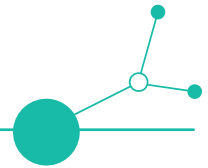




SMERF

SMERF Action Plan

D1.6.2



FINAL
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Introduction

The SMERF Action Plan serves as a strategic roadmap for guiding the transformational journey of low-tech and medium-tech SMEs within Central Europe. This comprehensive plan is rooted in the core principles of the SMERF project, aimed at empowering SMEs to embrace innovation, sustainability, and resilience.

As we embark on this transformative endeavor, our collective mission is clear: to equip SMEs with the tools, resources, and support they need to thrive in an ever-evolving business landscape. Through collaborative efforts and strategic initiatives outlined in this Action Plan, we seek to cultivate an ecosystem where SMEs not only survive but also flourish as drivers of economic growth and societal progress.

This document represents a holistic approach to SME development, encompassing a range of strategic phases and targeted interventions tailored to the unique needs of SMEs. From initial assessments to capacity-building programs, each component of the Action Plan is designed to catalyze SME evolution and foster sustainable development.

Our commitment to this endeavour is unwavering, guided by the belief that SMEs possess the resilience and ingenuity to shape a future that is vibrant, inclusive, and prosperous. Together, we will navigate the complexities of the business landscape, seize upon emerging opportunities, and chart a course towards a future where SMEs stand as beacons of strength and innovation.

Through the collaborative efforts outlined in this Action Plan, we not only aim to achieve the objectives of the SMERF project but also lay the foundation for a thriving SME ecosystem that serves as a catalyst for lasting prosperity.

1. Transformation Processes: from SME to SMERF

1.1. Development of the Ecosystem

1.1.1. Analysis of the Successful Transformation Process

Reference to SMERF project	Activity	Due date	Coordinator	Responsibility of PPs - Tasks	Deliverables & Outputs
A1.1. Determining factors and best practices influencing transformation of SME toward SMERF	Joint desktop research (Pillar 1 - Innovation culture)	End of P1 (09/2023)	A1.1 Lead (LP WUST)	A1.1 Lead (WUST) - strategic coordination Pillar 1 Leader - PP6 - STEP RI - operational coordination All PPs - provide inputs for joint research according to the requests by pillar leader.	D.1.1.1 Report on examination, evaluation and measurement of the culture of organization (pillar 1)
A1.1. Determining factors and best practices influencing transformation of SME toward SMERF	Joint desktop research (Pillar 2 - Digital manufacturing)	End of P1 (09/2023)	A1.1 Lead (LP WUST)	A1.1 Lead (WUST) - strategic coordination Pillar 2 Leader - PP4 KIT - operational coordination All PPs - provide inputs for joint research according to the requests by pillar leader.	D.1.1.2 Report on joint research of using elements of pillars 2-4 in SME
A1.1. Determining factors and best practices influencing transformation of SME toward SMERF	Joint desktop research (Pillar 3 - Open innovation 2.0 & sharing economy)	End of P1 (09/2023)	A1.1 Lead (LP WUST)	A1.1 Lead (WUST) - strategic coordination Pillar 3 Leader - PP3 CRIT - operational coordination All PPs - provide inputs for joint research according to the requests by pillar leader.	D.1.1.2 Report on joint research of using elements of pillars 2-4 in SME
A1.1. Determining factors and best practices influencing transformation of SME toward SMERF	Joint desktop research (Pillar 4 - Green & circular economy & sustainability)	End of P1 (09/2023)	A1.1 Lead (LP WUST)	A1.1 Lead (WUST) - strategic coordination Pillar 1 Leader - PP5 PBN - operational coordination All PPs - provide inputs for joint research according to the requests by pillar leader.	D.1.1.2 Report on joint research of using elements of pillars 2-4 in SME
A1.1. Determining factors and best practices influencing transformation of SME toward SMERF	Consolidation of joint desktop research in all 4 Pillars	End of P1 (09/2023)	A1.1 Lead (LP WUST)	A1.1 Lead (WUST) - strategic coordination All PPs - provide support to the WUST according to the requests	D.1.1.3 Report on characteristic features and transformation tools for SMERF

A1.2 Joint development of catalogue of best practices and success stories of SMERF	Identification of good practices	End of P1 (09/2023)	A1.2 Lead (PP5 PBN)	A1.2 Lead (PP5 BN) - coordination All PPs - identify good practices from their regions - (4 in text form while for 2 of them will be produced also video-interview)	D.1.2.2 Catalogue of best practices and success stories regarding SMERF
A1.3 Development of audit range, methodology and measurement system to determine SME's level of advancement in 4 pillars	Identification of available audit tools for assessing companies' level of advancement in 4 pillars. This analysis has been performed through desk research and it has led to the identification of promising methodologies.	End of P2 (03/2024)	A1.3 Lead (PP3 CRIT)	A1.3 Lead (PP3 CRIT) - strategic coordination Pillar leaders - coordination of content development All PPs - provide support-inputs according to the requests	D.1.3.2 Report on available audit tools for assessing companies' level of advancement in 4 pillars
A1.5 Determining best practices and policies of more innovative partner regions to be transferred to less innovative partner regions	Identification of best practices	End of P2 (03/2024)	A1.5 Lead (PP2 Biz-Up)	A1.5 Lead (PP2 Biz-Up) - coordination All PPs - provide support-inputs according to the requests	D.1.5.1 Report on best practices, policies and strategic initiatives of more innovative partner regions
A1.6 SMERF Strategy and SMERF Action Plan development	SMERF Strategy and SMERF Action Plan Development	End of P3 (09/2024)	A1.6 Lead (PP8 TUKE)	A1.6 Lead (PP8 TUKE) - coordination and development All PPs - provide support-inputs according to the requests	D.1.6.1 SMERF Strategy including communication strategy D.1.6.2 SMERF Action Plan O1.1 SMERF Strategy and SMERF Action Plan

1.1.2. Establishing Supportive Ecosystem

Reference to SMERF project	Activity	Due date	Coordinator	Responsibility of PPs - Tasks	Deliverables & Outputs
A1.2 Joint development of catalogue of best practices and success stories of SMERF	Development of methodology for video production	End of P2 (03/2024)	A1.2 Lead (PP5 PBN)	A1.2 Lead (PP5 BN) - coordination and development of methodology All PPs - provide support according to the requests	D.1.2.1 Methodology of catalogue and videos development
A1.2 Joint development of catalogue of best practices and success stories of SMERF	Development of good practices	End of P2 (03/2024)	A1.2 Lead (PP5 PBN)	A1.2 Lead (PP5 BN) - coordination PP2 Biz-Up - communication and cooperation with external professional responsible for post-production.	D.1.2.2 Catalogue of best practices and success stories regarding SMERF

				All PPs - development of good practices (4 in text form while for 2 of them will be produced also video-interview)	
A1.2 Joint development of catalogue of best practices and success stories of SMERF	Consolidation and reporting	End of P2 (03/2024)	A1.2 Lead (PP5 PBN)	A1.2 Lead (PP5 BN) - Consolidation and reporting	D.1.2.2 Catalogue of best practices and success stories regarding SMERF D.1.2.3 Report on developed videos regarding best practices and success stories on SMERF
A1.3 Development of audit range, methodology and measurement system to determine SME's level of advancement in 4 pillars	Development of audit range, methodology and measurement system. Based on D1.3.2 CRIT has developed the SMERF custom methodology for self-assessment of companies.	End of P2 (03/2024)	A1.3 Lead (PP3 CRIT)	A1.3 Lead (PP3 CRIT) - coordination and development All PPs - provide support according to the requests	D.1.3.1 Methodology of selecting, involving and assessment of SMEs for transformation
A2.1 Preparation of preliminary version of SMERF Diagnosis Tool to generate transformation scenarios	Development of SMERF Diagnosis Tool. CRIT has defined the list of requirements for the tool, identified the software house and worked on the preliminary version of the self-assessment tool.	End of P4 (03/2025)	A2.1 Lead (PP3 CRIT)	A2.1 Lead (PP3 CRIT) - coordination and development All PPs - provide support according to the requests	D.2.1.1 Report on SMERF Diagnosis self-assessment functionality and expert system development D.2.1.2 Preliminary guidebook on how to use SMERF Diagnosis Tool
A2.3 Train the SMERF mentors - preparation for mentoring towards SMERF transformation process	Preparation of the training The aim is to define trainings and contents for mentors on how to use SMERF Diagnosis Tool.	End of P5 (09/2025)	A2.3 Lead (PP3 CRIT)	A2.3 Lead (PP3 CRIT) - coordination and preparation of the training All PPs - provide support according to the requests	D.2.3.1 Methodology and plan for training the SMERF mentors organization
A2.4 SMERF Diagnosis Tool development - upgrade to final version	Development of guidebook	End of P6 (03/2026)	A2.4 Lead (LP WUST)	A2.4 Lead (LP WUST) - coordination and development All PPs - provide support according to the requests	D.2.4.2 Guidebook on how to Use SMERF Diagnosis Tool
A3.1 Organization of trainings supporting transformation process for SMEs - SMERF TRAINING	Preparation of the training	End of P5 (09/2025)	A3.1 Lead (PP4 KIT)	A3.1 Lead (PP4 KIT) - coordination and development All PPs - provide support according to the requests	D.3.1.1 Methodology and plan of SMERF TRAININGS organization
A3.2 Development of the SMERF Individual Support Program (ISP)	Preparation of the SMERF Individual Support Program (ISP)	End of P5 (09/2025)	A3.2 Lead (PP7 UNIGE)	A3.2 Lead (PP7 UNIGE) - coordination and development All PPs - provide support according to the requests	D.3.2.1 Methodology and plan of the SMERF Individual Support Program development

A3.3 Creating InnoGreen market - events and study visits	Preparation of the InnoGreen market and study visits	End of P5 (09/2025)	A3.3 Lead (PP2 Biz-Up)	A3.3 Lead (PP2 Biz-Up) - coordination and development All PPs - provide support according to the requests	D.3.3.1 Methodology and plan of organization of InnoGreen market event and study visits
A3.4 Innovation ecosystem development - transfer of best practices from more innovative partner regions	Preparation of cross-regional BEHIND THE SCENES WORKSHOP FOR POLICYMAKERS	End of P5 (09/2025)	A3.4 Lead (PP5 PBN)	A3.4 Lead (PP5 PBN) - coordination and preparation All PPs - provide support according to the requests	D.3.4.1 Methodology and plan of organization of BEHIND-THE-SCENES WORKSHOP FOR POLICYMAKERS

