manufacturing technologies. We design different shapes and sizes according to the customer's needs. Today's smart solution requires the smallest possible electronic device that is both robust and small enough to be integrated into flexible end products.
Industrial IoT (IIoT) & sensors	ITP develops small surface, linear and point sensors and the HW and SW to bring them to life. Our smart solutions usually have their own readout electronics, operating under internally written SW. In addition, we also offer different communication protocols within the electronic units and connect embedded sensors to remote mobile devices.
Smart Materials and their compatibility with existing and novel products.	

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TECHNOLOGY PROVIDER NAME	Sklaer GmbH
Code	048
Location	Eppstein, Germany
Organization typology	Digital Innovation; Image analysis
Expertise sector	Lighting
Contact person	Miras Jean-Pierre jpmiras@sklaer.com +49 173 8536013
Website	www.sklaer.com
Speaking languages	French, Germany, English, Spanish, Russian, Italian

PRESENTATION

Pioneer and Leader in Art Lighting with the first Multicolour LED projectors, (Mona Lisa in 1993 with 6 different wavelength and a CRI of 99) we have continuously innovated in Museum Lighting and developed projector families for renowned companies.

We provide consulting services, solutions, and proprietary products for a wide variety of applications: LED lighting, manual and automated calibration of projectors, plastic optics, colour mixing, imaging and non-imaging optical systems, optical instrumentation.

In our recent innovations, we have been granted in June 2023 a European patent to control the illuminance of a target thru spectral analysis and are involved in developing applications for smart lighting, whereby we analyze an image and control the light with dedicated algorithms.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Design of modular projectors for Art Lighting

Optical and control systems

Masterclasses and seminars in Lighting: Choice of the spectrum to enhance contrast of various textures, paintings and ensure an overall comfort.

Control of time of exposition, monitoring of degradation and enhancement of contrast of sensitive pieces of artistic works.

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ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Manufacturing of Light Modules, colour mixers Prototypes: 3D printing, Plastic injection
Industrial IoT (IIoT) & sensors	Owns a European patent to control projectors by RGB sensors or any type of digital camera. Mapping of image, including of pictures from smart phone.
Artificial Intelligence	Smart Lighting: Measurement and Analysis of a spectrum to control light with apps or as standalone.

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SILEO — SMP-COSME-2021-CLUSTER

Technology providers from ITALY

TECHNOLOGY PROVIDER NAME	/NUOVOSTUDIODRASLER
Code	003
Location	Fagagna (UD), Italy
Organization typology	Integrated Study for Design &Process Innovation
Expertise sector	Lighting/Furniture
Contact person	Giorgio Drasler Email: nuovostudio@drasler.it giodras@libero.it Phone number: +39 347 349 6547
Website	https://www.drasler.it/
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

/NUOVOSTUDIO DRASLER deals with distinctive expertise in innovation and integrated development of products (mostly furniture), services and business processes, operating for small, medium and large companies, concretely providing them with new successful ideas for markets that are ever faster in their evolution, often hybrid and turbulent , who never know rest. Our studio takes care of all of this. We are able to propose appropriate solutions to the most varied existing realities by providing new concepts and projects centered on trends and to favour the implementation of the Design Thinking philosophy and process within them. The staff is made up of three professionals in the areas of product and service design, communication and security.

The study also makes use of the collaboration of the best complementary professionals capable of providing the multidisciplinary approach necessary for innovation interventions in every field and for every market in their entirety.

In the specific area of design we use also platforms of Artificial Intelligence such as OpenAI and Generative Design tools; in the Organizational and Design Thinking we use processes of digital transformation. We offer a consultancy service regarding: brand value analysis/analysis of the product-service portfolio/competitive positioning analysis/assessment of market opportunities and threats and company strengths and weaknesses/analysis of current and future sector trends and their intersection/formulation of new product-service ideas/representation of the concept idea with DALL-E e 3D Studio/release motivated in the company with rendering of new products and services/support in the prototyping phase (3D print) of the product and service/communication to support the concept created for the market launch/consultancy for the implementation of design thinking in the company/web-sites, e-commerce and digital marketing, assistance

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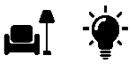
in drafting the business plan/assistance to digital innovation in the generational handover in the company/assistance to the safety innovation system.

What differentiates us from other marketing, communication or design studios is the shared and multidisciplinary vision with expert collaborators in the areas most sensitive to the development of new product or service ideas for a specific market and segment(s) of it. We cross applied disciplines such as sociology, business organization and digital innovation, the analysis of emerging and consolidated trends, branding positioning, design value and effective communication. In short, Design Thinking! A winning model! From the initial company listening phase to the final presentation of the product/service concept, we always proceed through the preparatory logic of analysis and selection of market opportunities to be transformed into satisfying needs in a "competitively unique way".

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:



New product development; design repositioning; brand enhancement; websites and e-commerce; product prototyping and engineering; trend analysis and setting.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Prototypes obtained from 3D Print (Binder Jetting/ Inkjet Printing), FDM (Fused Deposition Modeling) or FFF (Fusion Filament Fabrication), Jetted Photopolymer, LOM (Laminated object manufacturing).
Big Data & Analytics	Big Data Sources and analytics Marketing.
Artificial Intelligence	Use of AI (OpenaAI, DALL-E and Generative Design to generate new products.
Digitalisation of marketing and online trading	Value promotion of brands to connect with potential customers using the internet and other forms of digital communication.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	ADV GROUP
Code	038
Location	Pordenone, Italy
Organization typology	Digital Marketing and Technologies company
Expertise sector	Furniture
Contact person	Federico, Paronuzzi Email: f.paronuzzi@groupadv.com Phone number: +393333552453
Website	www.groupadv.com
Speaking languages	Italian, English, Spanish

PRESENTATION

ADV GROUP is a marketing technology company headquartered in the Technological Park "*Alto Adriatico*" in Pordenone, in the north east of Italy with over 13 years of experience in **Digital technologies, Marketing and Advertising.**

We analyse new trends on a fast moving and complex world, providing companies cutting-edge **technology and innovative marketing solutions** to compete in the global arena. Though a **network of high skilled professionals** we provide services for **marketing** and software **development**, like design of UI, UX and development of mobile app (hybryid, native iOS and Android), 3D objects, 3D rendering, 360 photos, product catalogues, websites, landing pages, e-commerce, CRM, advertising campaigns and customized web applications and web portals.

We recently developed and published **our own online software platform** to create **immersive and interactive experiences** in 360°/3D which can be even used by internal staff, like **designers** and **marketing managers**. It can be used to create:

- **E-commerce in 360°** where users can try products at home though **Augmented reality** and buy
- **24/7 Showroom and retails chains in 360°** with requests for quotations/appointments or sales funnels connected to CRMs.
- **Interactive product catalogs** with videos, lead generation, 3D products.
- **Assembly visual instructions**
- **360° establishment and plants** for virtual visits

We offer a new 3D browsing experience, immersive and interactive, which, for Marketing and Sales:

1. **Attract** and **increase** the **engagement** of visitors, customers and partners
2. **Enhance** the **user experience** with visual interfaces and immersive paths
3. **Elevate** the **brand positioning**
4. **Increase** the **remind** and the **awareness** of the brand, in the evaluation and purchase phases

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5. **Increase** the **website visitors**, average **time spent** and **sharing rates**
6. **Increase** the **conversion rates** (sales)

For Maintenance, Service and Training the visual interface and the interactivity provided allow to make easier, **faster, more effective and lasting** the comprehension and understanding of assembly instructions, user manuals, both for fitters, resellers and end customers.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Knowledge of markets and online marketing for furniture sector. We have developed **websites and advertising campaigns** to generate quotation requests and leads to **furniture manufacturers** (kitchens, etc). **Rendering, Product catalogs and 3D products** (chairs, etc). We recently developed a 360° Interactive Virtual tour for the **Designtech in Salone del Mobile 2023** - Milan.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	We create and manage **Interactive virtual and augmented reality experiences.** Expertise in creating interactive **Virtual Showrooms 360°** from photos or rendering. Creation of Interactive Product Catalogs including video and forms for resellers and end customers. Creation of **Assembly instructions in 360** for end users and fitters which allow to be easier to understand, provide a new experience and reduce assembly errors. Our software allow **designer and marketing managers** to project and create experiences with interactive and embedded elements in the environments (icons, texts, images, links, animations, videos, 3D objects, forms, html/js code) to add, for example pr**oducts in AR to try at home and connected to e-commerce, sales funnel connected to CRM, tickets for after sales support.** It can further use 360 videos and allow to start **streaming sessions and video calls** with customers. Can be easily shared as a link and **accessible by any device**, whatever is a smartphone, tablet, despot computer or even a VR visor within the need to install any app.
Digitalisation of marketing and online trading	Expertise in creating **company websites, landing pages, product catalogs, renderings, virtual showrooms, e-Commerce**, generating **sales funnels and marketing automation** through **CRM** (Customer relationship Management) and **planning and management of advertising campaigns** (Google, LinkedIn, Facebook, Instagram, etc.) both on B2B and B2C markets.
Image scripting technologies	Creation of **3D** and **products/environment renderings**, even with a super-high level of details for finishes.
WebAR	We can create **3D models** which can be seen and **tried at home in Augmented reality** though the camera of the Smartphones and without the need to install any app, so products and models can be easily shared to resellers and customers.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	CUBIT S.C.A.R.L.
Code	021
Location	Cascina, Italy
Organization typology	technology provider, tech-savvy company
Expertise sector	Lighting/Furniture
Contact person	Luca Tavanti Email: luca.tavanti@cubitlab.com Phone number: +39 0500984198
Website	https://www.cubitlab.com/
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

Cubit (CONSORTIUM UBIQUITOUS TECHNOLOGIES S.C.A R.L.) is a small company specialised in Internet of Things (IoT) systems, fluid dynamics (FD) digital twins, and drones. Founded in 2007 by the University of Pisa and a group of Italian SMEs, Cubit is located in the Technological Park of Navacchio (https://www.polotecnologico.it).

Our IoT business unit designs and realises custom electronic devices, monitoring & control systems, and IoT solutions for industrial automation, environmental monitoring, home & building automation, etc. We can cover the complete engineering cycle of a new electronic product from hardware design to certification and industrialisation, the development of software, including complex and intelligent applications, the integration in third party systems, the realisation of simple cloud platforms to provide complete vertical IoT solutions.

Our FD business unit carries out consultancies in computational FD, numerical simulations and optimisation, fluid-structure interactions, test and experimentation.

Our team is composed mostly of experienced professionals who closely collaborate with the customer to guide it through its digital transformation process. Since our foundation we have brought to completion 60+ commercial projects for the development of new products, supporting the customer from the idea to the market entrance and contributing to the creation or acceleration of start-ups (SensorID, Kyunsis, Nuvap). We have taken part in co-financed research and innovation projects, both at regional (ERDF) and European level (FP7, H2020, Horizon Europe).

We are certified ISO 9001:2015.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

TIAMBIENTA (ERDF, Toscana Region): Cubit designed and implemented a set of IoT devices integrated in the furniture and a data storage and visualisation platform for living environments – camper vans, boats, kindergartens – with the aim of increasing well-being, comfort and safety for users, as well as monitoring the environment and the products for better management and maintenance.

Spindle Vibration Sensor (SVS): Cubit developed a device for measuring and analysing the vibrations of electro spindles or bi-rotary heads for woodworking machines. The SVS can measure and integrate accelerations on three axes, apply appropriate filtering, report events of possible collisions, critical vibration regimes and malfunctions.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Smart street lighting system: Cubit designed, prototyped, engineered, certified, and developed the hardware and software of five different modules for wireless remote control of street lamps for public lighting (DALI 2.0 compliant), including the design and implementation of a custom wireless mesh network protocol for reliable communication of hundreds of nodes (https://intellienergy.it/smart-lighting/).

ORGANIZATION EXPERTISE

Industrial IoT (IIoT) & sensors	We have 15+ years' experience in the design and realisation of industrial IoT devices and systems, comprising a wide set of micro- controllers (e.g. ARM, ESP32), sensors (e.g. gases, dust, flow, radon, light, acceleration), communication technologies (e.g. ZigBee, Z- Wave, BLE, DALI, Modbus, Wi-Fi, EtherCAT, MQTT), and cloud platforms (FIWARE, AWS, custom). Our clients span from large companies (e.g. Seco, SCM, Generali, Enel) to SMEs (e.g. SICEP, Intellienergy, TecnoFerrari, EnerLife). We are an ST Microelectronics Proof of Concept (PoC) centre.
Artificial Intelligence	We can develop AI algorithms for image analysis that can be embedded in resource-constrained devices and operate in real-time for e.g. object identification and defect spotting.
Computational Fluid Dynamics(CFD) and Numerical Optimisation (NO)	We have consolidated experience in fluid dynamics design, CFD, numerical simulations and optimisation, fluid-structure interaction, FEM, test and experimentation (wind tunnels, naval tanks, air conditioning), with a strong academic background (continuous cooperation with the University of Pisa), and solid operational knowledge, the result of activities carried out in automotive, marine, aeronautical, and civil sectors (e.g. Ferrari, Fincantieri, Alenia, General Electric, INFN). We own a cluster of 9216 cores.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	EDALAB
Code	001
Location	San Giovanni Lupatoto, Italy
Organization typology	Tech-savy company
Expertise sector	Lighting
Contact person	Giovanni Perbellini Email: giovanni.perbellini@edalab.it Phone number: +39 045 2570357
Website	www.edalab.it
Social media	Linked IN Facebook
Speaking languages	English, Italian

PRESENTATION

EDALAB is a software engineering company founded in 2007, originally as a spin-off of the Department of Computer Science of the University of Verona, committed in supporting the innovation with modern electronic systems, leveraging on the software development as a key service to build new distributed and robust digital solutions. EDALAB is now focused on the delivery of customized IoT Platforms in many fields of applications, Industry, Smart Building, Logistics and agriculture, supporting its customers in 'connecting' their products and plants. EDALAB is certified ISO9001 and counts 15 engineers with expertise in hardware and software development, coordinated by project managers who ensure the correct workflows.

The main services EDALAB provides are related to the building of customized IoT Platform with the re-use of existing secure and robust software components (i.e. the BOX-IO Platform) and with the development of new dedicated hardware and software parts. The typical projects concern the data acquisition from the field, its transmission to the Cloud and the development of a software dashboard in which the customer extracts the value from the acquired data. EDALAB supports the customer in all project steps, starting with the design and ending with production and after-sale support. Other services linked with the above are the design and development of HMI for operators, design and development of Mobile Apps, design and development of custom firmware and hardware.

Customers find in EDALAB a unique partner for their IoT projects, a partner who strives to constantly update its expertise in the modern technology and to deliver the best service quality and technology transfer.

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EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

- Development of IoT Platform to control lights in industrial warehouse environment. Management of the whole data flow with the ZigBee protocol and development of the operators' workflow for installation and services to the end-users.
- Development of home automation platform with the management of Zigbee light drivers from different vendors, integrated with several other sensors
- Development of custom led drivers hardware (AC/DC, DC/DC) connected with ZigBee protocol

ORGANIZATION EXPERTISE

Industrial IoT (IIoT) & sensors	EDALAB is committed in the development of IoT Platforms, integrating OTS or custom sensors, gateways and Cloud services with the most recent software technologies.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	FORMA SRL
Code	**022**
Location	Vicenza, Italy
Organization typology	Digital innovation
Expertise sector	Lighting
Contact person	Gaetano Bertolo Email: g.bertolo@webforma.it Phone number: +39 0444304125
Website	https://www.webforma.it/
Social media	LinkedIn
Speaking languages	Italian, English, Spanish

PRESENTATION

Forma is an Italian company with 26 years of experience in developing custom software for Public Administrations and for small, medium and large company. Flexibility and speed of execution are our main characteristics. Secure applications, accessibility, open source software, large DB maintenance (with Postgresql), standard coding, project management ... represent the way to develop our projects.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

B2B website and software for lighting company.

