

EMPOWER MAGAZINE

SME
CLUSTER
GROWTH
EMPOWERED ENGINEERING



**CONNECTING
CLUSTERS**
PARTNERS MEET
IN HELSINKI

AEORUM
PILOT TEST OUR
PROGRAMME

**NEW ONLINE
SELF-ASSESSMENT
TOOL**
FOR SMEs LAUNCHED

SME CLUSTER
GROWTH
**IRISH
NATIONAL
EVENT**

WELCOME TO THE SME CLUSTER GROWTH PROJECT NEWSLETTER!

This issue shows the **progress made** in the project since the last edition, including **several training actions, meetings** and the publication of a **self-assessment tool** for SMEs.



S M E
CLUSTER
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The consortium had the opportunity to meet in **Helsinki to review the work done so far and to plan the last actions of the project**, which ends in December this year. In this EZINE you will find an update on the development of many of the topics discussed that day, including a **review of the cluster activity**, the **results and conclusions reached** after the end of **the training programme**, some events

organised by the consortium members and **the launch of the Online Self-Assessment Tool**, a tool aimed at helping SMEs to know themselves better and to plan their growth. In addition, you will be able to learn more about AEORUM, a Spanish company participating in the Mobility and Training programme dedicated to drones, and learn about building sustainable companies.

We hope you enjoy it!

**SME Cluster Growth Project
Consortium Members**

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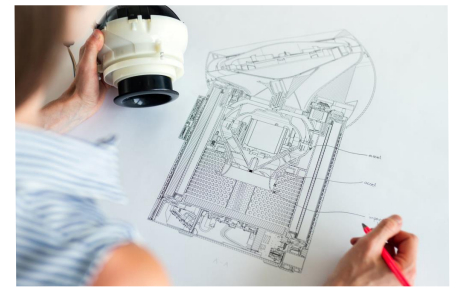
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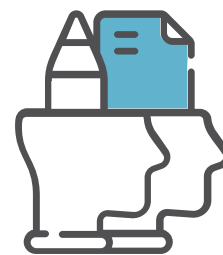
Connecting Clusters - Partners Meet in Helsinki

By Samantha Carty, Momentum

Samantha Carty



SME Cluster Growth, an Erasmus+ Knowledge Alliance project is now in its **third year** working to support SMEs in the engineering sector to innovate and grow. The consortium of project partners recently gathered in **Helsinki** to discuss recent project activities and achievements and to discuss the next steps towards completion.



The meeting was expertly hosted by CrazyTown with Toni Pienonen and Carolin Otsing, representing Finland's community-driven coworking and business accelerator. The Open Creative House venue provided an inspiring atmosphere for the meeting with introductions made to the community of music-driven people who connect with creative companies and with each other to drive success and elevate the creative industries.

According to Toni Pienonen, CrazyTown,



“The Finnish are not great at commercialisation, but that’s where incubator hubs like CrazyTown and Open Creative House come to the fore. At OCH tech. industries can meet and combine creative with traditional industries”.



At the meeting, each partner shared updates on their recent activities with the lead partner, the University of Malaga (UMA) who guided partners through each of the work packages. A particular emphasis was placed on looking at the work done in each country through their specific Cluster Growth Councils.

The University of Alcalá (UAH) which focuses on smart energies has ten SMEs in this sector as well as council and local business associations. Slow and steady progress has been made and as a result, two contracts have been secured within the cluster and UAH has launched a Postgraduate course on Smart Energies. The University of Bologna (UNIBO) continues to work with Almacube, their local business incubator and innovation hub for setting up new businesses, which has helped and guided them with activities. Istanbul Technical University (ITU) continue its advisory role and has had fruitful meetings to identify SMEs pursuing growth strategies. However, they also highlighted that for other SMEs it is simply a matter of surviving under present circumstances.

The Institut Mines-Télécom Business School also reported on their Cluster Group meetings while UMA was invited to participate in another cluster focused on launching new start-ups from the university with the mentorship of companies.