1.2. Validation and Implementation

1.2.1. Communication with target groups

1.2.1.1. General Communication Activities

Communication Activity	Indicator	Key Message	Dissemination channel	CL (TUKE)	All PPs	Timing
Project Poster	Project poster place at the premises of each PP (documented by photos)	General information about the project	Offline	- content preparation	Dissemination in their countries: - Place the printed poster at the premises of PP institution (mandatory) - Online dissemination via institutional websites and other thematic websites (optional)	Period 1
Project Banner	Offline banner presenting the project	General information about the project	Offline	- content preparation - printing of English language version and providing to the LP	Optional - printing the banner in English or national language and use that for project promotion	Period 1
General project promotion via social media	Set up accounts on YouTube, Facebook and LinkedIn	-		- setting the social media accounts		Period 1
	Regular project promotion - at least 1 post on Facebook and LinkedIn per 2w	General information about the project	YouTube, Facebook and LinkedIn	- coordination of preparation and releasing - content preparation and release on official project accounts	Sharing official project promotion on social media channels Content creation - regional project promotion individually prepared by each PP Active support by activity leaders in case of project activity thematic promotion	Period 1-6
Project Flyer	Project flyers for each target group - SME - Enterprise without SME - HEI and RTO - BSO and SA	General information about the project Specific information valuable for target group members - description of project relevant activities and benefits	Offline & Online dissemination	- content preparation	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 2-6
Websites Posts - articles	Regular project promotion - at least 1 article per 4w	General information about the project activities - progress Thematic updates - knowledge based on the deliverables and outputs generated within the project activities	Online	- content preparation - presentation of the content on official project website	Dissemination: - online via institutional websites and other thematic websites, social media channels Active support by activity leaders in case of project activity thematic promotion	Period 2-3
Newsletter	Regular release of project newsletter each 6 month	General information about the project activities - progress	Online	- content preparation - presentation of the content on official project website	During the project implementation phase: - active support to CL in development process - dissemination on regional level	Period 1-6 +
	After the end of the project by the indicated partners, a rotational change every 6 months,	Thematic updates - knowledge based on the deliverables and outputs generated within the project activities			After the project implementation phase: - development of newsletter - a rotational change every 6 months - dissemination on regional level	
Podcast	Recording at least 1 podcast	General information about the project Thematic information for SMEs	Online	- coordination of development and management of recording - content preparation	Active support according to the further developed process plan Dissemination in their countries: - Online dissemination via institutional websites and other thematic websites (optional)	Period 4

1.2.1.2. Communication Activities Related to the Specific Project Activities

Project thematic activity	Communication Objective	Target Audience	Key Message	Indicator	Communication Activity	Channel	CL (TUKE)	Specific PP	All PPs	Timing
A2.3 Train the SMERF mentors - preparation for mentoring towards SMERF transformation process	Encourage HEIs to participate on the training and become SMERF mentor	HEI	Benefits to become SMERF mentor - get the knowledge about the high-standard process of developing a detailed plan of transformation implementation for SMEs interested in becoming ready for the future	Together at least 80 participants will be trained in online / hybrid / In-person mode.	Flyers	Offline & Online dissemination	- content preparation	PP6 STEP RI - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 5
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP6 STEP RI - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5
					Social Media Posts Individual and group presentations	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP6 STEP RI - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5
					Invitations of participants	Offline & Online meetings	- content preparation	PP6 STEP RI - AL - active support	Conduction of Offline & Online meetings Group emailing (optional) - Provide email addresses for dissemination	Period 5
								Individual: -conduction of individual emailing	Period 5	
A3.1 Organization of trainings supporting transformation process for SMEs - SMERF TRAINING	Encourage SME to participate on the training which can support their transformation process towards SMERF	SME	Benefits for the SME to start transformation process towards SMERF as well as benefits of the training - provided knowledge, potential for networking and further cooperation with other participants as well as project partners	Each PP organizes 1 training - with the support of pillar leader to ensure joint organisation from at least 2 participating countries.	Flyers	Offline & Online dissemination	- content preparation	PP4 KIT - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 5-6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP4 KIT - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5-6
					Social Media Posts Individual and group presentations	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP4 KIT - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5-6
					Invitations of participants	Offline & Online meetings	- content preparation	PP4 KIT - AL - active support	Conduction of Offline & Online meetings Group emailing (optional) - Provide email addresses for dissemination	Period 5-6
								Individual: -conduction of individual emailing	Period 5-6	
A3.2 Development of the SMERF Individual Support Program (ISP)	Encourage SME to participate on the training which can support their transformation process towards SMERF	SME	Benefits for the SME to start transformation process towards SMERF as well as benefits of Individual Support Program (ISP)	At least 24 SMEs (3/PP) will be supported within ISP	Flyers	Offline & Online dissemination	- content preparation	PP7 UNIGE - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 5-6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP7 UNIGE - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5-6
					Social Media Posts Individual and group presentations	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP7 UNIGE - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5-6
					Invitations of participants	Offline & Online meetings	- content preparation	PP7 UNIGE - AL - active support	Conduction of Offline & Online meetings Group emailing (optional) - Provide email addresses for dissemination	Period 5-6
								Individual: -conduction of individual emailing	Period 5-6	

Project thematic activity	Communication Objective	Target Audience	Key Message	Indicator	Communication Activity	Channel	CU (TUKE)	Specific PP	All PPs	Timing
A3.3 Creating InnoGreen market events and study visits	Encourage to participate on the InnoGreen market	SMEs and big companies	Benefits of active/passive participation on InnoGreen market	At least 32 SMEs (2/PP) will participate	Flyers	Offline & Online dissemination	- content preparation	PP2 Biz-Up - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 5-6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP2 Biz-Up - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5-6
					Social Media Posts	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP2 Biz-Up - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5-6
					Individual and group presentations	Offline & Online meetings	- content preparation	PP2 Biz-Up - AL - active support	Conduction of Offline & Online meetings	Period 5-6
					Invitations of participants	Emailing - group and individual	- content preparation - technical solution for group emailing - conduction of group emailing	PP2 Biz-Up - AL - active support	Group emailing (optional) - Provide email addresses for dissemination Individual: - conduction of individual emailing	Period 5-6
	Encourage to participate on study visits	SMEs and big companies, HEIs/RTOs	SMEs - benefits of participation as visitor Big companies and HEIs/RTOs - benefits of participation as host	16 (2/PP) study visits will be organized where SMEs will visit either big companies or HEIs/RTOs	Flyers	Offline & Online dissemination	- content preparation	PP2 Biz-Up - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites and emails	Period 5-6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP2 Biz-Up - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5-6
					Social Media Posts	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP2 Biz-Up - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5-6
					Individual and group presentations	Offline & Online meetings	- content preparation	PP2 Biz-Up - AL - active support	Conduction of Offline & Online meetings	Period 5-6
					Invitations of participants	Emailing - group and individual	- content preparation - technical solution for group emailing - conduction of group emailing	PP2 Biz-Up - AL - active support	Group emailing (optional) - Provide email addresses for dissemination Individual: - conduction of individual emailing	Period 5-6
A3.4 Innovation ecosystem development - transfer of best practices from more innovative partner regions	Encourage to participate on crossregional BEHIND THE SCENES WORKSHOP FOR POLICYMAKERS	Local & Regional public authorities and BSOs	Benefits of active/passive participation - share their experiences, solutions & models that efficiently support SMEs in the innovation process	Dedicated international event will be organized for at least 40 participants from 7 countries (8 CE regions).	Flyers	Offline & Online dissemination	- content preparation	PP5 PBN - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites	Period 5-6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP5 PBN - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 5-6
					Social Media Posts	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP5 PBN - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 5-6
					Individual and group presentations	Offline & Online meetings	- content preparation	PP5 PBN - AL - active support	Conduction of Offline & Online meetings Group emailing (optional) - Provide email addresses for dissemination	Period 5-6
					Invitations of participants	Emailing - group and individual	- content preparation - technical solution for group emailing - conduction of group emailing	PP5 PBN - AL - active support	Individual: - conduction of individual emailing	Period 5-6
	Encourage target audience members to participate on meeting and sign MoU declaring the intention for further cooperation	Innomediaries HEIs Regional and local authorities	Benefits for target audience stakeholders with intention to increase innovativeness of SMEs via a-ready-to-implement set of procedures for organizations wanting to use them in their daily business provided via SMERF Handbook.	Each PP will organize 1 meeting with the regional authorities/policymakers to present the results of SMERF and the handbook MoU will be signed by 16 entities.	Flyers	Offline & Online dissemination	- content preparation	PP7 UNIGE - AL - active support	Dissemination: - offline in their countries - online via institutional websites and other thematic websites	Period 6
					Websites Posts - articles	Online	- content preparation - presentation of the content on official project website	PP7 UNIGE - AL - active support	Dissemination: - online via institutional websites and other thematic websites	Period 6
					Social Media Posts	Facebook and LinkedIn	- content preparation - posting on project social media accounts	PP7 UNIGE - AL - active support	Dissemination - posting on institutional and other thematic social media accounts	Period 6
					Individual and group presentations	Offline & Online meetings	- content preparation	PP7 UNIGE - AL - active support	Conduction of Offline & Online meetings Group emailing (optional) - Provide email addresses for dissemination	Period 6
					Invitations of participants	Emailing - group and individual	- content preparation - technical solution for group emailing - conduction of group emailing	PP7 UNIGE - AL - active support	Individual: - conduction of individual emailing	Period 6

1.2.1.3. Planning of Communication Activities

Reference to SMERF project	Activity	Due date	Coordinator	Responsibility of PPs - Tasks	Deliverables & Outputs
	SMERF Communication Strategy	End of P1 (09/2023)	Communication Lead (PP8 TUKE)	Communication Lead (PP8 TUKE)- coordination and development of SMERF communication strategy All PPs - provide support-inputs according to the requests	SMERF Communication Strategy
A2.5 Attracting of pilot action participants and SMERF Diagnosis Tool users	Preparation of communication campaign	End of P3 (09/2024)	A2.5 Lead (PP8 TUKE)	A2.5 Lead (PP8 TUKE)- coordination and development All PPs - provide support-inputs according to the requests	D.2.5.1 Plan of attracting SMERF Diagnosis Tool target groups
A2.5 Attracting of pilot action participants and SMERF Diagnosis Tool users	Implementation of communication campaign	End of P6 (03/2026)	A2.5 Lead (PP8 TUKE)	A2.5 Lead (PP8 TUKE)- coordination All PPs - implementation of communication campaign	D.2.5.2 Report on attracting SMERF Diagnosis Tool users