ORGANIZATION EXPERTISE

Big Data & Analytics	Development of large and structured DB. More of 25 years experience in Postgresql DBMS (including GIS and time-series data for IoT) with open source analysis tools.
Image scripting technologies	3d rendering file automatic generation from CAD files. Hidden and secure watemarking of images. Large experience with JavaScript ES5.

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foxwin

TECHNOLOGY PROVIDER NAME	Foxwin srl società benefica
Code	002
Location	Udine, Italy
Organization typology	Knowledge and technology provider
Expertise sector	Furniture
Contact person	Filippo Causero Email: filippo.causero@foxwin.eu Phone number: +39 3331256234
Website	https://www.foxwin.eu/
Social media	LinkedIn
Speaking languages	Italian, English, Spanish

PRESENTATION

We believe that the success of your organisation depends on people. Foxwin is a benefit corporation that helps organizations improve their governance through data-driven consulting services and software that engages all employees and stakeholders.

We developed a software called Fennec that is capable to collect from employees the internal inefficiencies, cluster them and find out what are the most urgent and important to be solved. Foxwin consultants, expert in management consulting, facilitate employees and managers in finding out the solutions to improve processes efficiency, business growth, digitalisation and organization clarity. The main advantages in using Fennec are: it reduces assessment costs by half (we don't need to interview many managers and employees to find out the inefficiencies) and increases engagement of employees because we listen to the needs of all collaborators.

We developed an ESG assessment software to help the companies that want to start their green transformation journey. Foxwin consultants, experts in sustainable development, through an online form and interviews to key managers, assess in less than one day how sustainable the enterprise is. The advantage in using our software is to show through a visual dashboard the results obtained in the following dimensions: environment, social, governance and the impact on UN Sustainable development goals.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

We have been working with furniture companies on different topics. Some examples are:

ESG Assessment service:

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- Preparation of an impact report for a furniture company. The document, entitled "furniture for future", was drawn up for a project that won a call, which central topic was the circular economy.
- Preparation of ESG Assessment report for a company, which produces outdoor furniture.
- Preparation of ESG Assessment report for a company, which produces goods derived from wood

ORGANIZATION EXPERTISE

Big Data & Analytics	We use our internally developed software Fennec to gather hundreds of data from employees, cluster them and generate insights that help managers in prioritising the organisation development activities. In a complex system, such as an SME, is difficult to understand the most important problem or bottleneck that must be solved. Managers are usually full of decisions to take and don't have the time to analyse deeply each one. Through our consultant services and software, we show them a list of all inefficiencies in descending order of popularity and importance perceived by employees. Managers are then able to take data driven decisions with clarity and quantification.
Digitalisation of marketing and online trading	We started our business as a start-up 6 years ago and learned how to use different and sophisticated CRM for marketing automation and commercial activities. Now we use our experience to help other businesses adopting this type of software and train their employees in using them effectively.
ESG assessment	We developed a software to assess easily how sustainable an SME is. Many assessment tools (such as the popular B Impact assessment) are too difficult for SMEs because they ask hundreds of questions and request quantitative answers. For example, they ask how much CO2 the business produces in a year. We developed a series of questions to help companies that want to start a green transformation, not the ones that are already expert in this field. The software shows a dashboard that highlights immediately how sustainable the enterprise is in the dimensions of environment, social, governance, economic and communication/reporting. It also shows the positive impact on the 17 Sustainable development goals.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	GALILEO VISIONARY DISTRICT
Code	031
Location	Padua, Italy
Organization typology	Science and Technology Park, Digital Innovation Hub, Technology Transfer Centre Industry 4.0, startup incubator, Business Support Organization
Expertise sector	Furniture/Lighting
Contact person	ALESSIO ZINI Email: a.zini@galileovd.it Phone number: +39 049 8061111
Website	https://www.galileovisionarydistrict.it/
Social media	Facebook LinkedIn
Speaking languages	Italian, Spanish, English

PRESENTATION

PARCO SCIENTIFICO E TECNOLOGICO GALILEO - Galileo Visionary District is the Science and Technology Park of Padua. Born in 1997, it is a consortium Company whose shareholders are the Padua Chamber of Commerce, the Cassa di Risparmio di Padova and Rovigo Foundation, the Municipality of Padua, the University of Padua, CNA Padova and Confindustria Veneto Est. Galileo's mission is to support the local competitiveness through services for developing of innovative processes.

Galileo's competences refer to design (industrial, digital, graphic and brand design), innovative materials and related technologies (technological scouting and technology transfer), support for business development and the birth of new innovative companies, marketing and communication.

Galileo's activities can be divided into the following areas:

- Scuola Italiana Design-SID, the educational dpt. of Galileo, is a vocational training centre and a creative centre for product innovation through the “design”.
- R&D: Galileo supports supporting companies in their innovation paths; the main activities refer to: research and Development on the themes of Industrial Design and Web Design, business development, new products and services, scouting of new and innovative materials on international markets, technology transfer projects.
- Start Cube, the Incubator of the University of Padua: Galileo supports the birth and the development of new high-tech and innovative enterprises, providing them with liquid offices, tools, and dedicated services.

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- Galileo DIH - Industry 4.0: Galileo is a Technology Transfer Centre certified Indyustry 4.0 by Unioncamere (Decreto Direttoriale MISE 22 dicembre 2017) and is registered in the smart specialization portal as Digital Innovation Hub (https://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool). The main activities within Industry 4.0's framework are Technological training, Training and consultancy on organizational and / or business, technical and industrial models, Design and planning of implementation interventions for Industry 4.0 technologies, Industrial research and experimental development including virtual prototyping, Analysis, monitoring and technological brokerage services.
- POPLAB: Galileo's subsidiary Company Poplab is a research & development center, a design studio, a FabLab and a training center. Popab can develop dynamic architectures, temporary stages and pavilions, scenery based on virtual reality. Currently, the team includes professional figures who deal with the different phases of the projects.

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:

Product design

Innovative materials

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Technological training; Prototyping.
Augmented and Virtual Reality	Technological training; Projects development; Virtual showroom; virtual prototyping.
Industrial IoT (IIoT) & sensors	Technological training.
Digitalisation of marketing and online trading	Technological training; Market Analisys; CRM.

Others:

- Market Analysis
- Scenario building
- Envisioning & Design Thinking
- Start-Up Acceleration services
- Educational Activities (Industrial Design & Design Management)
- Research activities for companies
- Virtual prototyping
- Innovative materials & technologies
- Eco materials
- Product Design & Product Brand Language
- Visual & Communication Strategies & Art Direction
- UI/UX, Exhibit design

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	GF TECH SRL
Code	003
Location	Buttrio (UD), Italy
Organization typology	CyberSecurity, IT Consulting, Academia, Digital Innovation
Expertise sector	Lighting/Furniture
Contact person	Matteo Greatti Email: matteo.greatti@gftech.srl Phone number: +39 340 36 89 945
Website	https://www.gftech.srl/
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

GF Tech is a start-up born in mid-2021 made up of a team of experts with more than 15 years of experience in sector of Information Technology.

We offer assistance and consultancy in the IT sector, Cyber Security and technological solutions for companies. From the design of Infrastructure and management of IT networks with certified system engineers, to Big Data analysis to facilitate the decision process business making and development thanks to Business Intelligence.

Over the years, the GF Tech staff has worked together on related projects to the various fields of networking, IT and security: from designing Wi-Fi for densely visited commercial areas, to Wi-Fi for industry 4.0 in production plants, networks over very large surfaces and with a large number of workstations with related infrastructure virtualized and cyber security (firewall, segmentation, VPN) up to corporate systems composed of many interconnected offices to the central data center.

All these challenges built up the experience and the staff's know-how, as well as the well-established ability to work in team under pressure; these abilities allowed the team to make a well-rounded system integrator.

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:

- Lighting sector: WiFi for Industry 4.0 in production plants
- Furniture sector: WiFi for Industry 4.0 in production plants

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ORGANIZATION EXPERTISE

Cybersecurity	WiFi design for densely visited commercial areas, WiFi for industry 4.0 in production plants, networks for very large areas and with many stations with related virtualized infrastructure and cybersecurity (firewall, segmentation, VPN) even in business systems composed of many locations interconnected to each other and to the central datacenter.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	INVENTRONICS S.R.L.
Code	028
Location	Treviso, Italy
Organization typology	Digital Systems - Manufacturer of lighting components/systems, Technical testing and analysis, and research and development of LED light engines, LED Drivers & Light Management Systems/Controls
Expertise sector	Lighting
Contact person	Valerio Michielan Email: v.michielan@inventronicsglobal.com Phone number: +39 329 366 95 68
Website	www.inventronics-light.com
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

Inventronics, with the recent acquisition of ams Osram Digital Systems Business in Europe and Asia, is now a new global leader in the lighting industry, a distinguished provider of advanced lighting and digital control solutions. This strategic merger of two industry powerhouses brings together our collective expertise and resources, allowing us to offer an even broader range of products and services to our valued customers. Inventronics drives innovation and redefine the future of the lighting industry. The company is committed to deliver exceptional value, promoting sustainability, and exceeding customer expectations, building a brighter future.

Inventronics main activities are represented by the Development, Validation, and Manufacturing of innovative and highly reliable digital Lighting Systems. The company's field of technical knowledge ranges from the LED based light engines, electronic Drivers, Sensors and Controls. Therefore covering a wide range of engineering competences: Optical, Mechanical, Thermal, Electronic Power Conversion, Wired/Wireless Control, Firmware/Software, IoT.

Inventronics offers a wide range of LED based lighting components to enable solutions in the different target applications (eg. Architectural indoor/outdoor, Streetlighting, Hospitality, Shop/Retail, Commercial, Residential, Horticulture, etc), both with standard components and customized.

Our technical services are available for customers who need technical application support in their projects (delivered by our Field Application Engineers), Product Certification (by our Qualified Laboratory), co-development and development support for customized solutions (by our RD department).

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SILEO — SMP-COSME-2021-CLUSTER

The main advantages of using our services is to have access to the highest technical expertise on any of the electronic components to build up an LED based Lighting System (from the Light Engine, Driver, Sensors and Controls) in general lighting applications as well as in special applications, such as UVC (for air purification/surface disinfection), Horticultural (Greenhouse, Vertical-farming, Aqua-culture) and others in which light is embedded for secondary function.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

As a global leader in the lighting industry, our fields of expertise cover advanced lighting and digital control solutions.

ORGANIZATION EXPERTISE

Big Data & Analytics	Our cloud system where digital components programming settings, operating data collection are collected and can be visualised/analysed by our EM/MA SW tool.
Cybersecurity	Our HubSense Wireless Network (open BT Mesh based technology), were data communication and control management are developed to have the highest level of protection.
Industrial IoT (IIoT) & sensors	Our DALI controllers, capable to interface with Building Automation systems, for Internet-remote monitoring, data transfer/collection and control, extensively useful for energy harvesting.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	LightCube srl
Code	015
Location	Padova, Italy
Organization typology	Knowledge and technology providers
Expertise sector	Lighting
Contact person	Diego Barbisan Email: diego.barbisan@light-cube.com Phone number: +39 347 306 6186
Website	www.light-cube.com
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

LightCube is a spin-off of the University of Padua founded in 2011 and deals with the research, development and design of LED systems, both for general lighting applications and for specific custom applications, from the industrial field to the biomedical and photobiological fields. LightCube offers its partners a complete design service for custom LED lighting systems. The integration of photometric, electronic, optical and thermal design in a single design development represents a significant competitive advantage for partner companies. Customers who rely on Lightcube have the opportunity to fully follow the development of the project. From optical design, to the creation of prototypes, to the optical and thermal characterization phase, up to the creation of the finished product. This allows to considerably shorten the times of industrialization and consequently the project costs.

In terms of services, Lightcube covers all sectors of both industrial and experimental research and development. The spin-off uses state-of-the-art instrumentation: source meters, parameter analyzers, power meters, for electrical characterization; integrating spheres with spectrometer, photogoniometer with diameter up to 2 meters, for photometric analysis; spectroradiometers, optical power meters and instrumentation specifically designed for optical characterization; high resolution infrared camera, calibrated thermocouple systems and proprietary electrical techniques for thermal characterization.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Lightcube offers advanced skills in all design phases in the lighting sector. Starting from the optical and thermal design phase of lighting products, to the study and implementation phase of control electronics including the prototyping of dedicated PCB boards.

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After the prototyping, Lightcube offers optical and electrical characterization services thanks to the advanced instrumentation at its disposal. Source meters, parameter analyzers, power meters, for electrical characterization; integrating spheres with spectrometer, photogoniometer with diameter up to 2 meters, for photometric analysis; spectroradiometers, optical power meters and instrumentation specifically designed for optical characterization; high resolution infrared camera, calibrated thermocouple systems and proprietary electrical techniques for thermal characterization. LightCube offers support for IOT communication of LED based lamps with specific light protocols (DMX, Dali and general purpose protocols (Bluetooth, Wi-Fi, Zigbee, etc.). After the products industrialization, Lightcube offers support for the EPREL energy label registration and ecodesign limits. Moreover, Lightcube offers dedicated courses on lighting techniques, optics design and reliability study on LED sources.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Experience in design and modelling of 3D optics. Design of the tools necessary for the production of small quantities of optical reflectors. Prototyping of 3D samples with 3D printers.
Industrial IoT (IIoT) & sensors	Experience in environmental sensors (UV, VIS and IR lighting, capacitive sensors, temperature, humidity, etc.). Experience in communication protocols for lighting (DMX, Dalì) and general protocols (Bluetooth, Wi-Fi, Zigbee). Experience in optical adaptive feedback for the control of the light (intensity, CCT).

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MANGANELLI STUDIO - 3D

TECHNOLOGY PROVIDER NAME	MANGANELLI MARIO
Code	024
Location	Gorizia, Italy
Organization typology	Freelance professional
Expertise sector	Furniture/Lighting
Contact person	MARIO MANGANELLI Email: info@mariomanganelli.com Phone number: +39 3421964273
Website	www.mariomanganelli.com
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

I am a freelance professional with a degree in Industrial Design (IUAV University of Venice 2009). I began my career as a technical employee and purchasing manager in the toy industry from 2010 to 2013. Later, I enrolled in a full-time Master's program in Computer Graphics, where I gained further experience in 3D modelling and rendering.

During this time, I transitioned to the furniture industry and in 2015 I became a digital manager at Cluster Legno Arredo del FVG, where I was responsible for 3D modeling, rendering, and web design/development. Afterward, I worked at Derwid (an AR/VR software house) creating 3D assets and C# programming inside its own product configuration platform.

Most of my current clients are SMEs in the furniture industry. I offer a wide range of services, including 3D scanning, detailed 3D modelling, photogrammetry, rendering, content creation for real-time applications, and implementation of web-based configurators. I also provide my services to agencies and other creative/graphic studios.