Finally, Munster Technological University held online and face-to-face meetings and identified access and retention of talent as a key struggle for SMEs. In response, MTU facilitated networking events on campus to connect SMEs and members of the Cluster Council with specific departments for research, graduates, talent and work placements.

**According to Laura O'Donovan,
Researcher at MTU,**

“

“The meetings were like a counselling session. These SMEs are time-poor and were unaware of their ability to access university talent in the form of work placements, internships and graduates. We were able to show them the host of resources that are available for them”.

”

The partners are now tasked with collating all of the data from the pilot testing of the mobility and training programme to feed into the future sustainability of the project in advance of the final project meeting which will be held later this year.



Masterclass in Growth + Internationalisation of SMEs at UNIBO

The [Department of Management - DiSA, Alma Mater Studiorum - Università di Bologna](#) of the [Alma Mater Studiorum - Università di Bologna](#) recently hosted a Masterclass on the growth and internationalisation of SMEs.

The Masterclass was held at Almacube, the business incubator and innovation hub at Università di Bologna. Almacube promotes local economic development through innovation and the creation of new businesses, educating new generations with an entrepreneurial approach. UNIBO arranged the Masterclass as part of the training program of the Erasmus+ SME Cluster Growth project co-funded by the European Union, collaborating with Almacube to organise the training events.

Speaking after the event Herica Righi, Research Fellow, PhD at **Alma Mater Studiorum - Università di Bologna**, said that

“collaborating with the SME Cluster Growth – empowered engineering project has been an amazing journey full of learning and experience. The development of the Training Programme, in partnership with Almacube aimed to support SMEs and startups on their growth path by changing experiences. However, it also showed me some interesting practices and realities.”

Learn more about Università di Bologna and the work they are doing to support SMEs [here](#).



New Online Self-Assessment Tool for SMEs Launched

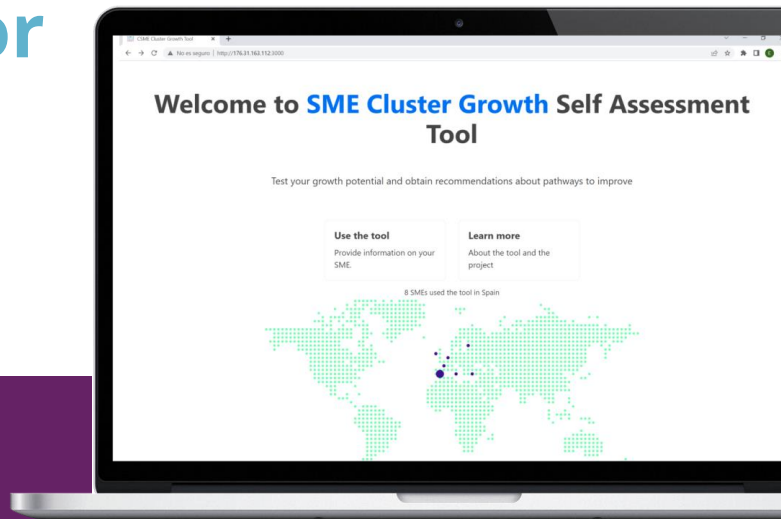
By Prof. Dr. Elena Garcia Barriocanal,
Universidad de Alcalá.

Self-assessment can be a powerful tool for SMEs to support sustainable growth.

It helps **SMEs to monitor performance, identify areas for improvement then develop smart strategies**, that engage employees and adapt to **changing market conditions**. By leveraging the insights from self-assessment, SMEs can position themselves to achieve long-term success and growth.

In the SME Cluster Growth project, Universidad de Alcalá created a web-based self-assessment tool for SMEs. It helps them assess their capacity for growth in terms of internationalisation, engagement with universities, valorisation of knowledge and talent, growth financing, and collaboration with ecosystems and clusters.

This tool enables self-assessment of SME management practices based on these criteria. It also identifies bottlenecks and suggests actions and recommendations based on the specific bottlenecks detected.