1.2.2. SMERF Supporting Infrastructure - implementation and pilot testing

Reference to SMERF project	Activity	Due date	Coordinator	Responsibility of PPs - Tasks	Deliverables & Outputs
A2.2 Testing and verification of preliminary version of SMERF Diagnosis Tool by SMEs	Testing and verification - planning	End of P4 (03/2025)	A2.2 Lead (PP6 STEP RI)	A2.2 Lead (PP6 STEP RI) - coordination and development All PPs - provide support according to the requests	D.2.2.1 Methodology for implementing joint pilot action
A2.2 Testing and verification of preliminary version of SMERF Diagnosis Tool by SMEs	Testing and verification - implementation	End of P4 (03/2025)	A2.2 Lead (PP6 STEP RI)	A2.2 Lead (PP6 STEP RI) - coordination All PPs - implementation of testing - min 20 from each PP	D.2.2.2 Report on SMERF Diagnosis Tool testing pilot action O2.1 Testing SMERF Diagnosis Tool
A2.3 Train the SMERF mentors - preparation for mentoring towards SMERF transformation process	Implementation of the training. The aim is to provide trainings for mentors on how to use SMERF Diagnosis Tool. At least 80 mentors will be trained by the consortium.	End of P5 (09/2025)	A2.3 Lead (PP3 CRIT)	A2.3 Lead (PP3 CRIT) - coordination All PPs - implementation of training - each PP organizes at least 1 training (at least 10 persons per training).	D.2.3.2 Report on training the SMERF mentors
A2.4 SMERF Diagnosis Tool development - upgrade to final version	Implementation of feedback into upgraded version	End of P6 (03/2026)	A2.4 Lead (LP WUST)	A2.4 Lead (LP WUST)- coordination All PPs - provide support according to the requests	D.2.4.1 Report on SMERF Diagnosis Tool upgrade O2.2 SMERF Diagnosis Tool O3.1 Testing a scheme of supporting SMEs according to transformation scenarios
A3.1 Organization of trainings supporting transformation process for SMEs - SMERF TRAINING	Training - implementation	End of P6 (03/2026)	A3.1 Lead (PP4 KIT)	A3.1 Lead (PP4 KIT) - coordination All PPs - implementation of training - Each PP will organize 1 training with the support of the pillar leader	D.3.1.2 Report on SMERF TRAININGs organization O3.1 Testing a scheme of supporting SMEs according to transformation scenarios
A3.2 Development of the SMERF Individual Support Program (ISP)	Implementation of the SMERF Individual Support Program (ISP)	End of P6 (09/2025)	A3.2 Lead (PP7 UNIGE)	A3.2 Lead (PP7 UNIGE) - coordination All PPs - implementation of ISP - Each PP will support at least 3 SMEs	D.3.2.2 Report on the SMERF Individual Support Program implementation O3.1 Testing a scheme of supporting SMEs according to transformation scenarios
A3.3 Creating InnoGreen market - events and study visits	Implementation of the InnoGreen market and study visits	End of P6 (09/2025)	A3.3 Lead (PP2 Biz-Up)	A3.3 Lead (PP2 Biz-Up)- coordination of the activity and organisation of the InnoGreen Market All PPs - implementation of study visits - 2 per PP	D.3.3.2 Report on InnoGreen market events and study visits O3.1 Testing a scheme of supporting SMEs according to transformation scenarios

1.3. Scaling and Integration

Reference to SMERF project	Activity	Due date	Coordinator	Responsibility of PPs - Tasks	Deliverables & Outputs
A2.2 Testing and verification of preliminary version of SMERF Diagnosis Tool by SMEs	Testing and verification - planning	End of P4 (03/2025)	A2.2 Lead (PP6 STEP RI)	A2.2 Lead (PP6 STEP RI) - coordination and development All PPs - provide support according to the requests	D.2.2.1 Methodology for implementing joint pilot action
A3.4 Innovation ecosystem development - transfer of best practices from more innovative partner regions	Organization of cross-regional BEHIND THE SCENES WORKSHOP FOR POLICYMAKERS	End of P6 (09/2025)	A3.4 Lead (PP5 PBN)	A3.4 Lead (PP5 PBN) - coordination and organisation All PPs - provide support according to the requests	D.3.4.2 Report on BEHIND THE SCENES WORKSHOP FOR POLICYMAKERS
A3.4 Innovation ecosystem development - transfer of best practices from more innovative partner regions	Description of best practices and lessons learned	End of P6 (09/2025)	A3.4 Lead (PP5 PBN)	A3.4 Lead (PP5 PBN) - coordination and description development All PPs - provide support according to the requests	D.3.4.2 Report on BEHIND THE SCENES WORKSHOP FOR POLICYMAKERS
A3.5 SMERF Handbook development	SMERF Handbook Development	End of P6 (09/2025)	A3.5 Lead (PP7 UNIGE)	A3.5 Lead (PP7 UNIGE)- coordination and development All PPs - provide support according to the requests	D.3.5.1 SMERF Handbook
A3.5 SMERF Handbook development	Presentation of the SMERF Handbook and overall support for the SMERF Transformation	End of P6 (09/2025)	A3.5 Lead (PP7 UNIGE)	A3.5 Lead (PP7 UNIGE)- coordination All PPs - each PP will organize 1 meeting with the regional authorities/policymakers to present the results of SMERF and the handbook	D.3.5.2 Report on the Meetings with policymakers/regional authorities
A3.5 SMERF Handbook development	SMERF Memorandum of Understanding	End of P6 (09/2025)	A3.5 Lead (PP7 UNIGE)	A3.5 Lead (PP7 UNIGE)- coordination and preparation of the MoU All PPs - each PP will sign MoU	D.3.5.3 Report on SMERF Memorandum of Understanding O3.3 SMERF Memorandum of Understanding

Conclusion: Empowering SMEs for Future Success

In conclusion, the SMERF action plan represents a comprehensive and strategic roadmap for supporting low-tech and medium-tech SMEs in their transformation towards becoming "SMEs Ready for the Future" (SMERF). Through a series of meticulously planned activities, the action plan aims to address key challenges and leverage opportunities to empower SMEs to thrive in the rapidly evolving market landscape.

By focusing on research and data collection, identification of key success factors, benchmarking and comparison, and identification of transferable practices, the action plan seeks to provide SMEs with the knowledge, tools, and resources necessary to navigate their transformation journey effectively. Through collaboration with industry experts, stakeholders, and SME representatives, the action plan aims to foster innovation, resilience, and growth within the targeted regions.

Moreover, the action plan emphasizes the importance of documentation and knowledge dissemination to ensure that insights and best practices are shared widely within the ecosystem. By creating a repository of knowledge and resources, the action plan seeks to facilitate learning, collaboration, and continuous improvement among SMEs participating in the SMERF initiative.

Overall, the SMERF action plan is guided by the principle of empowering SMEs to shape a future that is vibrant, inclusive, and sustainable. Through collective effort and collaboration, we are confident that the SMERF initiative will contribute to the success and prosperity of SMEs across diverse industries and regions.

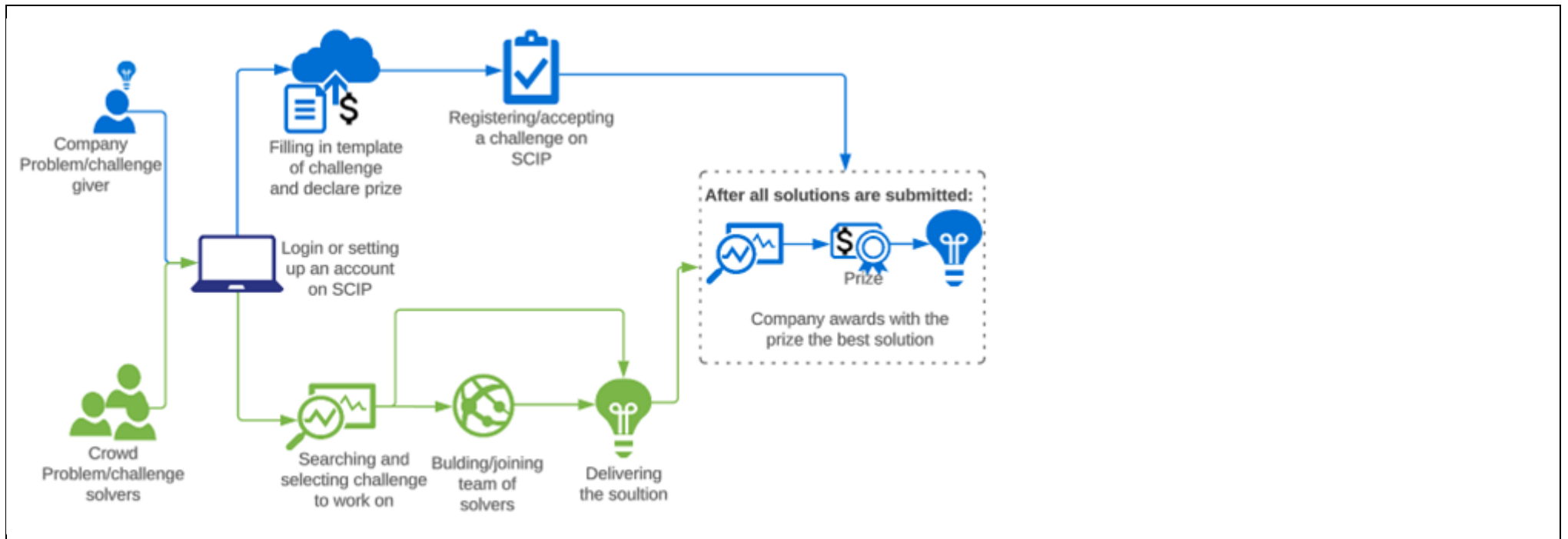
Annexes: Innovation services per project partner

Project partner	Innovation service
WUST	Innovation challenges
	Synergy platform- crowdfunding for R&D
	Deep Tech Needs
	Infrastructure Sharing- Synergy platform
Biz-Up	LEGO SERIOUS PLAY
	Design Thinking
CRIT	Smart Technology Workshop
	Technology Due Diligence
	Technology Scouting
KIT	Introduction to Additive Manufacturing
	Access to KIT networks
	Decision Support Systems with Integrated AI
PBN	Complete product development processes
	Collaborative and industrial robots, automatic mobile robots, drones
	Production Simulation — Teaching & Learning Factory Unit
	Big Data — Data Analytics
STEP RI	Servitization & service innovation
UNIGE	Advanced AI & Robotics Applications4SMEs
	Technology Transfer Lab
TUKE	Start-up Centre & Incubator
	Digital Innovation Hub Services

WUST

Innovative service n.1	
Name of the tool	Innovation challenges
Source for more information	https://synergyplatform.pwr.edu.pl/challenges
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English, If needed it can be conducted in local language (but it will limit the possible solutions)
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	Defined by the SME
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's

Contact person	<p><i>SMERF Team member</i></p> <p>Joanna Helman</p> <p>Joanna.helman@pwr.edu.pl</p> <p><i>Directly responsible contact person</i></p> <p>innomanu@pwr.edu.pl</p>
Short description of the service	
<p>This service is focused on crowd innovation challenges as a revolutionary process for research and innovation ideas, products and solutions development involving industry and academia. By matching innovative ideas with specific technical competences, the SYNERGY platform has created an opportunity for research teams to receive direct support from other interested researchers.</p> <p>Platform provides new international ways of creating projects, developing innovative products, solving problems and has created an alternative model of funding for research and innovations. It is a space where actors can define their needs and problems and others can deliver jointly developed solutions.</p> <p>Once these challenge givers upload their challenges and searched for competences/skills on the platform, service provider promotes these challenges and look for possible solutions providers.</p> <p>Service implementation example:</p> <ol style="list-style-type: none"> 1. Company A has a technical problem related to the efficiency of one of the machines on production line. However internal staff has no expertise, knowledge or time to deal with the problem. 2. Company A is creating a challenge on SCIP platform to solve their problem. Company A describes their challenge, all conditions and expected results. Also, a prize for the problem solvers should be defined as well as assessment conditions. 3. The challenge is launched by company A and accessible on the SCIP platform, so its users can see it and they provide their solutions of the problem. They can also build teams to provide common solution. 4. After closing the challenge, company A is assessing all provided solution according to predefined conditions. All solutions can be rated as well as their providers. 5. The best solution, with highest rate, is awarded by Company A <p>The general approach of the crowd innovation challenges service is presented below:</p>	



Benefits

- **Process Improvement:** Enhance production processes by identifying and eliminating potential defects with input from diverse external experts.
- **Product Development:** Gather fresh ideas from a broad community, including customers, leading to products that better meet market demands and stand out competitively.
- **Customer Feedback Integration:** Involve customers directly in product development, turning them into prosumers and tailoring products to their needs, increasing satisfaction and loyalty.
- **Support for R&D:** Access a wide range of expertise to support research and development, accelerating innovation and bringing new technologies to market faster.
- **Technology Implementation:** Explore the latest technological advancements with the help of industry experts, fostering a more dynamic and innovative business environment.
- **Enhanced Collaboration:** Engage a global community to benefit from diverse insights and creative solutions, driving innovation and enriching problem-solving capabilities.