With the use of these technologies, my clients can save money and time by avoiding the need to build physical prototypes during the design process. This allows for a shorter time-to-market for new collections and enables customers to preview customized products (such as an armchair with an exclusive fabric cover) before production. Additionally, clients can obtain photorealistic renderings of all product variants for catalogs and e-commerce.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

3D modelling service starting from technical drawings, or pictures, or 3D scanning. Created assets can suit different use cases according to the client's needs. I'm able to create high-resolution 3D

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models (highpoly) for photorealistic rendering, as well as low-resolution 3D models (lowpoly) for real-time 3D applications.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Reworking of CAD models and technical drawings to generate 3D assests suited for 3D web applications. Implementation of web-based configurators.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	Expertise in content creation: 3D modeling of products and virtual-spaces (digital showroom, shops, exhibitions); digitalization of materials/ finishes; management of VR/AR platforms.
Image scripting technologies	Digital product staging, lighting and high-quality rendering of furniture products. Provided images can have different styles and resolution according to the customer need. Solo images of a specific product are often used for e-commerce catalogs through a scripted process that allows batch rendering of multiple product variants or finishes (colors/materials).
WebAR	Expertise in bringing 3D product inside websites and web apps by optimizing 3D assets for fast loading and ease of use in mobile devices. UI and elements can be customized according to the B2B or B2C purposes.
3D Scanning and modelling (accurate assets creation)	Data capturing with a scanning device and development of 3D models with a very high definition. This technology is very suitable for products with organic (smooth) shapes, like sofas and upholstered armchairs.
Photogrammetry	Expertise in creating high-quality digital twins of materials form a given sample. Several properties are extracted from the material and used in a digital environment to replicate its visual appearance (rougness/glossyness, reflection amount and direction, bump, etc).

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MATERIALLY

TECHNOLOGY PROVIDER NAME	MATERIALLY SRL
Code	027
Location	Milan, Italy
Organization typology	Innovative and circular materials advisory
Expertise sector	Lighting/Furniture
Contact person	Veronica Sarbach Email: vsarbach@materially.eu Phone number: +39 02 86891727
Website	https://www.materially.eu/en/
Social media	➢ Facebook ➢ Instagram ➢ LinkedIn ➢ X/Twitter
Speaking languages	Italian, English, German, Chinese

PRESENTATION

Materially S.r.l. Impresa Sociale – short Materially – is an independent Italian SME that helps companies in the development and dissemination of sustainable innovation starting from materials.

Materially operates with a design-oriented approach and attention to the issues of Circular Economy and intelligent innovation thanks to a broad background of international projects and experiences. In particular, Materially acts as a generator of links and contacts between producers of innovative and sustainable materials, as well as emerging material and processing technologies, and their potential users, be they companies or freelance professionals. Materially intervenes in this relationship by developing consulting projects where innovation starts from the material and is realised through design.

Materially also supports manufacturers through the promotion and dissemination of their innovative solutions via tailor made events, exhibitions and knowledge & technology transfer activities among diversified stakeholder groups belonging to educational institutions, public bodies, enterprises, end-users and civil society.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Materially has advised the Italian Association of Wood and Furniture Manufacturers (FederLegnoArredo) in the set-up of a sustainable materials database.

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EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Materially has advised major lighting companies in their transition towards carbon zero goals.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D Printing)	Materially advises major manufacturing companies on the application of additive manufacturing and other cutting edge production technologies.
Circular materials	Consulting on circularity applied to materials and by means of material innovation. Scouting of circular material solutions. Advisory on sustainability guidelines applied to materials. Participation to several EU funded projects with focus on circularity-driven material innovation (most recent: GRETE, INFURI, Digiprime Call A)

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OFFICINA DIGITALE

ENABLING TECHNOLOGY

TECHNOLOGY PROVIDER NAME	OFFICINA DIGITALE S.r.l.
Code	013
Location	Treviso, Italy
Organization typology	CyberSecurity - Infrastructure Management - IT Security
Expertise sector	Lighting/Furniture
Contact person	Paolo Picchi Email: paolo.picchi@officina-digitale.net Phone number: +39 0422 911828
Website	www.officina-digitale.net
Social media	
Speaking languages	Italian, English

PRESENTATION

Officina Digitale was founded in 2001 as an IT company to support commercial companies in the design and assistance of their information systems. The evolution of the services offered position it as MSSP (managed security services provider) and MSP (managed service provider) for the management of security and service continuity of IT systems. The company operates throughout the country with a focus on northern Italy. The team is made up of 7 people with IT certifications at various levels.

Knowledge: Advanced Networking, Cloud, Messaging Systems, Virtualization, Advanced Unified Communication Systems, IT Datacenter.

Services offered: ADS (System Administrator - GDPR compliant) - Infrastructure management (MSSP/MSP) Benefits of the services offered: guarantee of continuous operation of IT systems.

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:

Complete management of it systems, security, users, service continuity, updates, crm/erp/mes integration, iot ot/it separation.

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ORGANIZATION EXPERTISE

Cybersecurity	In-depth knowledge of issues relating to networking in its various forms, network and application firewalling, creation and maintenance of corporate and infrastructural posture aimed at preventing and eliminating cybersecurity risks. Execution of periodic assessments aimed at determining the real level of security established. In-depth knowledge of software tools and leading methodologies in the cybersecurity market.

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TECHNOLOGY PROVIDER NAME	Quasar srl
Code	012
Location	Tavagnacco, Italy
Organization typology	Consulting company
Expertise sector	Furniture
Contact person	Luca Diracca Email: dirluca@quasarud.it Phone number: 0432573516
Website	http://www.quasarud.it/
Social media	LinkedIn
Speaking languages	Italian, English

PRESENTATION

Quasar Srl was founded in 1992 as a consultancy firm. Over the years it has grown a multidisciplinary group of professionals to respond to different needs and develop different improvement projects in companies and public administration entities convinced that each structure cannot separate the strategic elements from the managerial ones and both these aspects from the economic ones.

It is currently made up of a "Management Systems" division that deals with organizational issues and a "Corporate Innovation" division that deals with digitization projects and predictive analysis projects. Aagain, the skill mix and multidisciplinarity are the strong point of Quasar, as it deals with organizational issues with digital competence and awareness - because in 2023 there is no organizational enhancement without digital tools - and digital issues with organizational competence and awareness - because no tool is able to improve an organization that cannot read and innovate itself.

We offer innovation management services - training, implementation of innovation management systems, setting up of innovation projects, process reengineering - and organizational consultancy services in all contexts related to organization process management - management systems, certifications in accordance to ISO 9001, compliance to the CE marking standards, tools for growth and adaptation with respect to global sustainability (i.e. environmental, social and governance, so-called ESG).

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Even if our approach is transversal to the type of organization, over the years we have developed a solid knowledge of the market for chairs, furniture and interior design products in projects with large, medium and small manufacturing companies. We believe our experience in the fields of

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innovation management and process reengineering with manufacturing companies, even outside the furniture and lighting sectors, can be a valuable asset for any prospective client.

ORGANIZATION EXPERTISE

Big Data & Analytics	Quasar Srl develops Analytics projects to visualize, analyse and design business processes both in production plants and in services companies.
Artificial Intelligence	Quasar Srl develops Predictive Analytics and Prescriptive Analytics algorithms aimed to improve the efficiency and effectiveness of production, logistics, quality assurance by analysing historical data about the business processes, forecasting future outcomes and, possibly, draw specific recommendations.
Innovation management	Quasar Srl helps big and small companies design and develop digitalization projects, analysing risks, designing a project management strategy and supporting the company during the project either as a project manager or as a coach of the project manager. Quasar Srl helps big and small companies to implement an innovation management system according to ISO 56002.
Business Process Reengineering	Quasar Srl help companies to re-design their business processes through a consolidated activity of cooperative reengineerization laboratories in which the key users of the business process are guided into rethinking it from scratch and create, as an output of the laboratory, a roadmap for the implementation project.

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TECHNOLOGY PROVIDER NAME	RAWFISH SRL A SOCIO UNICO
Code	017
Location	Vicenza, Italy
Organization typology	Digital Tech Agency
Expertise sector	Lighting/Furniture
Contact person	Alessandro Lorenzin Email: alessandro.lorenzin@rawfish.com Phone number: +39 0444 962617
Website	https://rawfish.com
Social media	➢ Facebook: @RAWFISH ➢ Instagram: @rawfishagency ➢ LinkedIn: @RAWFISH
Speaking languages	Italian, English

PRESENTATION

Rawfish is a mobile agency that combines design and development, crafting unique digital experience. Born in 2012, Rawfish has three offices, Vicenza, Milan and Switzerland. It is divided into 6 areas with specific and vertical skills: iOS, Android, Backend, UI/UX, Frontend Web, Project Management. In 2022 Rawfish has 34 employees, but by 2025 it is expected to reach 50 employees.

We develop custom software solutions end to end. Service design, UI UX design and development of mobile, web and backend solutions. Our expertise drive us to design and create cutting-edge and technically excellent user centric experiences. We develop mobile app and web products, always keeping up with the latest technological trends.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Knowledge of connection methods and related communication protocols with hardware devices such as handles and access management systems to physical premises (doors, windows, etc.).

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Knowledge of connection methods and related communication protocols with hardware devices such as lights and sanitization and sensor systems.

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ORGANIZATION EXPERTISE

Industrial IoT (IIoT) & sensors	Development of a mobile application in the IOT field as part of multi-year projects concerning smart and sustainable living environments and iot systems for healthy and safe living environments. Development of a mobile application for home automation management of fully furnished apartments that can be rented for long periods and for any type of user.

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TECHNOLOGY PROVIDER NAME	SKEINHOLDING S.R.L.
Code	009
Location	Villanuova sul clisi, Italy
Organization typology	IT and digital innovation industry
Expertise sector	Lighting/Furniture
Contact person	Roberto Dallavilla Email: amministrazione@skeinholding.com Phone number: +39 3349048561
Website	www.skeinholding.com
Social media	LinkedIn
Speaking languages	Italian, English, Spanish

PRESENTATION

Skeinholding is an international organisation focused on the realisation and distribution of Virtual and Augmented Reality services, digitalisation of marketing and online trading, image scripting technologies specialising in the construction sector such as lighting and furniture.

Our solutions range from the realisation of image scripting technologies for the detailed representation of products and their components, to the realisation of augmented reality systems for the positioning of company products in rooms with real dimensions and choice of finishes, and in the realisation of infocommerce, ecommerce, PIM solutions and digitalisation of marketing to enter international markets and consolidate existing ones.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Creation of IT developments for some of the most important manufacturer in the international B2B and B2C markets. Software in cloud for the creation of 3D real-time render, development of AR visualization for maintenance, Product WebAR and Image scripting technologies.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Creation of IT developments for some of the most important manufacturer in the international B2B and B2C markets. Development of AR visualization, Product WebAR and Image scripting technologies.

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ORGANIZATION EXPERTISE

Augmented and Virtual Reality	Realisation of interactive augmented reality systems for the positioning of company products in rooms with real dimensions and choice of finishes,
Digitalisation of marketing and online trading	Programming and publishing of info-commerce, e-commerce, PIM solutions and digitalisation of marketing to enter international markets and consolidate existing ones.
Image scripting technologies	Realisation of image scripting technologies for the detailed representation of products and their components with the possibility to zoom, rotate and interact with the customer directly.
WebAR	Integration in web portals of 3D visualization in high definition related to the products with the possibility to integrate their position in the real environment using AR.

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competence center SMACT

TECHNOLOGY PROVIDER NAME	SMACT SCPA
Code	008
Location	Venice, Italy
Organization typology	Competence Center, DIH
Expertise sector	Lighting/furniture
Contact person	Diego Pellizzari Email: diego.pellizzari@smact.cc Phone number: +39 3666499331
Website	https://www.smact.cc/
Social media	LinkedIn
Speaking languages	Italian, English, Spanish, French

PRESENTATION

SMACT cc was established in 2018 to respond to the Italian Economic Development ministry call "Highly Specialised Competence Centres 4.0", part of the national "Industry 4.0 Plan". Following these requirements, a public-private-partnership (PPP) has been set up among 11 universities and RTOs in the Triveneto region and 29 companies and other institutions, with three fundamental areas of activity:

- Orientation of companies towards digital transformation;
- Managerial and technical, theoretical and experiential training for companies;
- Management of business research and innovation projects including technology transfer activities.

Then, SMACT cc launched the 'SMACT Innovation Ecosystem' (SIE) to coalesce other specialised skills over the ones of its founding members. At the moment, the program has been joined by 25 companies, leading the SIE to almost 70 entities. Thus, leveraging and activating SIE's knowledge, SMACT can mobilise many areas of specialisation to develop business solutions based on new technologies such as IoT, Cloud, Cybersecurity, Artificial Intelligence, Big Data and Analytics, Blockchain, Robotics and Augmented Reality.

Since its foundation, the Italian Economic Development ministry allocated to SMACT cc 2.7m€ to co-finance Innovation, Industrial Research and Experimental Development projects. These resources have been turned into 34 innovation projects, involving 49 research groups from the SIE to support companies in the fulfilment of their business ambitions.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

SMACT cc has developed and deployed an academic research, through its associated Universities, to define which are the advanced technologies applications in the lightning and furniture manufacturing processes and the related cost-benefit.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

SMACT cc has developed and deployed an academic research, through its associated Universities, to define which are the advanced technologies applications in the lightning and furniture manufacturing processes and the related cost-benefit.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	Knowledge developed in the previous innovation projects carried out by SMACT cc and present in SMACT Innovation Ecosystem.
Big Data & Analytics	
Cybersecurity	
Industrial IoT (IIoT) & sensors	
Robotics	
Artificial Intelligence	
Blockchain	
Computer Vision	

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TECHNOLOGY PROVIDER NAME	VECTION ITALY SRL
Code	025
Location	Bologna, Italy
Organization typology	XR Solutions
Expertise sector	Lighting/Furniture
Contact person	Francesca Lotta Email: francesca.lotta@vection-technologies.com Phone number: +39 345 6225237
Website	https://vection-technologies.com/
Social media	LinkedIn
Speaking languages	Italian, English, French, Spanish

PRESENTATION

The company Vection Italy Srl was established in 2019 as an innovative start-up focused on R&D activities. It specializes in the realization of solutions with 3D technologies, with a personalized approach to develop software and platforms such as virtual reality experiences, augmented reality tools, real-time 3D configurators.

The R&D division has developed a proprietary technology called INTEGRATEDXR®, which is the heart of the digital solutions of the company and is composed by:

- 3DFrame - virtual reality platform that allows easy and fast loading of objects (3D models) and environment, so as to make Virtual Reality accessible to all. Thanks to the collaboration with Cisco, it is possible to integrate 3DFrame with Webex meetings and to use the platform tools.
- Enworks - tool that provides support in digital (Virtual Reality, Augmented reality or 2D) for the procedures of configuration/ maintenance/ installation and assembly of a machine or generally speaking a mechanical device.
- Mindesk - Solution that allows you to view 3D projects of Revit, Solidworks and Rhinoceros in Virtual Reality with immersive experience. Ideal for review design processes. Vection Italy Srl, wholly owned and controlled by Vection Technologies Ltd, a company listed on the ASX (Australian Securities Exchange), has its headquarters in Casalecchio di Reno (BO). Vection Technologies Ltd now has eight locations around the world in Bologna, Milan, Bari, San Francisco, Abu Dhabi, Ahmedabad, Sydney and Perth. It counts prestigious partnerships with world-class companies such as Cisco, Accenture, NTT Data, DXC, Toshiba, Nvidia, DELL, Epic Games, Siemens, etc. and operates in the most significant industries and services such as automotive, machinery, industrial production, healthcare & pharma, fashion & retail, training, AEC & real estate, furniture, etc.