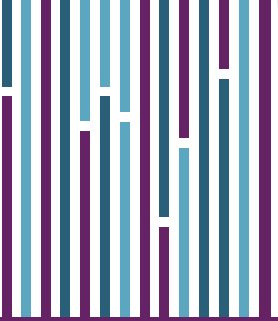


The self-assessment tool is open source and is intended to be adapted, reused or enlarged according to the particular needs and situation of an SME. It could also be extended to integrate with existing systems, for example, a learning management system (LMS). The tool has been designed to be used within an SME training or mentoring process rather than as a long-term database or service. It complements the training and mobility toolkit carried out in the framework of the SME Cluster Growth project.

The open-source tool is available on GitHub. The tool does not require any authentication, so can be used by anyone with the URL.



[Download the toolkit here](#) to help you assess your **SME management practices, identify bottlenecks and plan actions towards growth.**



Meet **Aeorum** and learn about their experience of **pilot testing the programme.**

Aeorum is a spin off company from the University of Malaga. They are an **IT company** that work for the **drone sector** by providing a cloud solution in order to help with the **information management collected by those devices.**

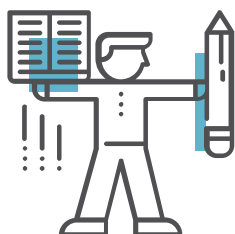
Thanks to their participation in the **“Mobility and Training program”** provided by the **University of Malaga** within the framework of the SME Cluster Growth Project, they have learned how to improve different aspects that will help the business to grow and make that growth sustainable in the future.

Furthermore, they also learned how to collaborate with other ecosystems, universities and clusters. Increasing the collaboration with the university have helped them to develop innovative solutions for the market and meet the market needs.

In this short video Dr. Jesús García, co-founder of Aeorum shares his experience of pilot testing the programme, areas for growth and challenges that SMEs are currently facing.

Watch it [here](#)

A Participants Experience – SME Cluster Growth



SME Cluster Growth Irish National Event

The **MTU Extended Campus** hosted its **SME Cluster Growth National event** on **May 19th, 2023**, as a free breakfast networking opportunity for MTU staff and SME representatives to meet each other. A boisterous chatter could be heard from 7.20 am onwards until 10 am on a beautiful day in the Bishopstown campus of MTU.

Invitations were sent to all internal units/departments of MTU to come and meet SME representatives in an informal setting over breakfast. Contact was made with over 200 companies in the region and a very positive response was received. Representatives from over 45 companies attended the event, with several the SME representatives from the SME Cluster Growth project in attendance. Several support agencies such as Cork Education and Training Board, the Intreo Office (the Public Employment Service) and the Local Enterprise Office were present to provide information and advice to everyone on the day.

Name badges were printed for each attendee, internal and external, which facilitated excellent networking. A competition for a donation to charity was underway during the event, all attendees had to do was drop their business card into a box which facilitated more sharing of information.

The Extended Campus staff were present and active during the event to facilitate further connections with industry and relevant MTU staff or peers in similar domains



Stands with **key personnel** from the following units were available for **connections, advice, and information:**

- The **Nimbus Technology Gateway** which is one of 15 Enterprise Ireland Technology Gateways, providing businesses with innovative software and hardware technical research and development capabilities.
- The department of Computer Science, Management and Enterprise, Accounting and Information Systems, Organisation and Professional Development, Mechanical, Biomedical and Manufacturing Engineering, Biological Sciences, Artificial Intelligence Systems and Innovation and Enterprise.
- The Faculty of Engineering and Science.
- iEd Hub, an educational consortium creating an innovative and agile platform to prepare next-generation graduates to excel in industry.
- Ireland Knowledge Centre for Climate, Carbon and Community Action (IKC3) offer a range of flexible learning pathways to support and enable industry, enterprise and the community transition to a carbon neutral society.
- The Extended Campus which facilitates connections between external organisations and MTU.
- Centre for Advanced Manufacturing Management Systems (CAMMS) that offers full-time, part-time and specialist courses in Art, Business and Humanities, Computing and Information Technology, Engineering, Management, and Information Systems.