Initial requirements for the service taker

There are no specific requirements, but to effectively utilize the SYNERGY platform for crowd innovation challenges, service takers should follow the recommendations:

- **Defined Challenge:** Clearly articulate the technical problem or innovation need, including detailed descriptions, conditions, and expected results.
- **Prize and Assessment Criteria:** Establish a prize for solvers and define the criteria for assessing submitted solutions.
- **Resources for Evaluation:** Allocate internal resources for evaluating the solutions based on predefined conditions and for rating solution providers.
- **Access to Platform:** Register on the SYNERGY platform and familiarize yourself with its functionalities for creating and managing challenges.
- **Commitment to Collaboration:** Be open to engaging with a global community of experts and customers, valuing diverse insights and innovative approaches.

By meeting these recommendations, companies can maximize the benefits of the SYNERGY platform, improving processes, developing products, and driving innovation through collaborative efforts.

Innovative service n.2

Name of the tool	Synergy platform - crowdfunding for R&D
Source for more information	https://synergyplatform.pwr.edu.pl/campaigns
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	No limitation
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online

	<input type="checkbox"/> On-site at the service taker's	
Contact person	<i>SMERF Team member</i> Maria Rosienkiewicz maria.rosienkiewicz@pwr.edu.pl	<i>Directly responsible contact person</i> innomanu@pwr.edu.pl
Short description of the service		
<p>Synergy is a free platform that enables the creation and testing of crowdfunding campaigns among a company's employees. It serves as a training tool for entrepreneurs who want to test their ability to create a crowdfunding campaign and simulate the process of raising funds.</p> <p>An SME can use the platform to support a training or workshop during which the following activities can be performed: Definition of campaign goals, Defining benefits for supporters, Campaign value and cost planning, Supporting the developed campaigns by assigning artificial money, Assessing the drafted campaigns.</p> <p>To use the crowdfunding functionality on the Synergy platform, a new user must register an account and log in. This is sufficient for creating a new campaign. If a company wants to use the simulated crowdfunding functionality, the user must contact the platform's administrator at innomanu@pwr.edu.pl. The administrator will then assign the appropriate role on the platform to the user, enabling them to manage the crowdfunding simulation process.</p> <p>The user that is logged-in can add a new campaign by clicking the button "Add campaign", then a pop up will appear with a form where the details about the campaigns should be filled in. There is a possibility to save the form as a "Draft version". The finished version of the campaign's information form shall be submitted as "Released version" where all required data have to be filled in. After saving the campaign is registered but not yet approved - the information about "campaign inactive" is provided, and a notification will be sent to platform administrators informing about new campaign. The administrator will verify the campaign's content and will approve it - after this the campaign will be visible on the campaign list in the "Crowdfunding for research" functionality. The "Released version" will be visible in the list of campaigns within "user's section". To view all campaigns created on a given account, one has to click on the account avatar in the navigation bar and select option "My campaigns".</p>		
Benefits		
<p>Learning how to create a crowdfunding (CF) campaign results in numerous benefits for SMEs. CF provides immediate funding without the need for traditional loans, allowing for market validation and proof of concept. Crowdfunding enhances visibility and marketing reach, building a community of loyal customers and generating valuable feedback. It functions as a pre-sale platform, reducing financial risk and optimizing production. Successful campaigns boost credibility and trust, attracting media attention and potential partners. They enhance skills in marketing, project management, and financial planning, aiding future fundraising efforts. Crowdfunding allows SMEs to test new ideas with minimal financial risk and to receive real-time feedback from potential customers, enabling rapid iteration and improvement. Additionally, it creates a buzz around the product or service, often leading to viral marketing and word-of-mouth promotion. By engaging with a broad audience, SMEs can establish brand recognition and loyalty early on. Overall, crowdfunding fosters innovation and provides a competitive edge, significantly impacting the SME's growth and success.</p>		
Initial requirements for the service taker		

To start using the service it is required to register on the <https://synergyplatform.pwr.edu.pl/>. If support is required, an email should be sent to innomanu@pwr.edu.pl

Apart from that there are no specific requirements. In the navigation bar, after selecting the tab "Crowdfunding for research," the application redirects to the view where the list of active crowdfunding campaigns can be seen. In general, the user may be interested in the following paths:

- Adding a new crowdfunding campaign,
- Browsing campaigns submitted by other users,
- Sorting by publication date or campaign end date,
- Searching for campaigns by keywords.

Innovative service n.3	
Name of the tool	Deep Tech Needs
Source for more information	https://synergyplatform.pwr.edu.pl/needs
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input type="checkbox"/> Open innovation 2.0 & sharing <input type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	WUST Team innomanu@pwr.edu.pl

Short description of the service
The "Deep Tech Needs" service is designed to capture the essential training requirements of Small and Medium Enterprises (SMEs) within the deep tech sector. This tool facilitates the identification of critical training needs from various stakeholders' perspectives, ensuring a comprehensive understanding of the demands within the ecosystem. By gathering this information, the service aims to develop and refine a deep tech training portfolio that equips students with the skills needed to address current and emerging community challenges. SMEs can submit their key training requirements through the dedicated platform, synergyplatform.pwr.edu.pl , ensuring their voices are heard and their needs are met.
Benefits
Understanding the core needs of SMEs within the deep tech ecosystem allows Higher Education Institutions (HEIs) participating in the DEETECHTIVE project (deetechtive.eu) to tailor their curricula to meet these specific demands. By incorporating the identified training needs into their educational programs, HEIs can ensure that their graduates are equipped with the relevant skills and knowledge required by the industry. In the long term, this alignment will lead to a labour market enriched with highly skilled employees, effectively bridging the gap between academic training and industry requirements. This synergy between education and industry will foster innovation and drive economic growth, benefiting both the SMEs and the broader community.
Initial requirements for the service taker
No initial requirements

Innovative service n.4	
Name of the tool	Infrastructure Sharing - Synergy Platform
Source for more information	https://synpro.e-science.pl/infrastructures
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	Online service available 24/7
	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online

Form of provision (please mark all possible options)	<input type="checkbox"/> On-site at the service receiver's premises
Contact person	SMERF Team member innomanu@pwr.edu.pl
Short description of the service	
<p>The service involves two types of participants: infrastructure providers offering technological infrastructure and infrastructure takers in need of specific equipment. Additionally, a dedicated platform facilitates the infrastructure sharing process, enabling easier access to advanced technologies for various organizations</p> <p>Investing in an infrastructure often poses difficulties for organizations and raises i.e. following questions:</p> <ul style="list-style-type: none"> • how can we use the infrastructure properly? • which use cases exist in our company or research organization for this technology? • how can we ensure that the infrastructure is fully used? <p>In order to answer these questions, INFRASTRUCTURE SHARING service offer the user the possibility to test infrastructure and gives the possibility to better utilize and commercialize offered technologies.</p> <p>INFRASTRUCTURE SHARING (https://synpro.e-science.pl/infrastructures) is a living database of infrastructure located mainly in Central Europe, but not only.</p>	

Manual

Free search

Country



Infrastructure Type Additive Manufacturing

Infrastructure Type Industry 4.0

Infrastructure Type Micro/Nano Manufacturing

Infrastructure Type Research Equipment

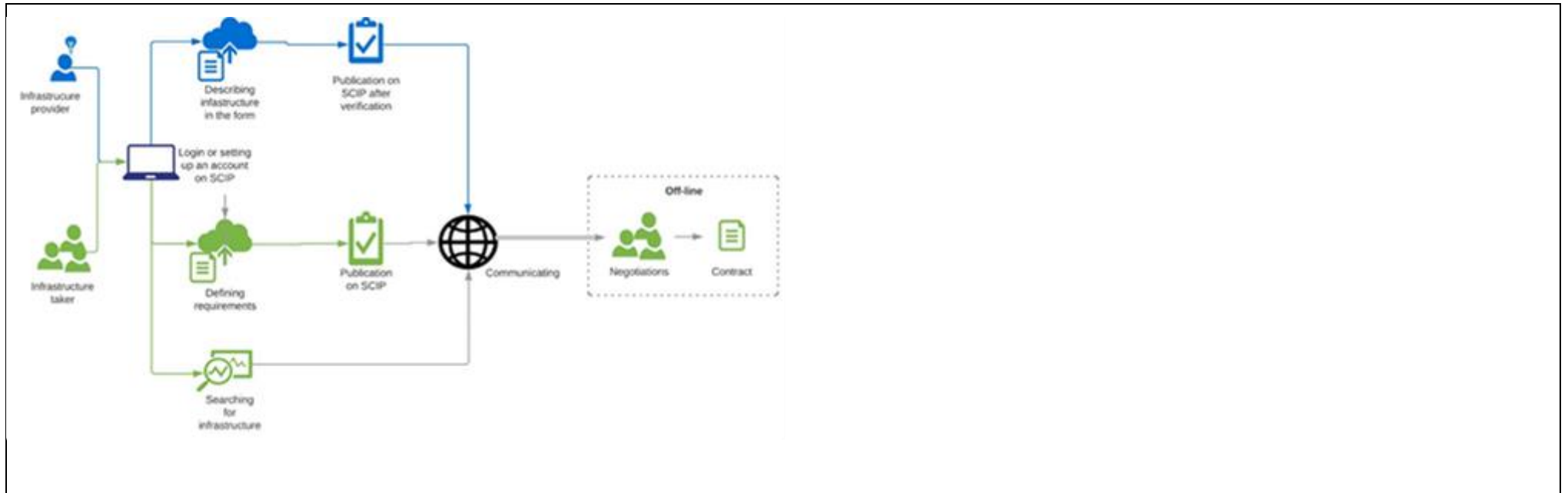
Infrastructure Type Space and Office Equipment

Name ▲	Description	Organization	Possibilities of use	Updated
3D Printer 	Creativity Ender 3 V2 Neo	Novac s.r.l.	Rental Usage according to agreement	2023-12-12 19:57
Scanning Electron Microscope (SEM) 	A type of electron microscope that permits the observation and characterization of heterogeneous organic and inorganic materials on a nanometre (nm) to micrometre (µm) scale.	Centre for Micro- and Nanosciences and Technologies	Usage according to agreement	2019-11-20 14:54

In general, the users are interested in three following paths:

- **to search** existing database of infrastructure (no need to be logged in),
- **to register** their own infrastructure (for registered users),
- **to use** already registered infrastructure - which in fact means contacting a person who is offering the particular infrastructure (for registered users).