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Vection Italy helps organizations in any industry to transform their workflows and processes with extended reality (XR) technologies to increase sales, efficiencies, reduce costs or simply improve the way they work.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

In the furniture industry, Vection Italy can support the creation of virtual furniture mockups, allowing designers and end users to virtually view and customize products. This allows the designer to identify any design issues and make necessary changes in a timely manner, reducing waste and improving the quality of the final product. Additionally, virtual reality technology can also help customers visualize how the product fits into their home environment, enhancing the overall customer experience.
Vection Italy has worked on various projects in the furniture and lighting sector, including Uno+, Cassina and Bedshed.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

In the lighting industry, Vection Italy can support designers to create virtual lighting designs and test the effect of different light sources on the virtual environment. This allows the designer to identify lighting problems and make necessary adjustments before actual production, improving the efficiency and quality of the final design.
Vection Italy has worked on various projects in the furniture and lighting sector, including Uno+, Cassina and Bedshed.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	Vection Italy's expertise focuses on using virtual reality technology to support smart product implementation, increase focus on customer experience delivery and advanced customization for designers and end users, reduce product errors and reduce waste, positively impacting the transition to a low-carbon economy.

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VISUP®

TECHNOLOGY PROVIDER NAME	VISUP SRL
Code	014
Location	Milan, Italy
Organization typology	Tech-savyy Company
Expertise sector	Furniture
Contact person	Gabriele Venier Email: gabriele@visup.it Phone number: +39 340 244 5408
Website	https://www.things5.com/
Social media	LinkedIn
Speaking languages	Italian, English, French, Spanish

PRESENTATION

VISUP is a software house that specialises in data collection, analysis, and visualisation in the IoT field. The company was founded in 2015 and has since focused on Big Data Analytics for the Internet of Things (IoT) in the industrial sector.

VISUP offers a range of products specifically designed for industrial machinery and appliance manufacturers (OEMs), including Things5 and Plant9, which were developed through the company's extensive experience in data-driven insights. VISUP's services include Big Data and Analytics, Artificial Intelligence, Human-Like AI-ChatBots, and IoT Connected Products. By leveraging the power of Big Data and Analytics, VISUP empowers businesses to optimise operations, drive innovation, and gain a competitive edge.

The company excels in creating custom-designed analytics applications that unlock the true potential of IoT data for addressing specific business challenges. VISUP also specialises in creating algorithms for intelligent and personalised lighting to improve the quality of life for people. The advantages of using VISUP's services include improved decision-making through real-time visualisation of bottlenecks and risks, increased customization and reduced errors in machine operations through the use of Artificial Intelligence, and improved customer support through the use of Human-Like AI-ChatBots. VISUP's IoT Connected Products provides a comprehensive solution that helps businesses manage their IoT devices effectively and efficiently.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Visup Srl is a highly experienced company in the field of IoT solutions for kitchen appliances. With a strong track record of successful projects, Visup has established itself as a leading player in this market segment. The company has worked with some of the biggest names in the industry, collaborating with worldwide market leaders to create innovative and cutting-edge

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solutions that meet the needs of modern consumers. Thanks to its deep expertise and extensive knowledge of the latest technologies, Visup is able to deliver high-quality services that are tailored to the specific requirements of each client.

ORGANIZATION EXPERTISE

Big Data & Analytics	Leveraging our extensive experience in data-driven insights, we specialise in creating custom-designed analytics applications that unlock the true potential of IoT data for addressing specific business challenges. With a deep understanding of data-based analysis tools, we excel in visualising bottlenecks and risks in real time, presenting them in an easily digestible format for quick decision-making. Our dedicated team of experts works closely with clients to identify their unique needs and develop tailored solutions, ensuring seamless integration and maximum value extraction from the wealth of available data. By harnessing the power of Big Data and Analytics, we empower businesses to optimise operations, drive innovation, and gain a competitive edge in today's rapidly evolving marketplace.
Industrial IoT (IIoT) & sensors	Our area of specialisation in the IoT industry focuses on Connected Products' IoT technology. For further information on our solutions in this area, please refer to the specific paragraph below.
Artificial Intelligence	Our expertise in this field focuses on creating algorithms for intelligent and personalised lighting to improve people's quality of life. For example: -Smart lighting algorithms that automatically adjust brightness based on sunlight levels for optimal illumination. -Personalized lighting tailored to your circadian rhythm, promoting better sleep and overall well-being. -Customised lighting solutions designed to accommodate specific health conditions such as colour blindness, myopia, or autism. -Lighting algorithms specially crafted to cater to the needs of young children.
Human-Like AI-ChatBots	The Bot is built on the latest AI technology (Chat GPT like), making it capable of understanding customer queries and providing relevant responses in real-time about your company's knowledge base (maintenance manuals, procedures, etc.). Our bot is designed to handle a wide range of customer support inquiries, from basic issues to complex problems, and provide instant solutions. With its advanced capabilities, our Bot can help customers get answers to their questions quickly and efficiently, without the need to wait for a human representative and cut-off costs for Customer Support.
IoT Connected Products	IoT Development Platform. Our IoT Development Platform is a comprehensive solution that offers a range of features to help businesses manage their IoT devices effectively. With OTA firmware and software batch updates, users can easily update their devices remotely, ensuring that they are always up-to-date with the latest features and

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	security patches. The platform also offers device analytics, which allows users to monitor the performance of their devices and identify any potential issues. Bi-directional communication enables seamless communication between devices and the platform, while user behaviour analysis provides valuable insights into how users interact with their devices. Remote diagnostics and service allow users to troubleshoot and resolve issues remotely, while API interoperability ensures seamless integration with other systems. Automated reporting provides real-time data on device performance, while installation site analytics help users optimise their device placement. Finally, alarms and notifications ensure that users are alerted to any issues or events that require their attention. Overall, our IoT Development Platform is a powerful tool for businesses looking to manage their IoT devices effectively and efficiently.

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Technology providers from POLAND

TECHNOLOGY PROVIDER NAME	enlum Nikodem Derengowski
Code	019
Location	Szymbark, Poland
Organization typology	Tech Savvy
Expertise sector	Lighting/Furniture
Contact person	Nuria Diago Alonso Email: nuriadiago@gmail.com Phone number: +33 6 38 76 66 67
Website	www.enlum.eu
Social media	LinkedIn
Speaking languages	English, Polish, Danish, French, Spanish, Catalan

PRESENTATION

Enlum is a young Polish company focused on research- and innovation-based design processes. It was founded in 2019, and it's portfolio of services is based on research (psychometric techniques, lighting technology, and NIF of light) and design (lighting, architectural, artistic) activities.
The major activities and services utilising advanced technologies are:

- Digital prototyping using 3D modelling and accurate simulations of materials and lighting.
- Aiding the design (lighting, furniture, architecture) with usage of online-based tool for surveying, communicating, and co-creating of a product. This service allows for quick feedback on the design (within company, as well as between the company and product users) and its implementation.
- Research-based calibration techniques for representation of visual stimuli, allowing for realistic representation of the design.
- Photogrammetry and drone photography in the architecture-focused projects, allowing for accurate representation of site-conditions.
- Surveying lighting conditions and material properties through measurements (luminance, illuminance, spectrum), questionnaires, simulations, and photography (classic and drone).

The major advantage of using Enlum's services is its scientific background, and research-based techniques implemented in the design processes. Moreover, Enlum's mission is to stay up to date with the newest - and community verified - technologies, especially in the domain of 3D modelling and digital prototyping.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

3D simulation of scenes, real-time adjustment of materials photometry, production of sessions allowing testing of concepts and processing of results (preferences, observations, suggestions, applications, etc.), simulation of the design in a digital-twin of a 3D environment created using photogrammetry.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Optical calculations, 3D image and video production , material simulation, 3D rendering, calibration of images, calibration of screens, spherical imaging, image processing, visual quality assessment (comfort, agreeableness, etc.), construction of narrative of sessions dealing with prototype testing, management of surveys, processing of results, statistical analysis.

ORGANIZATION EXPERTISE

Digitalisation of marketing and online trading	Enlum proposes interactive sessions to communicate innovative solutions through invitations of participants. Solutions are prepared through co-design and are presented in context of indoor or outdoor scenes.
Image scripting technologies	Enlum proposes interactive sessions for the design teams and their partners to explore, test and validate digital prototypes. Solutions are presented in context (indoor or outdoor scenes). An important and quick step in prototype analysis before manufacturing.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	F.P.H.U. "SEPHIA" DOMINIKA KUROWSKA DA COSTA
Code	032
Location	Brody, Poland
Organization typology	Tech-savvy company
Expertise sector	Furniture
Contact person	Karolina Furyk-Grabowska Email: biuro@studio3d-krakow.pl Phone number: +4888162722
Website	https://studio3d-krakow.pl/ http://www.sephia.com.pl/ https://studio3d-sklep.pl/
Social media	Facebook
Speaking languages	Polish, English

PRESENTATION

The Sephia BHP company has been in existence since 2017. Initially, the company specialized in occupational health and safety (BHP) and printing on ceramic materials. However, since January 2022, the company acquired Studio 3D, expanding its offerings to include additive manufacturing, 3D design, machining, and training in these areas. The company employs a specialist named Karolina Furyk-Grabowska in the field of additive manufacturing. She has been involved in 3D printing for 11 years, both in the industry and as a staff member at State Universities (currently working at the University of Agriculture in Krakow). She holds a higher education degree in Management and Production Engineering, as well as Materials Engineering. From 2014 to 2022, she ran a business focused on 3D printing. She participates in national and international conferences and is the author of publications, including:

A. Kiełbus, K. Furyk-Grabowska: "Develop an innovative compensation solution for functional disorders of the hand," Zeszyty Naukowe Quality. Production. Improvement, No 1(6) 2017.

The company collaborates with the Cracow University of Technology, specifically with the Department of Engineering and Production Automation. As part of this cooperation, the company provides its machines to students, assists with thesis writing, and offers student internships. Thanks to the collaboration with universities and a specialized team, our clients can expect comprehensive support in 3D design, additive manufacturing, and the selection of appropriate materials.

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EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Our clients are associated with various industries. We have the opportunity to collaborate with representatives from fields such as healthcare, fashion, automotive industry, plastics industry, and furniture industry. Our experience in this area includes projects and printing of furniture, creating tactile sculptures for visually impaired individuals, as well as designing and printing sculptures.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Sephia Company has a specialized team in this field. Thanks to the collaboration with the Cracow University of Technology and the University of Agriculture in Krakow, we have access to numerous laboratories and specialists in this area. Our laboratory is equipped with SLA, FDM, and SLS technologies. With the extensive experience of our staff, we are capable of developing a production process using 3D scanning, CAD programs, and 3D printers. This enables us to shorten production time and reduce costs while maintaining the initial product specifications.

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SILEO — SMP-COSME-2021-CLUSTER

Technology providers from PORTUGAL

TECHNOLOGY PROVIDER NAME	CRANTEC
Code	005
Location	Esposende, Portugal
Organization typology	Technologies Solutions Engineering, R&D, Expertise & Integration
Expertise sector	Lighting/furniture
Contact person	José Tabu Email: contact@crantec.net Phone number: +33 6 95 94 13 87
Website	https://www.crantec.net
Speaking languages	English, French, Portuguese

PRESENTATION

Crantec is an Engineering and R&D Company, an IT Expert and Pioneer on LiFi (Light Communications), IoT, AI solutions integration collaborating for more than 10 years with PureLiFi Company (https://pureLiFi.com), (Leader on LiFi technology development) with full access to the state of the art LiFi technology (hardware and software) as a LiFi Solutions Provider. Crantec is a Member of Solar Impulse (https://www.solarimpulse.com) World efficient Solutions Foundation fighting the Climate change and addressing sustainability challenges while enabling economic growth.

As an Technology Expert Integrator, Crantec ambition is to provide on the market innovative end-to-end Low-carbon high Energy efficient solutions addressing the Climate change, Connectivity, Cybersecurity and security issue in various sectors including Smart Home, Smart Building, Smart Cities, Hospital, Medical, School, Industry 4.0, …

Our field of knowledge and technology include expertise and strong skills on:

- **Networking and hardware Infrastructure** : Power Line Communications, Fibre Optical network, Power Over Ethernet (PoE) as the Backbone and foundation of high Energy efficient Digital and secure network infrastructure with the integration of the Solar Energy as a Power Source ;
- **Wireless Mobile Network Infrastructure**: WiFi and LiFi (Light Communications) high speed Wireless Mobile network solutions integration;
- **Cybersecurity**: Cybersecurity solutions and stack integration;
- **Security**: AI Smart Surveillance and Observation applications integration with real-time video analysis and Deep Learning technology.

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- **Industrial IoT and sensors**: Design and manufacturing of high efficient and secure connected IoT Solutions integrating innovative technologies such as (**PoE, USB-C PD LED Luminaire, WiFi/LiFi Access Point, AI, BLE, Sensors) using 3D Printing Technology**;
- **Light Sector**: Manufacturing of innovative connected and hight efficient LED Luminaire fixture, LiFi /WiFi LED Luminaire Access Point
- **Furniture Sector**: Design and Manufacture of Digital furnitures integrating innovative technologies and connectivity (AI, LiFi /WiFi);
- **Robotics**: LiFi/WiFi solutions integration on robotics for Industry 4.0
- **Artificial Intelligence (AI):** Artificial Intelligence solutions integration on IoT objects, Infrastructures and Network solutions.
- **Machine Learning**: AI Machine Learning solutions integration addressing various sectors such as Security Smart surveillance, Industry process automation, Smart Office Digital transformation, E-Commerce, Services, Banking, Training.
- **Light Communications**: Design and integration of High Speed interference-free secure Wireless communications solutions based on visible light and/or Laser Based Infrared Light.

Crantec have Expertise and skills in key technologies with a great experience over the entire chain of its activities. Crantec vision is to Design, Manufacture, develop and implement low-carbon-based solutions on the market. Crantec solutions rely on Resilience, Connectivity, Energy saving, Energy efficiency, Cybersecurity, Usability.

- **Network Backbone**: Crantec provide a Greentech Networking and Infrastructure solutions based on Fibre Optic (POL, GPON, FTTO (x)) and Power over
- **Ethernet** (PoE++ 802.3bt) Standard technologies as the foundation of low consumption Energy efficient and Energy saving Networking Backbone infrastructure for IP-based Smart Building, Smart Home, Smart City, Industry 4.0….;
- **Connectivity**: Crantec design Low consumption and High efficient and Energy saving LED Luminaire, LiFi / WiFi LED Wireless Access Point Luminaire designed on top of **USB-C Power Delivery high Power LED technology.** Crantec develop innovative USB-C technology to develop new generation of Human Centric LED Lamp Luminaire (Low-carbon) connected on Power over Ethernet Network;
- **Cybersecurity**: Crantec integrate Cybersecurity tools and AI features on its designed products such as connected PoE LED Luminaires, fixtures, LiFi/WFi Access Point, IoT Objects as a connected secure platform.
- **Usability**: Crantec integrate AI solutions for a better and easy User Experience

Over time, Crantec have been able to develop a Vision and a Global Strategy on key technologies. We can supply and integrate global solutions with a joint development on specific projects with ours Partners. We can also assist them from the analysis and proposal of technical solutions to the deployment to ensure the full success of their projects.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Crantec design and Manufacture Digital furnitures integrating innovative technologies and connectivity: AI, LiFi / WiFi) wireless mobile connectivity technologies.