A local SME owner, Claire Keane was supported to showcase her wares from Second Street chocolateries. Every attendee received a small packet of Claire's delicious chocolates for a Friday lunch treat.

A presentation of Second Street chocolates was made to Fred Graepel's to say thank you for generously supporting a site visit and exchange of expertise for the last of the SME Cluster Growth Training Programme days with MTU.

Professor Irene Sheridan spoke to the crowd of SME representatives, MTU staff and local industry support agencies about the importance of collaboration, connecting with each other. She spoke of the need to create mutually beneficial relationships between the expertise within MTU and the expertise externally held in industry, public sector organisations, alumni and elsewhere. These relationships benefit MTU, its students, the economy and society.



Laura O' Donovan, Research in the Extended Campus), Prof Irene Sheridan and Fred Graepel, CEO of Graepel Perforator and Weavers Ltd.



She spoke at length about the SME Cluster Growth project, the struggles we experienced, and the many positive outcomes and impacts already seen within MTU and the SMEs participating. The SME Student Consultancy projects have been a huge success, garnering great enthusiasm from dedicated students and really positively received by the SMEs.

The role of the Extended Campus is to facilitate connections and relationship building between MTU and the region, and this event was an excellent example of how many connections have already been made and are being built for the future. She thanked everyone for coming to the event, and so early, as attendees began arriving at 7.15 am, and wished everyone in the room an excellent summer ahead.

Dr John Hobbs delivered an excellent workshop on Understanding Clusters to a packed room of attendees. Dr John Hobbs is Director of the V-LINC Cluster Research Group, at MTU, which has conducted cluster mapping projects with over 50 industry clusters in 20 countries worldwide.

He is a cluster practitioner with direct involvement in the establishment of several clusters in Ireland and a member of the National Steering Group on Ireland's Cluster Policy. The workshop was very positively received and established further connections during the discussion afterwards.



Professor Irene Sheridan, Head of the Extended Campus addressing the crowd of attendees



Dr John Hobbs presenting a workshop on Understanding Clusters

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Building Sustainable Companies

Nurturing Responsible Finance, Brand Image, Network Collaboration, and Cultural Alignment

By Elma Demir, Researcher and Business Development Manager

Small and medium enterprises (SMEs) are the driving force of many economies, particularly in the technology sector. While SMEs are often associated with innovation and job creation, the environmental impact of these businesses is often overlooked. As the technology sector continues to grow, it is essential that sustainable practices are implemented to ensure the continued success of the industry.

Clusters in engineering are one way of achieving sustainability in the technology sector. These clusters refer to groups of companies that are geographically close together and share resources and expertise. By working together, these companies can reduce their environmental impact and foster innovation.

While certain practices, such as using renewable energy sources and sustainable materials, have been seen as the forefront of environmental change in the technology sector, the social aspects of the sustainability transition are often neglected.

To foster mutual knowledge exchange on the subject matters between experts, SMEs and students in the Essonne region, the Institut Mines-Télécom Business School (IMT-BS) organised a national hybrid event on May 25th 2023 consisting of series of workshops and expert talks.

The event revolved around the theme of sustainable organisations which prioritise environmental, social and economic sustainability in their operations and decision-making processes. Experts highlighted that in addition to their goal of operating in a socially responsible, economically viable and environmentally sound manner, sustainable organisations also strive to build long-term relationships with their stakeholders and contribute positively to the communities in which they operate.

The event aimed primarily to shed light on four pillars of sustainable organisations: responsible finance, sustainable brand image, the creation of a strong network and collaboration, and aligning organisational objectives with culture.

The line-up of experts and practitioners brought together knowledge and experience in their respective fields.

Hubert Saint Olive, independent consultant at the Hadvise and Lecturer at the IMTBS & the Parsons School of Design presented on how responsible finance practices can be integrated into the core operations of businesses, ensuring economic growth while preserving environmental integrity and social well-being.