Technological infrastructure may vary, ranging from individual machines (e.g., robot, 3D printer, microscope) to technology lines and even entire laboratories.



The platform comprehensively supports the entire process of searching, registering, and contacting between the provider and taker of the infrastructure.

Benefits

INFRASTRUCTURE SHARING service offer the user the possibility to test infrastructure and gives the possibility to better utilize and commercialize offered technologies. This new business model can help companies make the right technology investment decision and increase the infrastructure utilization rate. What is more, the infrastructure sharing solution supports:

- **promoting** organization's technology and competences,
- **testing** a new business model,
- **increasing** organization's turnover, reduce costs,
- **increasing** the utilization of their infrastructure,
- **establishing** new business partnerships,
- **advertising** organization's technologies.

Initial requirements for the service receiver

There are no formal requirements for the SME to be able to use this service.

Biz-Up

Innovative service n.1	
Name of the tool	LEGO SERIOUS PLAY®
Source for more information	https://www.lego.com/de-at/themes/serious-play
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English and German
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: ~ € 1.600,- (depends on the extent) Additional notes: depending on the kit and workshop offered
Duration	3-4 hours, but can also be several days
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input type="checkbox"/> Online <input checked="" type="checkbox"/> On-site at the service taker's
Contact person	<i>SMERF Team member</i> <i>Directly responsible person</i> Stefanie Neumayer Stefanie Neumayer stefanie.neumayer@biz-up.at stefanie.neumayer@biz-up.at
Short description of the service	

LEGO Serious Play is a moderated workshop method, in which LEGO bricks are used for creative thinking and developing problem-solving skills. It engages group discussions and also encourages all participants to open up and show their potential. Through LEGO Serious play it is possible to visualize and explain complex topics easier. Moreover, this interactive method helps to create a common level of knowledge within the team. Most importantly, gaining new insights, developing new knowledge and a new way of thinking are the main goals.

Certified facilitators conduct and moderate LEGO Serious Play workshops for organizations, ensuring that discussions stay on track and participants do not drift into unrelated topics. Certainly, the facilitator can also teach participants how to set up a workshop and share the foundational principles and methods endorsed by LEGO Serious Play.

Overall, the LEGO-bricks and the additional workshops can lead to unlimited creative ideas, build resilience and encourage innovative thinking in a fun way. Such workshops can last from a few hours to several days, depending on the complexity of the challenge or problem.

Benefits

Workshops including LEGO Serious Play support building effective communication and mutual understanding. These skills enable the team to gain new insights, develop new knowledge and break through their usual way of thinking.

All participants are encouraged to share their creative thoughts, which will create a bigger pool of new ideas for future growth and innovation.

LEGO Serious Play supports communication within the organization. Complex ideas are being visualized and can be explained in depth, but also in a fun way. Moreover, encouraging everyone to participate and engage in discussions fosters stronger teamwork. However, it is important that everyone is paying attention and listens to each other's opinion.

It helps to enhance creative problem-solving skills by breaking free from conventional thinking and embracing an out-of-the-box approach. Such a service / workshop can boost one's creativity and innovative thinking.

Additionally, viewing situations from different perspectives can also lead to improved decision-making skills.

Initial requirements for the service taker

Firstly, in order to include LEGO Serious Play in one's company, the company requires someone who is certified to lead Serious Play workshops. Thus, the knowledge on how to use this tool internally is necessary. The knowledge can be gained through workshops teaching methods and basics about how to use LEGO Serious Play in the own company.

Therefore, the fee depends on the price of the workshop and certification.

There is also the possibility of hiring an external facilitator one for a workshop. In that case, the fee is based on the time frame and tasks for the challenges within the organizations. Such workshops can last from several hours to several days. Certainly, this fee also depends on the facilitator's offer.

Name of the tool	Design Thinking
Source for more information	What is Design Thinking? - Design Thinking - Hasso Plattner Institute (hpi.de)
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English and German
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: ~ € 1.600,- (depends on the extent) Additional notes:
Duration	Highly variable - from days to months
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online (only applies to individual parts of the process) <input checked="" type="checkbox"/> On-site at the service taker's
Contact person	OBJ SMERF Team member OBJ Directly responsible person OBJ Stefanie Neumayer OBJ Stefanie Neumayer OBJ OBJ stefanie.neumayer@biz-up.at OBJ stefanie.neumayer@biz-up.at OBJ
Short description of the service	
<p>We live in a VUCA world (Volatility, Uncertainty, Complexity, Ambiguity), which is becoming increasingly challenging. Digitalization and globalization are transforming the way we live, learn and work. Companies, institutions and political entities face mounting pressure to adapt to these circumstances and manage complexity. This is where Design Thinking becomes essential.</p> <p>Design Thinking is a mindset and an approach aimed at developing innovative, customer-centred solutions and solves problems through collaborative teamwork. It fosters an agile culture in terms of working and learning. The iterative Design Thinking process requires a diverse team and a flexible and agile work environment.</p> <p>The Design Thinking innovation process is an iterative method, which consists of 6 phases. à Understand à Observe à Define Point of View à Ideate à Prototype à Test</p>	

The process requires a culture that is open to failure because Design Thinking thrives on exploring what seems impossible. The empathetic approach centers on human needs.

Benefits

Design Thinking offers numerous benefits. An extract of the advantages:

Design Thinking focuses on **human-centered solutions**. The focus is on understanding and addressing the needs and experiences of the users, which leads to solutions that are more effective and user-friendly.

The Method enhances innovation by encouraging creativity and out-of-the-box thinking. It fosters innovative ideas and solutions that might not emerge through traditional problem-solving methods.

Design thinking is an **iterative approach** which allows continuous refinement and improvement of ideas, which lead to a higher quality of the outcome.

Furthermore, the method **improves collaboration**, as the process promotes teamwork and brings together the diverse perspectives and experiences of all team members. This leads to robust solutions.

Design Thinking stands for **flexibility and adaptability**. Additionally, it **reduces the risk of failure**, thanks to prototyping and testing ideas early and often.

Initial requirements for the service taker

The minimum expense of this service is approximately € 1.600,00. The actual price varies depending on the type and intensity.

The culture of the SME must be sufficiently open to enable employees to fully engage within the Design Thinking process. Additionally, flexible spaces and rooms, which foster creative thinking and actions, are essential. Furthermore, the appropriate mindset is crucial, as the environment must remain free from criticism.

CRIT

Innovative service n. 1	
Name of the tool	Smart Technology Workshop
Source for more information	https://crit-research.it/en/servizi/innovative-collaboration/
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy

Innovative service n.2	
Name of the tool	Technology Due Diligence
Source for more information	no source available
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English, Italian
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee: Additional notes: For this service, CRIT offers a free of charge Technology Due Diligence assessment valued at €3,000 to a single company. Subsequent assessments will incur a fee.
Duration	Estimation of 1-2 months per company.
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	CRIT Paolo Gnudi gnudi.p@crit-research.it
Short description of the service	
<p>The service foresees the assessment of innovativeness and competitiveness level of a SME, by understanding its technological strengths and weaknesses.</p> <p>It will include: an in-depth analysis of the technology proposal, a state-of-the-art analysis of the relevant technology and the main trends associated with it, assessment of positioning against competitive solutions.</p> <p>The activity can also be a useful tool for an innovative company to understand its positioning through an analysis performed by an external and independent specialist.</p> <p>This service cannot be provided to multiple companies at the same moment.</p>	
Benefits	

The company will receive the technical information needed to evaluate investment opportunities and/or partnerships with high-tech companies (e.g., startups).

Initial requirements for the service taker

N.a.

Innovative service n.3	
Name of the tool	Technology scouting
Source for more information	https://crit-research.it/en/servizi/technology-scouting/
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English, Italian
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee: Additional notes: For this service, CRIT provides a free of charge Technology Scouting (research report) valued at €12,000. Multiple companies may access the same report if it pertains to shared topics or areas of interest. Following the initial complimentary report, subsequent services will be subject to a fee.
Duration	3-4 months
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	<i>CRIT</i> <i>Paolo Gnudi</i> gnudi.p@crit-research.it
Short description of the service	
<p>Service of research and analysis of technical-scientific information that enables the company to select the most suitable technologies and technology partners to develop a product, process and service innovation and to define a corporate technology strategy consistent with the trends that characterize the sector in which it operates.</p> <p>If possible, more than 1 SME with lacks in the same field will be identified, so to offer a scouting covering the peculiarities of more than one company.</p>	
Benefits	

This activity enables a company to stay ahead of market trends by identifying and adopting cutting-edge technologies, thereby maintaining a competitive advantage. By exploring innovative solutions and advancements, technological scouting helps a company to optimize its processes, reduce costs, and improve overall efficiency.

Initial requirements for the service taker

n.a.