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EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Crantec design, develop and manufacture innovative connected and Low-carbon Energy efficient LED Luminaire, fixture, LiFi /WiFi LED Luminaire Access Point based on USB-C PD high power LED Luminaire technology.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Crantec use 3D Printing technology to design and manufacture its products such as LED Luminaire, LiFi/WiFi Access Point, IoT Device Platform.
Augmented and Virtual Reality	To successfully support the implementation of smart products for VR application, there is a strong needs of high speed, high bandwidth, reliable and low latency network infrastructure, as a backbone and as the foundation of VR Network infrastructure. LiFi is the only reliable high speed Wireless technology which can achieve a low latency to support VR and AI applications. LiFi is a Low-carbon , Energy efficient and Green technology solution to achieve the Net Carbon Network Communications infrastructure. LiFi network infrastructure is based on Fibre Optic technology interconnected with Power Over Ethernet (PoE) LAN Network. LED Luminaires Access Point are then connected to a PoE network which is interconnected with the Optical network Backbone connected to the Internet.
Cybersecurity	Crantec integrate Cybersecurity tools and AI Artificial Intelligence features on its designed products such as connected PoE LED Luminaires, fixtures, Furnitures, LiFi/WFi Access Point, IoT Objects as a connected secure platform.
Industrial IoT (IIoT) & sensors	Crantec design and manufacturing Low-carbon high Energy efficient and secure connected IoT Solutions integrating innovative technologies such as USB-C PD LED Luminaire, WiFi/LiFi Access Point with integrated BLE technology and Sensors using 3D Printing Technology;
Robotics	Crantec integrate LiFi/WiFi Wireless connectivity technologies on robotics, machine for Industry 4.0, Medical solutions, Industrial IoT Devices …
Artificial Intelligence	Crantec integrate Artificial Intelligence AI solutions addressing needs in various sectors such as IoT objects, AI Smart Surveillance, Environment monitoring, Hardware Infrastructures and Network solutions.
Machine learning	Crantec integrate AI Machine Learning solutions addressing needs in various sectorssuch as Security Smart surveillance, Industry process automation, Smart Office Digital transformation, E-Commerce, Services, Banking, Training, using realistic AI Virtual Human Assistant (Digital twin) AI Deep Learning technology.

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Light Communications technology	Crantec is an Expert, Pioneer and Integrator on LiFi Solutions. Crantec have been collaborating and developing LiFi technology with PureLiFi Company for 10 years now: Design and integration of High Speed interference free secure Wireless communications solutions based on LED visible light and/or Laser Based Infrared Light. Crantec have been designed and developed real life LiFi solutions on the market. LiFi is a wireless technology holds the key to solving challenges faced by 5G. LiFi can transmit at multiple gigabits, is more reliable, virtually interference free and uniquely more secure than radio technology such as Wi-Fi or cellular. LiFi is a Low-carbon , Energy efficient and Green technology solution to achieve the Net Carbon Network Communications infrastructure. LiFi network infrastructure is based on Fibre Optic technology interconnected with Power Over Ethernet (PoE) LAN Network. LED Luminaires Access Point are then connected to a PoE network which is interconnected with the Optical network Backbone which is connected to the Internet.

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Technology Uptake Facilitators from ROMANIA

TECHNOLOGY PROVIDER NAME	Asociația Digital Innovation Zone - Zona de Inovare Digitală
Code	041
Location	Iași, Romania
Organization typology	European Digital Innovation Hub
Expertise sector	Furniture
Contact person	Cristina Baghiu Email: cristina.baghiu@digital-innovation.zone Phone number: +40724275435
Website	https://digital-innovation.zone/
Social media	LinkedIn Facebook Instagram X/Twitter
Speaking languages	Romanian, English, French, Spanish

PRESENTATION

Digital Innovation Zone EDIH is an European Digital Innovation Hub active since 2019 in North-East Romania region. It was funded as a private not-for-profit initiative between the Regional Development Agency North-East, 6 universities, 5 chambers of commerce, 2 clusters and several tech & digital marketing companies. Starting 2022, we developed the EDIH capabilities of our consortium and we are part of several industry & DIH associations at EU level, such as DIH2, I4MS, Change2Twin certified DIH, Enterprise Europe Network node, EIT Health & EIT Manufacturing ecosystems via associated partnerships. Since our organization is bridging the gap between research and market, we see ourselves as an essential piece of the national innovation ecosystem.

The Digital Innovation Zone (DIH) EDIH is led by a competent and enthusiastic team with expertise in various domains. The team is passionate about regional development and aims to create a culture that encourages digital development in the North-East Romania region. The governance structure is based on:

- Managing Board: advises and coordinates all major strategic decisions;
- Executive Team: Provides the operational expertise and day-to-day business;
- Special interest Group Leads: we encourage participation and involvement from all interested parties (tech suppliers, ecosystem organizations, etc) that are joining our association as associated partners.

Digital Innovation Zone is the EDIH in North -East Romania. Our main activities are:

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→ test-before-invest (supporting technologies experimentation for our SME customers);
→ access -to-finance (support in developing new business models, grant readiness and investor readiness programs);
→ digital culture & skills programs;
→ ecosystem development and partnership matchmaking.

The technologies that are available through our test before invest service are:

- Process Automation;
- Digital Twin;
- Artificial Intelligence (AI);
- Internet of Things (IoT);
- Virtual & Augmented Reality (VR&AR);
- Cloud;
- Product innovation (Additive Manufacturing/3D Printing);
- Cyber Security and Blockchain;
- 5G laboratory.

The EDIH is built on the regional specialization strategic sectors - with a focus on manufacturing & healthcare, having as Key Enabling Technologies Artificial Intelligence (applied at all levels).

The main benefits in using our services are:

-Unique service offerings - As the only EDIH in the North-East region of Romania, our unique service offerings can help differentiate us from competitors in our region and attract companies seeking digital innovation solutions.

-Access to a growing market - With a relatively low density of SMEs in the region, there is significant potential for growth and market penetration in the manufacturing and healthcare industries, two of our main target industries.

-Strong government support - Our DIH services are supported by the government of Romania (National Authority for Digitalization), as well as the Regional Development Agency.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

We worked during 2019-2021 with a regional leader in manufacturing industry, NordArin Prodcom, to support him to advance his digitalisation level, via a pilot innovation project.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	The proposed technologies support the exploration and development of solutions for the development of innovative medical devices through the design thinking approach. It also contributes to understanding the advantages of additive manufacturing with the possibility of introducing 3D printing technology both in the prototyping phase and in the technological flow. We provide advice on determining the optimal material as well as the method of 3D printing for a given application.

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	Our partners *TUIASI* and *University of Medicine and Pharmacy Grigore T. Popa Iași* can provide these technologies.
Augmented and Virtual Reality	With the help of XR* technologies, a variety of business operations in different industries can be improved, including in the area of training, collaboration, remote assistance and more. XR Technologies: Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) The Hub's XR experts can help to discover the various benefits that AR, VR and MR technologies can bring to the organisation through research, proof-of-concept and innovative solutions. We can help to look beyond the 2D world so a client can better manage his assets, increase his productivity and improve customer experience. Our partener *TUIASI* can provide this technology
Big Data & Analytics	Our hub can provide a series of web services that can be integrated into any patient management application so that these applications benefit from the advantages of cloud storage of medical data. Among the benefits of implementing these services in a medical application are: Online medical appointments; Automatic completion of medical records; Online medical consultation; Collection of medical services rendered; Obtaining GDPR consent online. *TUIASI* and *RomSoft* can provide these technologies.
Cybersecurity	In this sector we cover 4 areas: **Digital Identity and Traceability Blockchain**: we have developed the DigitalME tool (Digital Maturity Evaluator).This is a tool that allows to uniquely identify a machine or product user and keep all his data in a secure way, using the SSI* (Self-Sovereign Identity) concept: personal information, delivery locations, shopping preferences, anthropometric data, patient health records, product label, login data, etc. data is stored on the user side.It can be used in any sector as a method to validate identity and to store and access personal data in a secure way; **Public Institutions**: The development of self-sovereign identities (SSIs) based on blockchain technologies gives citizens ownership and control over their personal data and allows them to share their data using a kind of "digital safe". **Industrial production**: DIZ specialists offer consultancy in order to implement a technology through which you can follow the traceability of a product throughout the supply chain and offer you the opportunity to keep all the company's digital data in a secure way. **Health**: Our team advises on the implementation of a technology that allows the unique identification of a patient and the preservation of all his data in a secure way, using the concept of SSI self-sovereign identities.

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	TUIASI and *Webmagnat* provide these technologies.
Industrial IoT (IIoT) & sensors	**IoT, Clod Computing**: The proposed cyber-physical system consists of a network of wireless sensors capable of real-time monitoring of the clinical environment, the presence of people in a room as well as the detection of their actions. The aim is to target the most common sources of infection as well as the most common ways of their transmission, known from the specialized literature. The system will monitor several clinical scenarios that are known to play a role in the transmission of nosocomial infections, based on a rules engine with the help of which it will be possible to define the hygiene rules that want to be monitored and respected. **Awareness raising – IoT**: Remote monitoring (at the patient's home) of vital parameters (heart rate and rhythm, blood sugar, blood pressure, oxygen saturation, etc.), environmental variables (domotics) will allow doctors to identify changes in the patient's condition as soon as they occur , so that timely intervention can be made if necessary. The patient can also be in continuous contact via a tablet or smartphone with the healthcare team that monitors his condition. *TUIASI and University of Medicine and Pharmacy Grigore T. Popa Iași can provide these technologies.*
Process Automation	Efficient implemented robotics, such as material handling, welding, MIG, spot and arc welding, etc., will enable SMEs to improve the safety standards, the quality of their products and their resources usage. **Logistics 4.0**: Through the use of autonomous mobile robots and cloud, we offer the possibility of rapid automation of the transportation of materials within production systems as well as within logistics warehouses. We can also interface mobile robots with warehouse management systems. **Computer Vision**: We offer consultancy in the field of integrating computer vision systems into production processes with the aim of minimising human operator intervention, optimising operational efficiency and reducing production costs. **Supervisory Control & Data Acquisition (SCADA):** Through SCADA systems, we can control system architecture, network data communications, and graphical user interfaces for high-level oversight of machines and processes. We provide SMEs with guidance and support in the development of algorithms, procedures and support platforms for the implementation of intelligent control systems. *TUIASI can provide these technologies.*
Artificial Intelligence	Useful for product proposals via apps and for product development. AI has the potential of impacting the whole product design, increasing customisation. Lower errors and higher creativity in production. **Data Platforms, Business Intelligence (BI), and Artificial Intelligence (AI):** Considerable investment is being made in creating reliable and secure data

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	platforms that are the foundation for deeper use of data through business intelligence (BI) and artificial intelligence techniques and tools. **Dara Platforms and AI/ML Awareness**: Individuals, projects and organisations have their own unique context and specific needs, so there is no "standard" training. That's why the approach we take to the training effort consists of a set of phases that all boil down to a larger overall value: discovery, adaptation, delivery, follow-up. *Strongbytes can provide this technology.*
5G Laboratory	The new 5G laboratory inaugurated within TUIASI will work in a complementary way with the one in Bucharest, but a good part of its activity will be focused on the research and development of intended solutions transport and mobility of the future. The Orange 5G Lab in Iasi is equipped with technologies that will be available in the commercial network in the future, which can only be tested today in a laboratory environment: **5G Standalone Virtualized User Plane Function** – the local component that processes the traffic **5G and makes the connection with the core network of Orange 5G Lab Bucharest**; **5G New Radio** – the radio access component of the 5G infrastructure; **Open RAN & Open Core** – separation of software from hardware and virtualization of the radio network or the core network that allow the system to run on CoTS (Commercial-of-the-shelf); **Edge Computing** allows reducing the distance between users (applications) and services (data) and facilitates the guarantee of transmission latencies and throughput as required by services and applications.
Digital Twin	The digital twin has as its central point the generation and use of a virtual replica of a real system. In industrial production, with the help of the digital twin, a company can test and validate a product even before it physically exists. **Industrial Production**: DIZ specialists provide consultancy in the field of creating a replica of the production process. You will have access to a high-performance infrastructure for testing and experimenting with the appropriate technologies (CAD software, industrial robot infrastructure, simulation software, etc.) and you will be able to analyze and experience working scenarios with digital twins such as the use of robots in manufacturing processes. **Health**: The digital twin in medicine (GDM) is defined as the virtual representation ("digital twin") of the patient ("physical twin") that is generated from multimodal patient data, population data, and real-time updates of environmental variables and vital parameters of the patient.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	il-Silv soluții inginerești srl
Code	044
Location	Miercurea Ciuc, Romania
Organization typology	Wood engineering solutions
Expertise sector	Furniture
Contact person	Molnár Gábor Email: office@ilsilv.ro Phone number: 0040745228438
Website	www.ilsilv.ro
Speaking languages	Romanian, Hungarian, English

PRESENTATION

Technical solutions for the wood industry. Through our activity we offer partners design, planning and preparation process, respectively design and optimization technological processing lines, technical audit, necessary for the manufacture of wood and wood-based products.

At the same time, through technical consultancy we can help to develop technical solutions for wood industrialization, needed to access funds through projects. By working with the consultant, we can find the optimal technical solution that is necessary for you.

The product offered is the technical documentation necessary for furniture production and finished products made of wood and wood-based materials, consisting of: 3d drawings in space, 2d in plan, sections, details, drilling schemes, assembly schemes, nomenclature, consumption rules, general drawings, 3D renderings.

As a first step is to find out what your company has and what technological flow reaches the finished product. We do not want to have to spend extra to work with us, we want to settle on your pace and technology, as if we were working in the workshop. For this we will visit your factory and learn how it works. At the same time, we get to know your style of making the technical documentation, the level and degree of complexity required by the workshop for the technical documentation, the components you use for the technical documentation.

The final product is conceived as modular, that is to say from the technical documentation what the partner wants. For example, 3d, or 3d and 2d with the landmarks list etc.

At the same time, through the service contract, the beneficiary, you, of the realized product will perform verification through his own verifier, which means the final acceptance of the realized product and now the established fee will be invoiced.

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Your company receives the technical documentation online, verifies it and teaches in production. Since it is designed in their style of production, those in production will have no problem using it.

Collaboration is based on contract on project, after verification and acceptance, we bill for the fee. Occasionally or continuously, we can collaborate. In the collaboration contract we also have a confidentiality clause. The copyright will be yours only the right of use as good practice will have our company as a supplier, but with your written consent for use.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Furniture design engineer, with phd and over 20 years of experience. I have expertise in furniture production, tools and machine for furniture manufacturing, respectively I was also a manager of a furniture factory. Now I am a manager of a wooden houses and furniture factory also I manged my own furniture planning ltd.

ORGANIZATION EXPERTISE

Externalized furniture planning	We offer partners design, planning and preparation process, respectively design and optimization technological processing lines, technical audit, necessary for the manufacture of wood and wood-based furniture. Furniture planning engineer, with phd and over 20 years of experience. Now I am a manager of a wooden houses and furniture factory also I manged my own furniture planning ltd.
Manufacturing Process Optimization	Advanced techniques such as Lean Manufacturing, Six Sigma, or other optimization methodologies to improve the efficiency, quality, and productivity of wood manufacturing processes. I have expertise in furniture production, furniture manufacturing, respectively I was also a manager of a furniture factory.
Computer-Aided Design (CAD)	Advanced CAD software to design solutions for wood and wood-based products. This technology enables precise and efficient design processes. With experience in using AutoCad, Imos, SolidWorks.
Industrial Automation	Automation technologies, such as robotics and control systems, might be utilized to streamline and optimize the technological processing lines. This could involve the use of computer-controlled machinery and robotics to enhance productivity and precision in wood processing. With expertise in furniture production, tools, machines, cnc-s for furniture industry and experience in industry 4.0 for furniture manufactures.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	INNO Robotics SRL
Code	007
Location	Cluj-Napoca, Romania
Organization typology	Tech Provider
Expertise sector	Furniture
Contact person	Mihaela IOANEȘ Email: mihaela.ioanes@inno-robotics.com Phone number: +40765 335 040
Website	www.inno-robotics.com
Social media	LinkedIn
Speaking languages	Romanian, English, Spanish

PRESENTATION

Inno Robotics is a wholly Romanian-owned company started in 2011. It has become the largest national integrator of fully automated solutions of industrial robots, while also gaining the trust of our external customers. Over the years its projects have been implemented in various industries: automotive, aeronautics, metal processing (CNC assistance, presses, bending machines, welding), porcelain processing industry, etc. The expertise developed over time is mainly in robotic automated welding processes, machine tending and palletizing of various products.