KIT

Innovative service n.1							
Name of the tool	Introduction to Additive Manufacturing						
Source for more information	https://www.knmf.kit.edu/3DP.php						
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input type="checkbox"/> Open innovation 2.0 & sharing <input type="checkbox"/> Green & circular economy & sustainability economy						
Language (in what can be the service provided)	English						
Fee	<input checked="" type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: if external advisor is added Additional notes:						
Duration	No limitation						
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's						
Contact person	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><i>SMERF Team member</i></td> <td style="width: 50%;"><i>Directly responsible contact person</i></td> </tr> <tr> <td><i>Tobias Müller</i></td> <td><i>Tobias Müller</i></td> </tr> <tr> <td>Tobias.mueller2@kit.edu</td> <td>Tobias.mueller2@kit.edu</td> </tr> </table>	<i>SMERF Team member</i>	<i>Directly responsible contact person</i>	<i>Tobias Müller</i>	<i>Tobias Müller</i>	Tobias.mueller2@kit.edu	Tobias.mueller2@kit.edu
<i>SMERF Team member</i>	<i>Directly responsible contact person</i>						
<i>Tobias Müller</i>	<i>Tobias Müller</i>						
Tobias.mueller2@kit.edu	Tobias.mueller2@kit.edu						

Short description of the service
<p>Additive Manufacturing (AM) has become a viable alternative in the manufacturing of complex shaped parts, especially with polymers. However, the transition from traditional manufacturing routes is difficult if little or no know-how on additive manufacturing is present in the companies.</p> <p>KIT is working in different additive manufacturing technologies, with the Institute of Automation and Applied Informatics mainly focussing on Filament and 3D Inkjet printing. The IAI team will offer a introduction to additive manufacturing via online presentations on the benefits and limitations of AM, introduction to the different technologies, technical considerations when transforming to a AM based/supported production chain.</p> <p>In addition, personal consultation can be provided in terms of choosing the suited technology and first steps to move into the area of AM. KIT can also offer contacts to actual service providers specialized in the application of AM in companies.</p>
Benefits
<p>AM is considered a transformational technique as it features unique properties in terms of production of complex shaped parts in small and medium batches. Parts produced in an additive way can be adjusted quickly by just changing the digital model, which allows for a much more flexible manufacturing approach up to a point where even individualized products are possible.</p> <p>As there is a very dynamic development in this area and several technologies are available it is often times very hard to get started and getting the necessary knowhow on how or even if additive manufacturing can be implemented in a company. This includes the availability of suitable materials, physical properties of the fabricated parts and much more. By offering a service that provides guidance into the world of AM, costly bad investments can be avoided.</p>
Initial requirements for the service taker
<p>The service taker should have a basic idea on how AM works and what products/ product lines should be manufactured with the new technique. For a reasonable consulting information on the designated material or physical properties as well as the geometry of the parts should be available to the service giver.</p>

Innovative service n.2	
Name of the tool	Access to KIT networks
Source for more information	https://www.irm.kit.edu/english/2791.php
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input type="checkbox"/> Green & circular economy & sustainability economy

Language (in what can be the service provided)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: depending on service Additional notes:
Duration	No limitation
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	<i>SMERF Team member</i> <i>Directly responsible contact person</i> Tobias Müller Tobias.mueller2@kit.edu
Short description of the service	
<p>KIT offers a variety of services based on the unique character of being a merger of university and research centre.</p> <p>Due to its academic foundation, a huge number of students are graduating at KIT every year, with many of them being open to a career in industry. This is why KIT offers services aimed at student, KIT Alumni but also companies such as SMEs. This ranges from offering scholarships, matching events for students and companies, a board for job offers but also alumni meetings to create networks between former KIT employees or students.</p> <p>Via these services, companies can look for future staff members with a high level of education in state-of-the-art technologies. This can be done via campus events, providing company profiles, advertisement on the campus itself or online.</p> <p>Also, company relationships can be formed via the industry relations service offered by KIT. This ranges from KIT Business club to actual strategic partnerships, which are often times also long-term collaborations between partnering companies.</p>	
Benefits	
<p>The main benefit a company can get from the KIT career services is access to a highly skilled and motivated employee market directly after a finished bachelor, master or PhD degree. The multi-national concept of KIT also provides a possibility to find students capable of working internationally or even students from countries in Central Europe studying Karlsruhe and moving back to their home countries.</p> <p>In times of lack of skilled workforce getting a direct access to potential employees first hand can be a advantage for an SME trying to change/transform their business model/goal and become more innovative or introduce new approaches within the company.</p>	

The possibility to connect to other companies may rise the opportunity for collaborative projects to closer relationships in direct strategic cooperations.

Initial requirements for the service taker

The service taker should have a look at the KIT services webpage and get informed about the possibilities available for companies in terms of career services:

<https://www.irm.kit.edu/english/7003.php>

For industry relations, a information webpage is also available that give more information of the possibilities:

<https://www.irm.kit.edu/english/industry-relations.php>

After getting the information needed and identifying a possible service that could be of interest, the service taker should contact the respective SMERF Team Member to establish the direct contact to the KIT service they are considering.

Innovative service n.3	
Name of the tool	Decision Support Systems with Integrated AI
Source for more information	n/a
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input type="checkbox"/> Open innovation 2.0 & <input type="checkbox"/> Green & circular economy & sustainability sharing economy
Language (in what can be the service provided)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	Duration is defined based on the scope of the project and the specific needs of the SME
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input checked="" type="checkbox"/> On-site at the service taker's

Contact person	<p><i>SMERF Team member</i></p> <p><i>Directly responsible contact person</i></p> <p><i>Dr.-Ing. Dipl. Tobias Müller</i></p> <p><i>Phone +49 721 608-23559</i></p> <p><i>tobias.mueller2@kit.edu</i></p>
Short description of the service	
<p>This service provides SMEs with a robust framework to validate their ideas and concepts through technical consultations on the setup of pilot lines and production batches. This service offers SMEs consultations on AI-integrated Decision Support Systems custom-made for flexible manufacturing systems (FMS). The consultations include guidance on setting up pilot lines and example production batches to validate ideas and concepts. Additionally, it covers sustainability concepts, implementation of machine learning algorithms for process optimization, product quality estimation, and real-time monitoring.</p> <p>For illustration, an SME aiming to test a new production process can benefit from consultations on establishing a dedicated virtual pilot line. These consultations enable the company to refine and optimize their processes before full-scale implementation and gain knowledge about how to develop machine learning algorithms for process optimization, estimation of product quality, and real-time monitoring ensures that production efficiency is maintained, and any issues are swiftly addressed. By integrating machine learning into the manufacturing workflow through expert consultations, SMEs can significantly enhance their decision-making capabilities, optimize resource allocation, and predict maintenance needs.</p>	
Benefits	
<p>Utilizing this service offers several significant benefits for SMEs. Enhanced decision-making is achieved over the integration of AI that improves processes and optimizes resource allocation and leads to increased efficiency of production. Analysing pilot lines and production batches allows for the validation of ideas and concepts, reducing risk and ensuring probability before full-scale implementation. Machine learning capabilities, supported by robust databases, ensure appropriate responses to production issues (off-line and in-line cases), enhancing operational efficiency.</p>	
Initial requirements for the service taker	
<p>To effectively utilize our service, SMEs should begin by clearly defining their objectives and expected outcomes in relation to integrating AI in existing pilot lines. They are encouraged to provide a description of their manufacturing process, including any challenges they face. Additionally, SMEs should source relevant data that can be used to develop an appropriate Design of Experiments (DoE). This information will enable the service provider to tailor solutions specifically to the SME's needs, ensuring optimal outcomes. SMEs should also be prepared for ML algorithms deployment and secure storage solutions for ensuring that they can manage and protect their data throughout the process. Lastly, SMEs should be open to engaging with networks and utilizing career services, leveraging the extensive support and opportunities provided to foster a collaborative and innovative environment that drives sustainable growth. By following these recommendations, SMEs can fully capitalize on the comprehensive support offered, enhancing their manufacturing processes and driving innovation.</p>	

PBN

Innovative service n. 1 - Complete product development processes	
Name of the tool	am-LAB Digitalization HUB services
Source for more information	https://www.am-lab.hu/main.php?Lang=EN
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	Hungarian, English
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: It depends on the type and volume of development.
Duration	The duration can be a few weeks or even several months depending on the nature of service.
Form of provision (please mark all possible options)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service receiver's premises
Contact person	SMERF Team member <i>Directly responsible contact person</i> Pannon Business Network <i>Mr. Attila Joós</i> Hungary Attila.joos@pbn.hu
Short description of the service	

Complete product development processes

Including:

- prototype production
- 3D Modelling, 3D Printing, 3D Scanning, Reverse Engineering
- AR/VR augmented reality applications

The am-LAB Digitalization HUB is an applied R&D hub focusing on the latest digital technologies. Our goal is to support small and medium-sized enterprises, Midcap companies, and start-up and with concrete developments. We are focusing on the development of manufacturing and Industry 4.0 solutions, primarily supported by AI-driven software solutions. Through EU-supported mentorship programs, we assist startups and SMEs with concrete product development processes and AI-supported solutions. We have continuous learning opportunities, acquiring knowledge of new technologies.

In frame of our services, we develop products with higher added value and prototyping (FDM, SLS and SLA technologies) during the process. The service is complete, from idea to design, from model and tooling to optimisation for mass production. During product development, we create realistic images and animations of the planned product at an early stage of the design. Using the latest Hollywood movies software and technology, you can display realistic spaces, animations, and movements. It can be fully computer animation, but also a hybrid version. In the latter we put 3D animation into videos recorded with traditional technology.

With our modern tools, from about 70 different raw materials, we design individual products and components with two types of production technologies – and we manufacture both smaller and larger units on demand.

With our latest augmented reality apps, we focus on both industrial and marketing solutions in iOS and Android development environments. We display 3D content based on image recognition, as well as traditional video, audio and data sequences. We are able to display production data series in real time and develop AR applications for product marketing that helps sales during the product development phase.

In addition to mobile applications, we have prepared web-based AR applications, mainly to support industrial developments.

Benefits

Benefits for Companies Using am-LAB Digitalization HUB Services:

- **Access to Cutting-Edge Technologies:** companies gain access to the latest digital technologies and Industry 4.0 solutions, including AI-driven software, robotics, AR/VR, and big data analytics.
- **Product Development and Prototyping:** From ideation to design, model creation, and tooling, companies can streamline their product development processes.
- **Innovative Marketing Solutions**

Initial requirements for the service receiver

There are no formal requirements for the SMEs to be able to get the services, the companies must be committed to implementation.

Innovative service n. 2 - Collaborative and industrial robots, automatic mobile robots, drones

Name of the tool	am-LAB Digitalization HUB services
Source for more information	https://www.am-lab.hu/main.php?Lang=EN
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	Hungarian, English
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: It depends on the type and volume of development.
Duration	The duration can be a few weeks or even several months depending on the nature of service.
Form of provision (please mark all possible options)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service receiver's premises
Contact person	SMERF Team member <i>Directly responsible contact person</i> <i>Pannon Business Network</i> <i>Mr. Attila Joós</i> Hungary Attila.joos@pbn.hu

Short description of the service
<p><u>Collaborative and industrial robots, automatic mobile robots, drones</u></p> <p>With our developments, we offer a variety of robotics solutions for automation and indoor logistics processes with automated mobile robot applications for SMEs and large companies. We can perform inventory tasks with our unique development, a drone in the logistics field and the unique application developed for it.</p>
Benefits
<p>Benefits for Companies Using am-LAB Digitalization HUB Services:</p> <ul style="list-style-type: none"> • Access to Cutting-Edge Technologies: companies gain access to the latest digital technologies and Industry 4.0 solutions, including AI-driven software, robotics, AR/VR, and big data analytics. • SMEs can automate repetitive tasks and streamline indoor logistics processes with robotics solutions, improving productivity and reducing labor costs.
Initial requirements for the service receiver
<p>There are no formal requirements for the SMEs to be able to get the services, the companies must be committed to implementation.</p>

Innovative service n. 3 - <u>Production Simulation – Teaching & Learning Factory Unit</u>	
Name of the tool	am-LAB Digitalization HUB services
Source for more information	https://www.am-lab.hu/main.php?Lang=EN
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	Hungarian, English
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: It depends on the type and volume of development.

Duration	The duration can be a few weeks or even several months depending on the nature of service.	
Form of provision (please mark all possible options)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service receiver's premises	
Contact person	SMERF Team member Pannon Business Network Hungary	<i>Directly responsible contact person</i> Mr. Attila Joós Attila.joos@pbn.hu
Short description of the service		
<u>Production Simulation – Teaching & Learning Factory Unit</u> <p>The Teaching & Learning Factory Unit presented by am-LAB is available from November 2021, an intelligent mini factory designed to simulate and train various technologies (pneumatic, electronic, software, etc.) and training in factory production management.</p> <p>The demonstration production line and the related professional training are fully in line with industrial reality. The system simulates a modular, fully automated intelligent factory, including the latest Industry 4.0 technologies, advanced production instructions and predictive maintenance services. The system really connects and demonstrates a company's production, assembly, logistics and management processes.</p> <p>Our application system currently consists of 5 stations, each of which performs one or more tasks necessary to complete the manufacturing process specified in the factory.</p>		
Benefits		
Benefits for SMEs using AM-LAB's Production Simulation — Teaching & Learning Factory Unit can be: <ul style="list-style-type: none"> • Predictive Maintenance: SMEs can explore predictive maintenance techniques, reducing downtime and improving equipment efficiency. • Training for SMEs: SMEs can train employees on real-life factory technologies and management using a fully simulated, intelligent production environment, The unit offers flexible, modular training tailored to specific production tasks, enhancing employees' practical skills. 		

- Process Integration: The system demonstrates the full production workflow, including assembly, logistics, and management, helping SMEs optimize operations.

Initial requirements for the service receiver

There are no formal requirements for the SMEs to be able to get the services, the companies must be committed to implementation.

Innovative service n. 4 - Big Data – Data Analytics

Name of the tool	am-LAB Digitalization HUB services
Source for more information	https://www.am-lab.hu/main.php?Lang=EN
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	Hungarian, English
Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee: It depends on the type and volume of development.
Duration	The duration can be a few weeks or even several months depending on the nature of service.
Form of provision (please mark all possible options)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service receiver's premises
Contact person	SMERF Team member <i>Directly responsible contact person</i>

	Pannon Business Network Hungary	Mr. Attila Joós Attila.joos@pbn.hu
Short description of the service		
<p><u>Big Data – Data Analytics</u></p> <p>Our data analysis activities are based on the organisation and transformation of large amounts of disordered data based on customer-specific tasks. From these data we extract hidden or difficult to formulate information, which is properly synthesised to our customers at the end of the process. In the course of the tasks, we use deep statistical knowledge, which are programmed with the help of individual algorithms.</p> <p>In the course of the processes it is possible to examine customer habits, draw short- and long-term conclusions based on company financial data, map visualisation of address data, and draw further non-evident conclusions by involving external sources of information.</p> <p>In the course of the process, data analysis activities are always carried out jointly with the customer to get to know and interpret the data. The data analysis function is often complemented by field-specific knowledge (e.g.: in the case of company data, close cooperation with financial and corporate experts) which enables a serious interdisciplinary, professional cooperation with the client.</p> <p>With the help of a wide range of visualisation techniques, abstract information can also be easily transmitted without a detailed description of the complicated background work and methodology.</p>		
Benefits		
<p>Benefits for Companies Using am-LAB Digitalization HUB Services:</p> <ol style="list-style-type: none"> 1. Better Decision-Making: Insights from structured data help SMEs make informed, strategic decisions. 2. Customer Behavior Insights: Analyze customer habits to improve targeting and retention. 3. Financial Optimization: Evaluate financial data to identify trends and improve performance. 4. Operational Efficiency: Collaborate with experts to streamline processes and reduce costs. <p>These benefits help SMEs enhance competitiveness and drive growth through data-driven strategies.</p>		
Initial requirements for the service receiver		

There are no formal requirements for the SMEs to be able to get the services, the companies must be committed to implementation.

STEP RI

Innovative service n.1	
Name of the tool	Servitization & service innovation
Source for more information	https://www.restartproject.eu/ficha.php?id_ficha=6
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing economy <input checked="" type="checkbox"/> Green & circular economy & sustainability
Language (of service provision)	Croatian, English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	3 days (workshop 2 days + follow-up session 1 day)
Form of provision (please mark all possible options)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service receiver's premises
Contact person	SMERF Team member <i>Directly responsible contact person</i>

	Jana Blazevic Marcelja jblmarcelja@uniri.hr	Jana Blazevic Marcelja jblmarcelja@uniri.hr
Short description of the service		
<p>Servitization is a business innovation process of transforming a product-based business into a service-based one by developing an offer combining product and service, allowing entrepreneurs to better adapt their solution to the needs of the customer and improve their business.</p> <p>Servitization offers several benefits for small and medium-sized enterprises (SMEs):</p> <ul style="list-style-type: none"> • rationalization of resources and expenses, • more revenue in the long run as the service is no longer a cost but a value creator, • improved response to customer needs, and • improved pace of technology adoption. <p>Our service is based on the methodology developed for the THINGS+ project. Key steps in the implementation of the service:</p> <ol style="list-style-type: none"> 1. Inside-out evaluation: Evaluation of the company’s capabilities, existing products, and services. Exploring opportunities for improvement using internal knowledge and resources. 2. Outside-in analysis: Analysis of targeted customers and their challenges to identify valuable servitization & service innovation opportunities based on external insights. 3. Change and Strategy: Analysis of necessary changes in the business model and organizational capabilities, and creating a draft strategy for the commercialization of the servitized product. <p>This service prepares the SME for taking further steps by offering initial knowledge of the key aspects of servitization (through the workshop) and providing subsequent support sessions for any issues and uncertainties identified (through the follow-up session).</p>		
Benefits		
<p>The SME receiving this service will develop new competencies and gain valuable insights into concepts that can help them understand the benefits of servitization in terms of enhanced competitiveness, improved customer satisfaction, finding new revenue streams, strategic growth, improving innovation skills, etc. Servitization is also a process that improves the adoption rate of new technologies and leads to more efficient utilization of resources and improved energy consumption, therefore enhancing environmental performance.</p> <p>The convenience of the training is the opportunity to work 1-on-1 with a mentor who will provide the SME with individual support and prepare it for leaping into the servitization process.</p>		
Initial requirements for the service receiver		

This service is particularly valuable for product-based SMEs that want to enrich their offer with services, but it is also valuable to service-based SMEs that want to enhance their existing services. SME employees who are going to participate in this kind of activity should have a certain knowledge of the products and services they offer. There are no formal requirements for the SME to be able to attend these workshops besides the assessment previously taken in the earlier phase of the SMERF project.

UNIGE

Innovative service n. 1	
Name of the tool	Advanced AI & Robotics Applications4SMEs
Source for more information	https://www.raiseliguria.it/programma-training/
Thematic focus - Pillar	<input type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input type="checkbox"/> Open innovation 2.0 & sharing <input type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	Italian
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:
Duration	To be determined
Form of provision (please mark all possibilities)	<input type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	<i>SMERF Team member</i> <i>Directly responsible contact person</i> Giovanni Berselli formazione.raise@unige.it giovanni.berselli@unige.it
Short description of the service	

This service is part of the Robotics and Ai for Socio-economic Empowerment (RAISE) Ecosystem, born from the collaboration of the University of Genoa, the Italian Institute of Technology and the CNR (Consiglio Nazionale di Ricerca) and based on the scientific and technological domains of artificial intelligence and robotics.

“Advanced AI & Robotics Applications4SMEs” is a specialisation course for STEM graduates with specific requirements and employees from SMEs, which aims to develop experts in AI and Robotics. The course includes a common part with a focus on innovation management, followed by specialisation courses related to vertical spoke, covering high-level technical skills.

Benefits

Those attending the course will be able to meet experts in the field and gain advanced knowledge on AI and Robotics

Initial requirements for the service taker

Graduates with specific qualifications (in STEM disciplines or Economics) and employees of innovative SMEs can attend the course.

Innovative service n.2

Name of the tool	Technology Transfer Lab
Source for more information	https://unige.it/unimprese (ITALIAN only)
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes: research contracts signed directly with laboratories
Duration	How much is needed
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	SMERF Team member <i>Directly responsible contact person</i>

	Giovanni Berselli giovanni.berselli@unige.it	Antonella Prato prato@balbi.unige.it
Short description of the service		
<p>This service manages the collaboration between University of Genoa and enterprises. The support is provided in the following ways:</p> <ul style="list-style-type: none"> • Match between Enterprise's innovation needs and the most suitable research team capable of providing the R&D support • Consultation service for financing opportunities within the collaboration between Enterprises and the University of Genoa • Activate partnerships for joint projects on industrial research and experimental development 		
Benefits		
<p>The SMEs that will benefit from this service will have the opportunity to develop advanced projects by exploiting the know-how of the research teams of the University of Genoa; depending on their need, the staff of the Technology Transfer Lab will identify the research group best suited to their needs, promoting the definition of profitable partnerships.</p>		
Initial requirements for the service taker		
<p>There are no specific requirements; the service provided is, however, limited to the actual availability of particular knowledge of the research teams.</p>		

TUKE

Innovative service n.1	
Name of the tool	Startup Centre & Incubator
Source for more information	https://startupcentrum.sk/en/
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	<p>English,</p> <p>If needed it can be conducted in local language (but it will limit the possible solutions)</p>
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:.....

	Additional notes:	
Duration	After 6 months of Acceleration programme in the Startup centre startups may based on evaluation by expert panel extend their stay at the Startup center TUKE for additional 6 months or be invited to the Incubator TUKE (only applicable for startups already established as legal entities).	
Form of provision <i>(please mark all possibilities)</i>	<input checked="" type="checkbox"/> On-site at the service giver's premises	<input type="checkbox"/> Online
	<input type="checkbox"/> On-site at the service taker's	
Contact person	<i>SMERF Team member</i> Martin Dujcak martin.dujcak@tuke.sk	<i>Directly responsible contact person</i> Miroslav Michalko Miroslav.michalko@tuke.sk
Short description of the service		
<p>Technicom Start-up Center is a dynamic incubator and accelerator program designed to nurture and support budding entrepreneurs in transforming their innovative ideas into successful businesses. With a keen focus on fostering innovation and entrepreneurship, the center offers a comprehensive suite of resources, mentorship, and networking opportunities to empower start-ups at every stage of their journey.</p> <p>At the heart of Technicom Start-up Center is a collaborative workspace equipped with state-of-the-art facilities, providing entrepreneurs with a conducive environment to work, collaborate, and innovate. From co-working spaces to dedicated meeting rooms and cutting-edge technology infrastructure, the center offers everything a start-up needs to thrive.</p> <p>In addition to physical infrastructure, the center provides invaluable mentorship and guidance from seasoned entrepreneurs, industry experts, and investors. Through one-on-one mentoring sessions, workshops, and networking events, start-ups gain access to valuable insights, advice, and connections that can propel their growth and success.</p> <p>Furthermore, the Technicom Start-up Center offers a range of support services tailored to the unique needs of early-stage ventures. This includes assistance with business planning, market research, product development, marketing strategy, funding opportunities, and more. Whether it's refining a business model, preparing a pitch deck, or securing investment, start-ups can rely on the center's expertise and support every step of the way.</p> <p>Beyond the initial stages, the center continues to provide ongoing support to help start-ups scale and expand their operations. This includes access to funding opportunities, partnership development, access to markets, and assistance with recruitment and talent acquisition.</p> <p>Overall, Technicom Start-up Center is more than just a physical space; it's a vibrant ecosystem that fosters innovation, collaboration, and entrepreneurship. By providing a holistic support system encompassing infrastructure, mentorship, and resources, the center empowers start-ups to overcome challenges, seize opportunities, and realize their full potential.</p>		
Benefits		

- **Infrastructure Access:** Access to modern facilities without high costs.
- **Mentorship:** Guidance from industry experts.
- **Networking:** Connections with investors and peers.
- **Business Support:** Help with planning and development.
- **Funding Opportunities:** Access to capital sources.
- **Partnership Opportunities:** Collaboration prospects.
- **Market Access:** Exposure to potential customers.
- **Visibility:** Opportunities for promotion.
- **Talent Acquisition:** Recruitment support.