Company offers to the customer the complet autotomated solution for the industrial production process that needs to be automatized by offering, toghether with the products, services as: defining the technical solution, making mechanical and electrical design, manufacturing the parts needed for the robotic cell, developing the software for robot and PLC, providing the installation of the robotic cell, testing and validation, training for the operators, technical support after sale, warranty and post-warranty services.

The main advantage that INNO Robotics has is the wide know-how in robotic automation domain and in-house manufacturing workshop where at least 90% of the components of an automated cell that requires mechanical processing are produced, thus allowing to have a real control over the product quality and the execution deadlines.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

INNO Robotics has experience in automation of production processes in wood manufacturing. One of the most complex projects was handling and palletizing of hanger coats.

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ORGANIZATION EXPERTISE

Robotics	We have already developed a series of automated welding solution with incredible performance and succes on Romanian market. WeldPro can be easily adapted to the changing type of manufactured parts. From small series production to high volume production. We have designed this product to provide flexibility for production changes and it can be easily reprogrammed for new production parts if necessary. For material handling we also have experience in palletizing solutions in various industries and also CNC or presses tending. CNC tending cells can serve up to eight machine tools. They can easily handle small batches of parts and combinations of batches within the same machining process.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	TESAGON INTERNATIONAL
Code	006
Location	PAULESTII NOI, Romania
Organization typology	Tech-savvy company
Expertise sector	Furniture
Contact person	IULIA MATEI Email: iulia.matei@tesagon.com Phone number: +40 786 393 801
Website	https://about.tesagon.com/
Social media	LinkedIn Facebook
Speaking languages	Romanian, English, Spanish, French, Hungarian

PRESENTATION

Tesagon International was founded in 2015 to fulfill the need for quality, custom-made, quickly implemented cloud systems. Our team successfully designed and developed custom-made ERP solutions for clients in various industries. We've gained experience implementing solutions for vending machine operations, custom furniture manufacturers, map-based tracking of alerts and assets.

We provide the following services:

- ❖ Systems design
- ❖ Custom made software
- ❖ Engineering
- ❖ Consulting
- ❖ Web development

Products developed by us:

3DAll - Presentation, design, and production management solution for custom furniture manufacturers, developed on imos software platform, the world leader in the field. https://3dall.ro/

IWerp - ERP tool, created and developed on the specific of the furniture production industry - an integrated management system of all the processes and operations of the company. https://iwerp.ro/

Digital Dynamic – Sales and marketing tool for presenting spaces or products through professional virtual architectural solutions (dynamic rendering). https://digitaldynamic.eu/

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SILEO — SMP-COSME-2021-CLUSTER

Research, innovation and development are very important to us. Therefore, we were part of several R&D projects with public funding that you can find more about at https://about.tesagon.com/

We are passionate about open source technologies and use them to deliver the best technical solutions at the best price. Using agile development methodologies, we can adapt very fast to changing needs in this fast-paced world we live in.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

We have over 10 years of experience in the furniture industry. We are constantly on an active search to find the best solutions to specific problems, as well as optimal ways of working that provide overall efficiency and lead to minimizing the resources used and therefore costs.

We develop proven integrated solutions that offer a fast and efficient way of working and that work for both small and very large companies. In addition to custom developments for this industry, we have our own products (3D ALL and iWERP) that we have created for furniture manufacturers.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	We create immersive VR presentations for spaces and products using real time renderings. https://digitaldynamic.eu/
Big Data & Analytics	We created and developed an integrated management system for all processes and operations of the company, customized for furniture manufacturing industry. https://iwerp.ro/
Digitalisation of marketing and online trading	https://www.dressing.ro/ - online furniture configurator for dressings. Based on the final configurations, furniture can be directly sent to production without further investment of time and resources. 3dall.ro

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SILEO — SMP-COSME-2021-CLUSTER

Technology providers from SPAIN

TECHNOLOGY PROVIDER NAME	ACONDICIONAMIENTO TARRASENSE (LEITAT)
Code	016
Location	Terrassa, Spain
Organization typology	Digital Innovation Hub - Digital Industry
Expertise sector	Lighting/Furniture
Contact person	Vincent Jamier Email: vjamier@leitat.org Phone number: +34 93 788 23 00
Website	**www.leitat.org**
Social media	LinkedIn
Speaking languages	Catalan, Spanish, English, German, French

PRESENTATION

Founded in 1906, Leitat is one of the reference entities at national and European level in technology management. It has a team of more than 500 professionals, experts in applied research, technical services and management of technological and innovation initiatives. Leitat provides social, industrial, economic and sustainable value, offering comprehensive solutions in multiple sectors and areas: development of new materials, eco-sustainable production, occupational health prevention systems, revaluation of waste and use of natural resources, interconnectivity and digitization of industry, green energy and maximization of energy efficiency. Leitat is recognized by the Ministry of Economy, Industry and Competitiveness and is one of the main entities participating in Horizon 2020 and Horizon Europe.

Digital Industry department improves industrial competitiveness through access of state-of-the-art facility (DFactory) and knowledge transfer in the field of additive manufacturing and 3D printing (Leitat is member and manager of the International Advanced Manufacturing 3D Hub IAM3DHUB), robotics and automation, 5G & IoT, vision & photonics and artificial intelligence under open innovation models for the development of research and innovation projects, with a tech transfer and industrial adoption vision for a positive impact and return to the society.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Design and development of components and new disruptive solutions in AM3DP, structural elements, solutions for seatings and cushions with lattice structures, obtention of complex geometries, special series, on demand manufacturing, customized designs, prototyping.

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ROBOTICS: Associated robotics processes: assembly, union, machining, cutting, machine tending, palletizing, packing, vision, force control. P&V: integration of photonic materials for decoration, and optoelectronic devices such as solar cells, LSC, etc.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

AM3DP: Design and development of components and new disruptive solutions in AM3DP, inner & outer components (structural/shape/aesthetics), electrical connectors and heat dissipators, obtention of complex geometries, special series, on demand manufacturing, customized designs, prototyping. ROBOTICS: Associated robotics processes: Assembly, union, cabling, machining, machine tending, vision, force control. P&V: optical modelling and development of prototypes, including light sources, mirrors, diffusors, etc.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Technology consulting & adoption journeys; Design, redesign, optimisation of parts and development of new advanced industrial applications (solidworks, rhino, grasshopper, altair suite, magics…); customized trainings; parameter development of new AM materials; 3D printing with various materials (polymers in filament, powder, resins; metals -stainless and tool steels, nickel alloys, aluminium, titanium, copper-; sands for moulds) and different AM technologies (VAT -SLA, DLP, LCD-, FFF, MJF, SLS, SLM, BJ, GDP); development of new strategies and systems for post processing of AM parts (sandblasting, tumbling, shoot peening, electrochemical polishing, coatings, surface treatments, heat treatments); AM process digitalization and predictive models.
Big Data & Analytics	System architecture. Design of data pipelines and implementation of AI systems, both knowledge and information bases systems.
Cybersecurity	Implementation of different technologies, such as hardware secure elements integration or single sign on methodologies.
Industrial IoT (IIoT) & sensors	Leitat has been involve on three main areas: data generation, connectivity, edge computing and hardware security. On data generation for indoor and outdoor applications the parameters to be monitoring are analysed in order to design and /or select the transduction strategy to data capture and digitalization. On connectivity, channel bandwidth and data-rate are also analysed before to select the most appropriate band for interconnect sensors with dataloggers, PLC, mobile phone, servers or cloud. Design of privative and secure networks. Apply strategies against cyberattacks. Hardware is hardened and secured by design and also using cryptography at hardware & software levels.

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	Low power sensor networks and depending data topology, design battery-less sensors. Design and develop, Node sensors with EDGE computing with the aim to use artificial intelligence to analyse, categorize al data reported by deployed sensors. Sensors' design and integration of commercial ones. Data connectivity layers, MQTT, OPC-UA, Rest interfaces, JSON, non-relational data bases.
Robotics	Expertise in industrial robotics processes (welding, painting, machine tending, assembly…). Robotics lab for development, testing and validation of new robotic abilities, processes, and functionalities, based on enabling technologies such as artificial vision, navigation, force control, light manipulators, and sensors. Logistics processes with autonomous mobile robots. Leitat manages and operates the space and equipment available in the shared laboratory (including ATEX robotics area), offering different technological services, capabilities, expertise in robotics and automation according to the different levels of process complexity. The lab includes industrial and collaborative robots, AMR, 2D and 3D vision systems, robot end effectors and peripherals. Expertise in different enabling technologies such industrial control and communications, AI enabled robotics, digital twins, ROS modelling, vision, and sensors.
Artificial Intelligence	Development of pre-processing methodologies and analytics for data cleaning purposes, to support creation of good data training sets. Image and data-based systems.
Machine learning	Use of different algorithms to support regressions, classifications and clustering problems.
Photonics & Vision (P&V)	Expertise in five productive sectors: Industry, Energy, Health, Agri-Food and Environment. Since 2017, working under private contracts, developing solution at different grade of maturity. Some examples are: 1) design illumination system for sorting machinery for use hyperspectral camera in plastic sorting lines. 2) Design and develop different sunlight management system for energy field, for example for the integration of solar cells in urban furniture. 3) Development of photoluminescent materials for decorative applications and for energy harvesting.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	Aumenta Solutions
Code	023
Location	Barcelona, Spain
Organization typology	Deep tech company
Expertise sector	Furniture
Contact person	Pere Roset Email: pere@aumentasolutions.com Phone number:+34650307019
Website	www.aumentasolutions.com
Social media	LinkedIn X/Twitter
Speaking languages	Catalan, Spanish, English

PRESENTATION

Since 2013, we are pioneers in the integration of Augmented and Virtual Reality with cutting-edge technologies such as Artificial Intelligence, IoT, Blockchain, Edge Computing, and Holographic Transmission via 5G networks. These advanced technologies enhance the capabilities of our Augmented Reality solutions, allowing us to provide even more efficient and effective tools for virtual training, geolocated information access, remote assistance in repairs and maintenance, and product and installation planning and development. Our company's commitment to innovation and technological excellence makes our Augmented Reality applications a leading choice for businesses seeking to optimize their operations and stay ahead of the curve.

A list of our clients includes Space X, Seat,Alstom, Nissan, Iveco, Epson, Medtronic, J&J, MWC, Caixabanc, Fundació Miró, Verizon, Nokia, Telefónica, GSK, Pfizer, Banak, Aguas de valencia among others.

Some of our products:

- **DMAI: First Blockchain, IoT an AR platform for Active Maintenance**

AR No code Step-by-step SMARTGLASSES guide for maintenance/service procedures. Utilizing blockchain technology, IoT, and augmented reality (AR), this innovative platform enables real-time maintenance data sharing, increasing efficiency and reducing downtime.

This platform enables maintenance workers to access digital information, including schematics and maintenance manuals and visualize IoT remote data while on-site and allows for the certification of user tasks with Blockchain. - Identifies and certifies with Blockchain the operator's location and Timestamp. - Visualize IoT data in AR -Generate Blockchain certified images of the maintenance operations carried out.

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- **5G POWERED AUGMENTED REALITY HOLOGRAM ASSISTANTS**

Virtual assistants based on 360 volumetric video and displayed on real time using Augmented Reality powered by edge cpmputing and 5G. As example, discover the main activities and events related to 5G technology during the last MWC22 by downloading the APP 5G Railway Lab developed by Aumenta Solutions. https://play.google.com/store/apps/details?id=com.mwc.highlights&gl=ES.

- **LIGHT FIELD HOLOGRAMS**

Immersive experiences with the world's first group-viewable 3D holographic displays. No headset required. As a use case of this breakthrough technology we developed the project "ZOOHHH!" which offers new experiences to child hospital patients. Through this pilot project with 5G and LIGHT FIELD holographic technology, presented at the Sant Joan de Deu Hospital in Barcelona, the aim is to bring some animals from the Barcelona Zoo closer to boys and girls from the hospital to improve their mood and reduce the impact of hospitalization.

- **PLACE**

Smart placement of 3D objects on real places using Augmented Reality.

For furniture, we developed placement applications for companies like Banak and Puertas Sancas showing how their products appear in a real environment.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Developing AR applications for several furniture manufacturers in Spain.

ORGANIZATION EXPERTISE

Augmented and Virtual Reality	More than 10 years of experience on AR/VR/MR with more than 100 projects and top clients.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	DI3 GESTIÓN DE LA ENERGÍA S.L.
Code	036
Location	Badalona – Barcelona, Spain
Organization typology	Industrial Engineering - Tech-savvy company
Expertise sector	Lighting
Contact person	JORDI PORTA NEBOT Email: jporta@di3ingenieria.es Phone number: 609366050
Website	http://www.di3ingenieria.com/index.html
Speaking languages	Catalan, Spanish, English

PRESENTATION

Di3 Energy Management S.L., is an engineering dedicated mainly to energy management in its different facets, energy management and monitoring, lighting system management and monitoring, energy study audits, creation of computer platforms.

Our services are intended to facilitate the management and saving of energy, with applications that are both useful and simple for system operators.

Our systems are fully multi-brand, so that they can exchange information with products from any manufacturer.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Gallery of the Royal Collections of Madrid, Exhibition Hall of the Mapfre Foundation Barcelona, Exhibition Hall of the Mapfre Madrid Foundation, Garriga Nogues Museum Barcelona, Bullfighting Museum of Cordoba, La Casa Encendida Exhibition Hall of Madrid, Carlos V Museum in the Alhambra in Granada , Toledo Army Museum, Malaga Customs Museum, Salamanca Museum, Fundacion Telefonica on Gran Via in Madrid, etc.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Online control and management of the energy consumed in the production of more than 40 industries, with the consequent follow-up of production costs by product type.

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Augmented and Virtual Reality	Implementation of virtual reality systems for courses and training of operators in the operation of machinery.
Big Data & Analytics	In our ONLINE energy management platform, we analyze the times, volumes and periods of all the productive periods, in order to detect the possible improvements in productivity and costs.
Industrial IoT (IIoT) & sensors	For all the data recapture tanks, use presence detectors, light sensors, temperature probes, flow meters, thermostats, tachometers, pulse meters, analog communication 0-10 I 4-2mA.
Artificial Intelligence	The implementation of AI is being studied, to improve the scene selection processes, operating time, and the entire operability of the system.
Image scripting technologies	A virtual demo is being created with a real scenario where you can demonstrate online the features of the platform.
WebAR	Technology pending study of feasibility, costs and implementation.
Machine learning	Initially the AI, (and pending study of new services), the AI cannot personalize our sale of services.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	Enlighting Technologies SL (KUMUX)
Code	018
Location	Barcelona, Spain
Organization typology	Software
Expertise sector	Lighting
Contact person	Adrià Huguet-Ferran Email: adria.huguet@kumux.io Phone number: 690044863
Website	www.kumux.io
Social media	LinkedIn
Speaking languages	Catalan, Spanish, English, Italian, Portuguese

PRESENTATION

KUMUX is a spin-off of the Faculty of Physics of the University of Barcelona that was born in 2017. The company currently has 7 highly qualified employees within the world of software, control and lighting.

Due to its strong links with academia, KUMUX has a high level of experience in technology transfer. In addition to holding a patent protecting its core technology, KUMUX has participated in numerous scientific studies related to algorithms applied to lighting, including a collaboration with the Barcelona Supercomputing Center.