- **Continuous Support:** Ongoing assistance post-program.

Initial requirements for the service taker

Application Process: SMEs would typically need to fill out an application form providing details about their business idea, team, market analysis, and growth potential.

Eligibility Criteria: There may be specific eligibility criteria, such as being a registered business entity or having a minimum viable product (MVP) developed.

Membership or Registration: Participants might need to register for the competition, which could involve becoming a member of the centre or paying a registration fee.

Thematic Focus: The competition may have a particular thematic focus or industry vertical. SMEs should ensure their business idea aligns with the competition's theme.

Pitch Presentation: SMEs might be required to prepare and deliver a pitch presentation to a panel of judges, showcasing their business idea, market potential, and competitive advantage.

Commitment to Participation: Participants should be committed to actively engaging in all stages of the competition, including attending workshops, mentoring sessions, and networking events.

Compliance with Rules: SMEs must adhere to the competition rules and guidelines, including deadlines for submission, intellectual property rights, and ethical standards.

Scalability and Innovation: Judges may evaluate SMEs based on the scalability and innovation of their business idea, as well as the potential for growth and impact in the market.

By meeting these requirements, SMEs can compete effectively in the start-up competition hosted by Technicom Start-up Center, gaining valuable exposure, mentorship, and potential funding opportunities to propel their ventures forward.

Innovative service n.2							
Name of the tool	Digital Innovation Hub Services						
Source for more information	https://edihcassovium.sk/sluzby/						
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy						
Language (in what can be the service provided)	Slovak/English						
Fee	<input checked="" type="checkbox"/> Free of charge <input type="checkbox"/> Fee:..... Additional notes:						
Duration	The provision of services under this scheme is typically available for the duration of the project or as specified in the service agreement, ensuring alignment with project timelines and goals.						
Form of provision (please mark all possibilities)	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input checked="" type="checkbox"/> On-site at the service taker's						
Contact person	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><i>SMERF Team member</i></td> <td style="width: 50%; border: none;"><i>Directly responsible contact person</i></td> </tr> <tr> <td style="border: none;"><i>Martin Dujcak</i></td> <td style="border: none;"><i>Miroslav Janák</i></td> </tr> <tr> <td style="border: none;"><i>martin.dujcak@tuke.sk</i></td> <td style="border: none;"><i>info@edihcassovium.sk</i></td> </tr> </table>	<i>SMERF Team member</i>	<i>Directly responsible contact person</i>	<i>Martin Dujcak</i>	<i>Miroslav Janák</i>	<i>martin.dujcak@tuke.sk</i>	<i>info@edihcassovium.sk</i>
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<i>martin.dujcak@tuke.sk</i>	<i>info@edihcassovium.sk</i>						
Short description of the service							

1. Test Before Invest:

Description: Enables SMEs to test innovative technologies and solutions before making significant investments. This includes digitalization of manufacturing processes, cybersecurity, R&D, and prototype testing.

Offerings: Includes infrastructure access, digital maturity assessments, and technology validation.

2. Skill Development:

Description: Focuses on advancing digital skills through training and educational activities tailored to different expertise levels.

Offerings: Industry 4.0/5.0 training, programming, GIS software education, and preparation for industrial certifications.

3. Funding Support:

Description: Assists SMEs in securing funding for digital innovations by identifying suitable financial instruments and facilitating access to investors and grants.

Offerings: Project planning support, grant applications, and investor matchmaking.

4. Networking and Ecosystem Building:

Description: Connects SMEs with academia and tech sectors to foster innovation through networking events and partnerships.

Offerings: Technological matchmaking, trend monitoring, and access to a broad network of EDIH centers across Europe.

Benefits

Test Before Invest:

Risk Mitigation: Allows SMEs to experiment with technologies before committing financially.

Informed Decisions: Provides insights into the feasibility and potential impact of new technologies.

Skill Development:

Enhanced Competency: Improves digital skills among employees, boosting overall productivity.

Industry Readiness: Prepares SMEs for Industry 4.0/5.0 standards and certifications.

Funding Support:

Financial Access: Simplifies the process of obtaining funding and grants.

Resource Optimization: Guides SMEs in efficiently utilizing available financial resources.

Networking and Ecosystem Building:

Collaboration Opportunities: Facilitates partnerships with academia and tech sectors.

Innovation Acceleration: Promotes knowledge sharing and access to a broader network, enhancing innovation potential.

Initial requirements for the service taker

Application Form: SMEs must complete and submit the official application form provided.

Membership: SMEs should be members of the relevant industry or support organization.

Fees: Any applicable service fees must be paid at the time of application.

Documentation: SMEs must provide proof of their status, including registration and compliance with SME definitions.

Thematic Knowledge: Applicants should demonstrate a basic level of understanding in digitalization practices relevant to their business.

Compliance: SMEs must agree to adhere to all terms and conditions outlined in the support scheme.

De Minimis Aid: SMEs must ensure that the aid received does not exceed the de minimis aid threshold of up to 200,000 EUR over a three-year fiscal period as defined by EU regulations.

Innovative service n.3

Name of the tool	Prototyping and Innovation Services
Source for more information	https://www.sjf.tuke.sk/paic/en/
Thematic focus - Pillar	<input checked="" type="checkbox"/> Innovation culture <input checked="" type="checkbox"/> Digital manufacturing <input checked="" type="checkbox"/> Open innovation 2.0 & sharing <input checked="" type="checkbox"/> Green & circular economy & sustainability economy
Language (in what can be the service provided)	English, If needed it can be conducted in local language (but it will limit the possible solutions)

Fee	<input type="checkbox"/> Free of charge <input checked="" type="checkbox"/> Fee:..... Additional notes: According to individual agreement
Duration	According to individual agreement
Form of provision <i>(please mark all possibilities)</i>	<input checked="" type="checkbox"/> On-site at the service giver's premises <input checked="" type="checkbox"/> Online <input type="checkbox"/> On-site at the service taker's
Contact person	<i>SMERF Team member</i> <i>Directly responsible contact person</i> Martin Dujcak <i>Ladislav Vargovčik, PhD.</i> martin.dujcak@tuke.sk <i>ladislav.vargovcik@tuke.sk</i>

Short description of the service

The Prototyping and Innovation Centre (PaIC) at TU Košice is equipped with advanced manufacturing technology, suitable for precise tool manufacturing. It features new premises that enhance manufacturing accuracy and quality. PaIC's skilled team combines academic and industry expertise, supported by the university's strong research capabilities.

Mission and Activities

- **Research Implementation:** Applying research findings from faculty and students.
- **Industry R&D:** Conducting research, development, and innovation projects for industry.
- **Start-up Support:** Mentoring and manufacturing support for start-ups and small businesses.
- **Student Involvement:** Enabling students to participate in research and development.
- **Collaboration:** Coordinating industry-university projects with international reach.

1. Manufacturing:

- Prototyping and testing machinery and equipment.
- Precision CNC manufacturing of components.

2. Design and Testing:

- Design proposals and drawing documentation.
- Testing cutting power and tooling lifespan.
- Designing and manufacturing jigs.

3. Technological Processes:

- Designing and optimizing manufacturing procedures.
- Verifying technological processes.

4. **Robotics and Automation:**
 - Developing and testing robotic cells for industrial applications.
 - Automating manufacturing processes.
 - Equipment for decommissioning nuclear plants.
5. **Project Coordination:**
 - Managing EU-funded university-industry collaboration projects.
6. **Training:**
 - Training industry workers in new technologies and CNC programming.

PaIC at TU Košice bridges academic research and industrial application, providing resources and support to drive innovation and manufacturing excellence.

Benefits

1. **Advanced Technology Access:**
 - Use state-of-the-art equipment for precise prototyping and manufacturing.
2. **Expert Guidance:**
 - Receive mentorship from academic and industry experts.
3. **R&D Support:**
 - Collaborate on research projects to innovate and develop new products.
4. **Design and Testing:**
 - Access comprehensive design services and conduct rigorous testing.
5. **Networking:**
 - Connect with businesses, researchers, and potential partners.
6. **Cost-effective Production:**
 - Utilize precision CNC manufacturing for small batches without large investments.
7. **Robotics and Automation:**
 - Develop and implement automated systems to enhance production.
8. **Funding and Project Coordination:**
 - Assistance with EU funding applications and project management.
9. **Training:**
 - Access training programs for new technologies and CNC programming.
10. **Market Competitiveness:**
 - Leverage advanced manufacturing and R&D to stay competitive and innovative.

PaIC at TU Košice equips SMEs with the necessary tools, resources, and expertise for innovation and growth.

Initial requirements for the service taker

To use the services of the Prototyping and Innovation Centre (PaIC) at TU Košice, SMEs must meet the following requirements:

1. **Application Form:** Submit a detailed application form outlining the business idea, current stage, and specific needs.
2. **Eligibility:** Be a registered small or medium-sized enterprise with a clear project that aligns with PaIC services.
3. **Membership/Registration:** Register for the program, which may include becoming a PaIC member and paying any associated fees.
4. **Project Proposal:** Provide a comprehensive project proposal detailing objectives, expected outcomes, and required support.
5. **Commitment:** Commit to active participation in all program stages, including workshops and mentoring sessions.
6. **Regulatory Compliance:** Adhere to legal and regulatory requirements, including intellectual property and data protection regulations.
7. **Resource Utilization Plan:** Present a plan for using PaIC's resources, including equipment and expert guidance.
8. **Financial Stability:** Demonstrate financial viability or a plan for securing funding to support the project.
9. **Team Expertise:** Have a dedicated team with the necessary skills to effectively collaborate with PaIC staff and utilize resources.

Meeting these requirements ensures SMEs can fully benefit from the advanced facilities and comprehensive support offered by PaIC.

Quality Assurance Approval

Partner	Member of the Quality Assurance Team	Result of the quality check	Date of the quality check
(QAT1)	Stefanie Neumayer (PP2 Biz-Up)	<input checked="" type="checkbox"/> <u>accepted</u>	07.10.2024
(QAT2)	Federico Manara (PP7 UNIGE)	<input checked="" type="checkbox"/> <u>accepted</u>	09.10.2024