KUMUX offers software in the form of an API capable of being integrated into any lighting control system that allows to simulate natural light cycles autonomously based on geolocation, datetime or activity (office, hospitals, nursing homes, schools...). This has a high impact on people's health and well-being and positively affects cognitive performance and patient recovery. In addition, we have a spectral design platform to apply complex simulation algorithms to multichannel luminaires.

Our service is fully user-centric, so the software makes decisions to provide the best light without the user having to take any action beyond turning the lights on and off, just as they would in a traditional lighting system.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

The founding team of KUMUX has been working for more than 10 years in the lighting sector from a scientific point of view. After 6 years developing technology, KUMUX has managed to make a niche for itself among large companies in the sector, managing to partner with control companies such as Casambi, Tuya or KNX, among others, and certification companies such as UL. In these years KUMUX has participated in circadian lighting projects applied to offices, hospitals, nursing

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homes, universities or outdoor public lighting as a technology supplier. In addition, it has also provided software solutions to some of its technology partners that include technologies related to artificial intelligence, machine learning or software development, as well as consulting services.

ORGANIZATION EXPERTISE

Artificial Intelligence	Ability to apply algorithms related to the field of artificial intelligence, such as computer vision or machine learning. As an example, we developed software that was able to automatically digitize thousands of images of LED spectra from datasheets, something that would have taken thousands of hours of dedication if done manually.
Machine learning	Ability to apply machine learning algorithms to improve product features. As an example, we applied a neural network to a colorimetric sensor to increase its resolution and be able to calculate colorimetric parameters such as CRI, which would otherwise have been impossible.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	INNOVA IT SL
Code	030
Location	Mataró (Barcelona), Spain
Organization typology	Tech-savvy company
Expertise sector	Lighting/Furniture
Contact person	Francesc Rodon Email: frances.rodon@innovait.cat Phone number: 676565038
Website	WWW.INNOVAIT.CAT
Social media	LinkedIn
Speaking languages	Catalan, Spanish, English

PRESENTATION

Innova IT S.L. is a company founded in January 2004 by two young entrepreneurs, senior technical engineers, with the aim of making their customers more efficient, effective and competitive thanks to the automation of their production processes.

Innova IT staff continuously strives to provide a personalized response to our clients, trying to adapt and be flexible to changing situations and contexts. We are experts in the development and implementation of industrial software, and we have a wide range of technological solutions for Industry 4.0 that go hand in hand with a complete service that encompasses all the stages and processes involved in the development of a Project:

- Industrial IoT
- Planning POLCA
- MES
- CMMS
- Analytics & Machine learning
- System integration
- Advanced technologies
- Digital Consulting
- Industrial Automation

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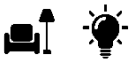
EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:



We can contribute our knowledge and experience in companies in the furniture and lighting sector with the implementation of production planning systems.

ORGANIZATION EXPERTISE

Big Data & Analytics	Development of dashboards in power BI.
Industrial IoT (IIoT) & sensors	Development of an own production planning application (POLCA) Legionella control application for preventive maintenance Water consumption application. Development of traceability solutions for assembly parts Development of our own hardware for data capture and its subsequent treatment to obtain information from the production line. MES and CMMS solutions Digital Consulting
Artificial Intelligence	Predictive maintenance platform for virtual monitoring in the metaverse of photovoltaic installations.
Machine learning	Installation of sensors for preventive maintenance (Sewage treatment).

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LAMÁQUINA

TECHNOLOGY PROVIDER NAME	LAMÁQUINA
Code	035
Location	Barcelona, Spain
Organization typology	Advanced Manufacturing Centre
Expertise sector	Lighting/Furniture
Contact person	Yara, Tayoun Email: yara@noumena.io Phone number: +34 937420927
Website	https://lamaquina.io/
Social media	LinkedIn
Speaking languages	English, Italian, Spanish, French, Turkish, Greek

PRESENTATION

LaMáquina by Noumena is an advanced manufacturing centre, introducing sustainable 3D printing solutions. With a team of young engineers, researchers, and robotics experts, it is part of the Noumena group since 2017 and offers services for architecture, interior and product design and retail and commercial sector that range from concept engineering, using advanced computational design tools, to advanced manufacturing, rapid prototyping, 3d mass customization production pre-assembly test, assembly on-site and assistance until the correct delivery of the project is certified.

Through different mediums and processes, our team works with various materials approaching projects with an innovative mindset. Computational design allows us to deal with complex digital forms and push the boundaries of the 3d printing technology. Our Facility uses state of the art machinery combined with 3DP technology to contribute to the large-scale fabrication in the aec industry. We are equipped with a variety of industrial robots, including the 6 axis abb robotic arm, delta wasp - one of which consistently prints in clay, a resin printer and a series of smaller scale printers. We promote material innovation, deploying alternative manufacturing solutions driven by sustainability. We consult and develop projects together with our clients blending advanced sustainable materials with innovative printing strategies, focusing on the relationship between leading-edge aesthetics and environmental awareness.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

LAMAQUINA has more than 6 years of experience in high-end furniture and interior components manufacturing. We have designed and fabricated together with renowned clients, designers and artists alike, furniture elements such as chairs, benches and varied seating elements, tables, lighting fixtures, sculptural elements, bars and partition panels.

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EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

LAMAQUINA designs and produces its own range of products, in addition to offering consultancy in defining a creative workflow for innovative product development. Services include design engineering, advanced manufacturing processes and material research for the production of small, medium and large scale design products.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	LAMAQUINA has advanced expertise in both Large scale 3d printing projects such as : Facade Partition for the Bafta Theatre London, Exhibition installation for the Spanish Pavilion at Dubai World Expo, in retail for the WOW store in Madrid, Presented by Stores in Riyadh and Dubai; and in smaller scale products and furniture such as a ceramic printed table for Kettal, retail stand elements for Jimmy Choo, along other installation for renowned exhibitions such as the Venice Biennale. We work to deliver the most innovative solution for an impactful and customised manufacturing solution for our clients that include designers, architects and artists.

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TECHNOLOGY PROVIDER NAME	Maqmetal Automation SL
Code	026
Location	Fogars de la Selva, Spain
Organization typology	Industrial robot & automation integrator and development
Expertise sector	Lighting
Contact person	Daniel Pascual Email: daniel@maqmetal.com Phone number: 646 123 848
Website	**Maqmetal.com**
Social media	LinkedIn
Speaking languages	Spanish, English, Catalan

PRESENTATION

Maqmetal Automation S.L., we are an industrial process automation company located between Girona and Barcelona.

Our expertise lies in robotic engineering, automation, and specialized machinery, and we are dedicated to innovation in these fields.

We are proud to offer a range of services that include robotic cells for loading and unloading, manipulation, palletizing, picking and placing, machining, cutting, and polishing.

We also provide artificial vision and measurement systems, EOAT/robot hands, special machinery, and installations of pneumatic transport systems for plastic materials.

Our team also offers engineering services such as project feasibility studies, 3D simulations, and layouts, as well as maintenance and remote assistance services. We are committed to providing our clients with reliable and cost-effective solutions for their automation needs.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Manufacturing, design, moulds, assembling (Lighting industry).

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ORGANIZATION EXPERTISE

Industrial IoT (IIoT) & sensors	Our company has developed dedicated software and hardware for reading and recording sensor data, in order to remotely monitor and capture real-time information from automation systems. With powerful predictive analysis tools, this data can be used for maintenance, improvement, and optimization of production processes. We have dataloggers and full experience in communications with PLC and computers and WEB server to provide full tracking tools.
Robotics	Our company specializes in the integration of 6-axis robots and all types of industrial automation that enable productivity improvements in handling and manufacturing processes. We develop full robot cells with collaborative robots, 6 axis robots, tandem robots, automation stations, cut stations, threat stations. All under CE standards.
Image scripting technologies	Our automation systems can integrate artificial vision systems for quality control and verification of automated steps, ensuring safe and complete production data logging. We use hyperspectral camera-based artificial vision systems, including VIS-NIR (visible-near infrared) vision technology.
End of Arm Tools (EOAT)	We have a strong capability for handling End of Arm Tools (EOAT) grippers. Our team is highly skilled in designing and implementing customized EOAT solutions for a wide range of industrial applications. Our expertise includes the integration of advanced sensing and control technologies to optimize the performance and reliability of EOAT systems. With our comprehensive knowledge and experience, we can provide our clients with highly efficient and cost-effective solutions for their specific automation needs.
Also we develop a custom **API bridge software** for communication al full tracking of parameters process.	

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noumena

TECHNOLOGY PROVIDER NAME	NOUMENA DATA SERVICES SL
Code	034
Location	Barcelona, Spain
Organization typology	Tech company
Expertise sector	Lighting/Furniture
Contact person	Yara, Tayoun Email: yara@noumena.io Phone number: +34 937420927
	Julia, Borges Email: admin@noumena.io Phone number: +34 937420927
Website	https://noumena.io/en/
Social media	LinkedIn
Speaking languages	English, Spanish, Italian, Catalan

PRESENTATION

Founded in 2021 as part of Noumena Group, Noumena Data is a tech company implementing data-informed solutions for spatial analytics and strategic planning. Since 2011, Noumena Group has been developing practices that integrate cutting-edge technologies to study and analyse spatial dynamics. The mission of the group is to develop metrics and tools in various sectors and scales that enable decision-makers to find more efficient, resilient, and sustainable spatial solutions.

We lead the way in AI-driven Spatial Analytics and metrics for enterprises and organisations. Our solution enables leaders to unlock and understand complex spatial data within their spaces through our advanced visualisation platform. Our solution is a comprehensive tool that empowers decision makers with valuable insights into customer behaviour to make informed decisions that enhance their customer journey, create better customer experiences, and ultimately increase customer satisfaction. Our working methodology incorporates data collection, data processing, and spatial monitoring. Our portfolio of work includes the application of these methodologies in various projects related to urban analysis, precision agriculture, and commercial spaces through the creation of digital twins, the implementation of autonomous systems to collect data, detecting and monitoring the physical characteristics of a site through cameras and on-board sensors to establish criteria for spatial decision making.

EXPERTISE PROVIDED IN THE FURNITURE & LIGHTING SECTOR:

NOUMENA DATA offers data-driven business growth services and has experience in the retail sector, on a variety of products, working on commercial spaces integrating

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software and hardware solutions to capture, analyse, and process data from stores. Our infrastructure includes sensing devices to gather information from the physical space, AI algorithms to process data, and an online platform to access, visualise, and monitor the results.

ORGANIZATION EXPERTISE

Big Data & Analytics	Development of custom algorithms to extract relevant information for the client and provide it through a platform with user friendly interface to visualise the processed data.
Industrial IoT (IIoT) & sensors	Noumena's data collection system architecture is organised as a network of edge computing devices, where each element is designed as modular components hosting sensors, cameras, and computing power capacity. The sensing system units are smart hardware devices integrating cameras and multiple sensors to collect ambient data through CO2, humidity, noise, and lighting sensors. All data is processed and made available on Noumena's online platform, converting data into spatial information translated into maps, sections, and data charts.
Artificial Intelligence	The use of AI for the creation of predictive models.
Machine learning	Spatial Monitoring: AI-driven spatial analysis. We develop spatial algorithms to reveal invisible patterns of human behaviour and their spatial expression. Through computer vision and machine learning, NOUMENA DATA implements strategies to track and monitor spatial dynamics, discovering associations between each individual component. Our goal is to produce informative geographic representations of spatial occupancy to drive strategies such as energy consumption in buildings, urban analysis, agricultural practices, or on-site construction management.

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ÒSCAR BEÀ I TORRAS
ORGANITZACIÓ I TRANSFORMACIÓ DIGITAL

TECHNOLOGY PROVIDER NAME	Òscar Beà Torras
Code	029
Location	Barcelona, Spain
Organization typology	Digital transformation Consultant for SMEs
Expertise sector	Lighting/Furniture
Contact person	Òscar Beà-i-Torras Email: oscar@beatorras.cat Phone number: +34 620 927 655
Website	https://oscarbea.com
Social media	LinkedIn
Speaking languages	English, French, Catalan, Spanish

PRESENTATION

Òscar Beà-i-Torras is an Information Systems Engineer, MBA who has with extensive experience working both for multinationals and SMEs. He has managing experience as IT area manager, and as managing director for an SME. He currently freelances offering his services to SMEs as well as to training entities.

Òscar started his professional career on 1991 working in the IT / Organization consultancy sector, mainly for multinational companies. During this period, he managed and implemented projects for a wide variety of companies of different sizes and sectors. Although these projects mainly had to do with IT, their scope became more and more strategic as his career progressed.

In 2013 he started his own practice; his value proposition is aimed at SMEs with two different lines:

- **TRAINING**

  Professor in Escuela de Alta Dirección y Administración (EADA) and tutor at Universitat Oberta de Catalunya (UOC) and UPCshool. Currently a doctoral candidate at the Universitat Politècnica de Catalunya (UPC). The research line for his PhD has to do with Digital transformation for SMEs. Defining and training in-company courses when necessary.

- **CHANGE MANAGEMENT / ASSESSMENT / CONSULTANCY**
  Assessing companies in their digital transformation and helping management to culturally adapt the whole company. Defining and implementing the digital transformation roadmap to support every company's strategy. In this line, Òscar organizes in-company training and discovery workshops to help with the cultural change as well as teams with management to discover their needs. Acting as Interim manager to support management with decision taking and organization management.

The services offered by Òscar are tailored to every company, reaching out for specialized help when necessary. Òscar helps each organization to find the right partner and gives support to managing projects.

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His experience and own training in management and IS/IT give him a unique understanding of different situations and ability to help in the circumstances of each organization.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

I have helped companies to elaborate their transformation map relating their systems map to their strategy considering an as-is situation and using IT and business innovation in order to get to the to-be situation. In this sense I have helped choosing corporative systems as ERP, CRM integrating these with production systems or sensors to capture information to manage operations or prepare feeding bigdata to predict tendencies and taking management decisions.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Teaching management methodology to a lighting company specialized in leds. Helping a public lighting maintaining company to elaborate their business plan as well as supporting data-oriented management decisions. Reviewing and restructuring procedures to certify quality.

ORGANIZATION EXPERTISE

Big Data & Analytics	Helping my customers to rightly design their KPI to take decisions. Giving support to my customers to choose the right partner for their needs.
Cybersecurity	Managing cybersecurity teams working for a digital security company.
Industrial IoT (IIoT) & sensors	Projects related with using IoT sensors to reduce human errors in stock management and logistic processes.
Robotics	Together with **Artificial Vision (AI)** and **machine learning**, the system helps handling pharma material to safely prepare prescription medication for patients.
Artificial Intelligence	
Digitalisation of marketing and online trading	Studying business process creating and restructuring procedures searching the efficiency and coherence with the mission of the company.
Machine learning	Preparing a chatbot to understand customer needs to offer individual experience according to their needs.

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SILEO — SMP-COSME-2021-CLUSTER

TECHNOLOGY PROVIDER NAME	Sterna Innovation Projects, SL
Code	020
Location	Girona, Spain
Organization typology	Technology Development SME
Expertise sector	Lighting
Contact person	Marc Torrent Email: mtorrent@sterna.es Phone number: +34 605243956
Website	https://www.sternainnovation.com
Social media	LinkedIn
Speaking languages	Catalan, Spanish, English

PRESENTATION

STERNA Innovation Projects SL is a Spanish SME founded in 2013 and specialized in Technology Development and Innovation Strategy.

Our key fields of knowledge lie in sensor design and development, electronics design, Internet of Things, product design and prototyping. Our main fields of expertise are in industrial systems, medical devices, agritech and logistics.

Our Services portfolio includes:

- Technology advisory: We provide our knowledge in technology, sensors, and product design, and analyse the state of the art and our customers chain value to propose new product concepts that best fits our clients' ideas.
- Prototyping: We create new functional prototypes from materials engineering to electronics development and smart features design. We provide manufacturing of concepts and mock-ups with rapid fabrication technologies to obtain early milestones.
- Product Validation: Our testing and validation methods follow the highest set standards to ensure product quality and compliance. We work closely with certified body parties to ensure certification and compliance. We are experts in code analysis and debugging to develop secure and failproof devices.
- Manufacturing Advisory: We manage product manufacturing from the first testing series to mass production. We design the best quality assurance strategies and manage them during production cycle. We design the tooling and the capabilities needed to fulfil your production objectives.
- Innovation Strategy: We help our client organization in the elaboration of Strategic Plans and implementation, Business Model Innovation, Business and Exploitation Plans and innovation portfolio

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management. Sterna helps to define a roadmap of key actions and support on the strategy follow-up and surveillance plan.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Design and development of a IoT distributed system for lighting applications control and maintenance.

ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	We are experts in the design and optimisation of parts for additive manufacturing techniques, using all market available materials and technologies. We are experts in low volume series product manufacturing taking advantage of these technologies.
Industrial IoT (IIoT) & sensors	We are experts in the design and development of customized IoT devices and platforms. We can design custom solutions with sensors, actuators, embedded processing and cloud communications for a broad selection of use cases including outdoors and dangerous ambients.

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TECHNOLOGY PROVIDER NAME	TECNICOS ECONOMISTAS ASESORES S.A.
Code	043
Location	Barcelona, Spain
Organization typology	Technological, organization and management consulting
Expertise sector	Lighting
Contact person	Toni Guasp Email: tguasp@teasa.es Phone number: 600 456 437
Website	**www.teasa.es**
Social media	LinkedIn
Speaking languages	Catalan, Spanish, English, Italian

PRESENTATION

Teasa is a consultancy with more than 30 years of experience, specialized in SMEs and oriented towards the creation of value, the innovation of work processes and systems and the technological transformation of the company to improve efficiency, reduce costs and increase profitability.

Teasa was born in 1992 and is made up of a team of highly qualified, multidisciplinary senior professionals (with a minimum of 20 years of professional experience) specialized in the different areas of the company.

The company is divided into two areas of specialization, teasaconsulting focused on Strategy, Organization and Management consulting projects and teasatech focused on Digital Transformation, Industry 4.0 and Innovation consulting projects.

Some of our added values are our specialization in SMEs, offering a flexible and personalized service, with a senior team, with proven experience and oriented to results. Teasa is an implementation consultant that will accompany you throughout the implementation project until you achieve the objectives set.

EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

Collaboration with companies like: CARPYEN, ELT, CALSI, SALVI LIGHTING, ARELSA, CASTAN ILUMNINACION, among others.

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ORGANIZATION EXPERTISE

Additive Manufacturing (3D printing)	Teasa has participated in a 3D Printing project for the Technical Office of a company that manufactures metal parts for third parties using Forging and Chip Removal Machining techniques. The 3D Project had the objective of being able to make sample pieces and prototypes of pieces and molds for forging in plastic materials and resins, as part of the Bid process + Validation of prototypes, prior to the manufacture of batches of orders for the clients. Teasa has established a partnership relationship with a 3D Printing company, founded by a former consultant and still a regular collaborator of Teasa. As a result of this relationship, we can also prove our participation in various projects for the application of 3D Printing to the manufacture of logos and other types of products for commercial and marketing (advertising) uses.
Augmented and Virtual Reality	Teasa has participated in a project called "DESIGN AND DEVELOPMENT OF AN INNOVATIVE INDUSTRIAL DIGITALIZATION SOLUTION ON THE MARKET, WHICH SERVES AS GUIDE AND SUPPORT IN FORMAT CHANGES OF CONDITIONING LINES FOR THE PHARMACEUTICAL INDUSTRY AND OTHER SIMILAR INDUSTRIES, INCREASING THE EFFICIENCY OF THE PROCESS". The project arises from the need for format changes in conditioning lines (in most of the industry made up of machines from different manufacturers) are long, complicated and inefficient. There is currently no type of application on the Spanish market that helps in format change operations. The format change guides are on paper and are usually incomplete, the dependence on the shift and the experience of the team is excessive, and reliable performance indicators are not recorded. It is about designing and developing a generic application that sufficiently covers the particularities of most industries with conditioning lines. The technological challenge of the project is twofold. On the one hand, it consists of the integration of augmented reality in the format changes in production lines, Conditioning and, on the other hand, the software designed makes it possible to significantly reduce dependency and human errors, as well as greatly improve the efficiency of manufacturing plants, through the incorporation of sensors in the different machines of the conditioning lines and the communication between them and with the designed software (IoT). It is important to note that “THE BOARD OF DIRECTORS OF THE CENTER FOR TECHNOLOGICAL DEVELOPMENT AND INNOVATION, E.P.E. (CDTI), AT ITS MEETING HELD ON 03/29/2023, APPROVED THE PARTICIPATION OF THE CDTI IN THIS RESEARCH AND DEVELOPMENT PROJECT, WITH IMPORTANT FINANCIAL HELP CO-FINANCED BY THE EUROPEAN REGIONAL DEVELOPMENT FUND (FEDER 2021-2027)”.
Big Data & Analytics	Teasa has participated in more than 10 projects for the implementation of MES (Manufacturing Execution Systems) or WMS (Warehouse Management Software) solutions in manufacturing plants and logistics or supply chains, of various types of products, for timely data collection. Real and subsequent analysis of the same, generally through exploitation by tools of the BI (Business Intelligence) type. We have also directed a project called "Process innovation based on the implementation of an advanced Production and Logistics Management System with

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	BIM (Building Information Modeling) technology in a company that designs, manufactures and assembles structural elements for residential wood construction". This Project, fully framed within the Industry 4.0 concept and also participated in by the CDTI, has the capacity to: • Control production and logistics by digitally connecting the machines involved and the different processes (IoT). • Optimize production, logistics and assembly costs (Smart Data & Analytics). • Improve the use of materials. • Improve the efficiency of processes and customer satisfaction.
Industrial IoT (IIoT) & sensors	Teasa has participated in a project called "DESIGN AND DEVELOPMENT OF AN INNOVATIVE INDUSTRIAL DIGITALIZATION SOLUTION ON THE MARKET, WHICH SERVES AS GUIDE AND SUPPORT IN FORMAT CHANGES OF CONDITIONING LINES FOR THE PHARMACEUTICAL INDUSTRY AND OTHER SIMILAR INDUSTRIES, INCREASING THE EFFICIENCY OF THE PROCESS". The project arises from the need for format changes in conditioning lines (in most of the industry made up of machines from different manufacturers) are long, complicated and inefficient. There is currently no type of application on the Spanish market that helps in format change operations. The format change guides are on paper and are usually incomplete, the dependence on the shift and the experience of the team is excessive, and reliable performance indicators are not recorded. It is about designing and developing a generic application that sufficiently covers the particularities of most industries with conditioning lines. The technological challenge of the project is twofold. On the one hand, it consists of the integration of augmented reality in the format changes in production lines, Conditioning and, on the other hand, the software designed makes it possible to significantly reduce dependency and human errors, as well as greatly improve the efficiency of manufacturing plants, through the incorporation of sensors in the different machines of the conditioning lines and the communication between them and with the designed software (IoT). We have also directed a project called "Process innovation based on the implementation of an advanced Production and Logistics Management System with BIM (Building Information Modeling) technology in a company that designs, manufactures and assembles structural elements for residential wood construction". This Project, fully framed within the Industry 4.0 concept and also participated in by the CDTI, has the capacity to: • Control production and logistics by digitally connecting the machines involved and the different processes (IoT). • Optimize production, logistics and assembly costs (Smart Data & Analytics). • Improve the use of materials. • Improve the efficiency of processes and customer satisfaction.

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Robotics	Teasa is directing and implementing the Digitalization and Automation project of the main production line of the company ENCOFRADOS J. ALSINA, S.A. The scope of said project is based on the incorporation of Robotics, Artificial Vision and Digitization of the Process.
Artificial Intelligence	Teasa is participating in a project called "Automation of the processes for generating offers and product development", for a company that manufactures products and installations for the storage and channeling of highly corrosive liquids. These products are made to measure according to the requirements of each client. For the geometric sizing of the same, complex calculations are required, also attending to general regulations, of each country and even of each client. The solution sought must be able to carry out two processes: 1. System based on Artificial Intelligence and/or Technical Configurator that, based on customer requirements, allows the calculation of the main parameters of the product to be manufactured through the iterative application of specific calculation algorithms, whose design constitutes one of the main phases of this project from a technological challenge point of view. In this way it will allow us to create the valued bill of materials. 2. Configurator of Offers that, based on the client's requirements, allows calculating the product, creating the valued bill of materials and generating the offer document with all the necessary documentation.
Digitalisation of marketing and online trading	In the field of digitalization of marketing in companies, teasa has extensive experience in the implementation of CRM systems and more recently in the interconnection of these systems with the company's general management systems (ERP).

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TELEMATEL

TECHNOLOGY PROVIDER NAME	TELEMATEL SLU
Code	037
Location	Sant Cugat del Valles, Spain
Organization typology	Professional Services & consulting - Tech-savvy company
Expertise sector	Lighting/Furniture
Contact person	Miquel Mur Orts Email: miquel.mur@telematel.com Phone number: +34 902 36 18 34
Website	**www.telematel.com**
Social media	LinkedIn
Speaking languages	Spanish, English

PRESENTATION

Telematel is a company founded in 1988 with the aim of sharing digital information between suppliers and distributors of electrical materials. It was founded by the employers' association of electrical material manufacturers and the electrical materials distributors. After a few years, it became independent and expanded into other sectors such as lighting and others related to the construction materials and installation industry. Since 2020, Telematel has been part of the Canadian multinational group Valsoft.

Telematel is the largest product information management company in the construction materials sector, as it integrates information from over 6 million products from 1,200 brands, digitizes, harmonizes, and transforms it for distribution to thousands of recipients for their use.

The services offered include: supplier catalog digitization and publication, product catalog syndication service, data transformation into various formats (Fab-Dis, BMEcat, others), information on information consumption and product visibility, measurement programs, and improvement of product information quality.

Product suppliers are able to shorten lead times for product launches, provide information to all analog and digital channels, analyze information consumption, and transform the information into formats required by distributors. Distributors receive updated information on all the products they need every day, with quality, and effortlessly integrate it into their information systems, such as ERP, CRM, web shop, Intranet, or others.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

FARO, SIMON, PRILUX, NOVOLUX, LEDS C-4, LLURIA, PHILIPS, LEDVANCE, SECOM, ROBLAN, THREELINE, DAISALUX, TRILUX, ARKOSLIGHT, NORMALUX.

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EXPERTISE PROVIDED IN THE LIGHTING SECTOR:

GRB, ROCA, SALGAR, IDEAL STANDARD, MEDICLINICS, GROHE, GEBERIT, GENEBRE, TEKA, TRES, FELIU BOET.

ORGANIZATION EXPERTISE

Big Data & Analytics	Product data harmonization, digitalization & integration in service Databases. Information transformation to any required format (ETIM BMEcat, Fab-Dis, distributors' formats, ad-hoc, html, other). Information delivery thru API to receivers. Data analytics of information consumption, quality and insights.
Digitalisation of marketing and online trading	

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Technology providers from SWEDEN

TECHNOLOGY PROVIDER NAME	SIGMA TECHNOLOGY SOLUTIONS GROUP
Code	033
Location	Göteborg, Sweden
Organization typology	Technology Company
Expertise sector	Furniture
Contact person	Amelie, Olsen Email: amelie.olsen@sigmatechnology.com Phone number: +46733877444
Website	http://sigmatechnology.com
Social media	LinkedIn
Speaking languages	Swedish, English

PRESENTATION

ENGINEERING THE DIGITAL REVOLUTION – A COMPANY, WHERE PEOPLE ARE IN FOCUS - SUSTAINABLE DEVELOPMENT FOR A SUSTAINABLE WORLD - MAKING TECHNOLOGY USABLE

Sigma Technology Group, part of the Sigma Group, is a privately-owned global technology consulting company with operations in Sweden, Hungary, China, Norway, Germany, and Ukraine and global delivery to Europe, the USA, and China. Sigma Technology Group offers cutting-edge expertise in software development, product information, embedded systems design & development, IT infrastructure development & administration, and digital solutions with expert consultants, offshore delivery, and development teams.

Our team provides comprehensive IT solutions for companies of any scale. We understand the need to feel native and organic to your software development while keeping costs low. Our professional project managers, developers, solution architects will guide you through every step of the way to successful delivery.

We offer Software development services, IT consulting, Digital transformation strategy and guidance and Business analysis.

Sigma is owned by Danir AB and has more than 5 000 employees and a network of partners in thirteen countries.

EXPERTISE PROVIDED IN THE FURNITURE SECTOR:

Collaborations with Interior Cluster Sweden and its members. Partner and supplier within Software Development, Information Management and Business Development towards IKEA.

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ORGANIZATION EXPERTISE

Big Data & Analytics	We help companies improve their business models and grow through digitalization and the identification of new offerings. Our team has a deep understanding of how to help the companies to get insights and become more data-driven in their decisions. In this area, we are a silver partner with SAS Institute.
Industrial IoT (IIoT) & sensors	Our development team has excellent LoRa, LoRaWAN, Sigfox, NB-IOT, sensor capabilities, and hardware development skills. We combine a unique understanding of the ecosystem's complete chain with extensive knowledge in putting together advanced solutions. We can also offer an open multi-technology IoT platform that fills the gap between sensors and the cloud and enable our customers to enter verticals with large-volume data opportunities. In this area, we are a gold partner with IIOTE.
Artificial Intelligence	We have experts in AI, Machine Learning, analytics, modelling, visualization, and cloud computing.
Digitalisation of marketing and online trading	Our team have been helping companies with developing ERP systems and back-end solutions to automate customer and product delivery management, administrate purchase and logistics, track customer loyalty and activity. Integrating systems with various other solutions, including company website, payment and invoice systems, and customer support.
WebAR	We provide Senior Agile Software and VR/AR/MR developers. In this area, we also have a strong focus on open-source tools.
Machine learning	We have experts in AI, Machine Learning, analytics, modelling, visualization, and cloud computing.
Software Development	We are dedicated to delivering software solutions to both established world-brands and innovative start-ups. Our team of experts has extensive experience in providing customized software solutions for businesses of all sizes, regardless of their level of complexity. Our commitment to innovation and excellence means that we always stay ahead of the curve, leveraging the latest technology.
Content Management	Ultimate product experience begins with creating product information that the end-user needs. We are experts in putting the end-users first and tailoring the information to their needs. We support companies with everything from defining project scopes to information analysis, technical writing, terminology management, localization, translation services, and publishing services.
Information Management	Information is the most valuable asset of any business. Be it internal manuals for employees or product descriptions for end-users, a knowledge delivery pipeline becomes a core of anything concerning your commodities and services. Global digitalization entailed the increasing need for automation and using technologies to unlock the full potential.

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	We have substantial experience working with information management, product information development, and formatting. We have developed a method for information analysis that we call SPI – System Process and Information. With the support of this method, our consultant will help companies to do a full review of the information needs and create tailor-made solutions meeting the requirements and business peculiarities.
Digital Transformation	Our team provides comprehensive IT solutions for companies of any scale, with professional project managers, developers, solution architects that will guide companies through every step of the way to successful delivery. Our team provides leadership and competence on digitalization journeys, offering our senior agile coaches and change managers in strategy and guidance.

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