Marion-Emi Alix, Sustainable Accelerator Manager at the Accélérateur ESS and lecturer – the HEC talked about business clusters and collaboration and provided suggestions on how to create robust networks and collaboration, which play a pivotal role in building sustainable organizations. By forging strategic partnerships, organizations can leverage collective strengths and resources to address complex challenges and drive systemic change.

Capucine Epagneau, Co-founder and CEO of company Petit Côté, shared how aligning goals and culture can foster business sustainability. It is through the fusion of values, purpose, and employee engagement that organisations can embed sustainability deeply within their DNA. By fostering a culture of sustainability, empowering employees to contribute to sustainable initiatives, and aligning individual and collective goals with the broader mission, companies can develop into sustainable organisations.

Julien Héron, CEO of Ab Initio talked about the significance of cultivating a sustainable brand image—one that resonates with the values of conscious consumers, strengthens reputation, and contributes to the overall well-being of communities. He delved into the strategies and communication tools that can enhance brand perception and loyalty, while simultaneously driving positive environmental and social impact.

The event was structured in such a way that each expert presented for about 15 to 20 minutes and after the presentations, provided space for questions from participants, as well as opportunities to share their own experiences and perspectives. The objective was to let us, together, discover innovative ways to build sustainable organisations that not only thrive in the present but also pave the way for a brighter, more sustainable future.

The event was organised in the scope of the [SME Cluster Growth project co-funded by Erasmus+](#). The project is implemented through collaborative efforts of the University of Malaga (Spain), Crazy Town Oy (Finland), University of Alcalá (Spain), University Industry Innovation Network (the Netherlands), University of Bologna (Italy), Istanbul Technical University (Turkey), Momentum (Ireland), Cork Institute of Technology (Ireland) and Institut Mines-Télécom Business School (France).

CLICK TO VIEW

The screenshot shows the SME Cluster Growth website. At the top left is the logo 'SME CLUSTER GROWTH' with 'EMPOWERED ENGINEERING' below it. A navigation menu includes 'HOME', 'ABOUT', 'BENEFIT FROM', 'NEWS', and 'RESOURCES'. A central video player shows a person pointing at a document with a play button overlay. Below the video is the text 'Get to know us in one minute!'. To the right of the video is the 'SME CLUSTER GROWTH EMPOWERED ENGINEERING' logo. Below the video is the headline 'Supporting SMEs in the engineering sector to innovate and grow.' followed by a quote: 'Engineering remains a dominant knowledge sector in the EU. By focusing on cross-border engineering business cluster development, we enable synergies across regions, reach international markets, adopt new technologies, and support mutual learning.' Below this is another quote: 'Engineering SMEs and the Higher Education community are the primary beneficiaries of this approach. While students, regional government, intermediary organisations, venture capitalists, business consultants and investors have the advantage of an outward looking engineering ecosystem.' To the right of this text is a quote box containing the quote: 'You cannot have an economy without engineering...' attributed to 'Calestous Juma Honi, FREng FRS'.

Reflections on **ITU Training Days** with a Team of Dynamic SME Representatives

**By Prof. Dr. Sebnem Burnaz,
Istanbul Technical University**

In Turkey 99.8% of all businesses are small and medium enterprises (SMEs). These businesses provide 73.8% of the total employment, realise 64.5% of the total turnover of the enterprises in the country and 56.3% of the total exports (www.tobb.org.tr). Although these numbers show the importance of SMEs in the country's economy, criticisms or complaints about their mismanagement are the subject of many academic studies. So, we found ourselves with mixed feelings while waiting to deliver our project training to our SME participants.

We planned the first meeting face-to-face, and hosted SME representatives at the Advanced Level Entrepreneurship Centre run by ITU ARI Teknokent in the technology development zone. The centre served as the best location with its cosy and comfortable working environment. After presenting our project aim, we discussed sustainable growth, its relation with organisational culture and management vision as well as leadership approach.



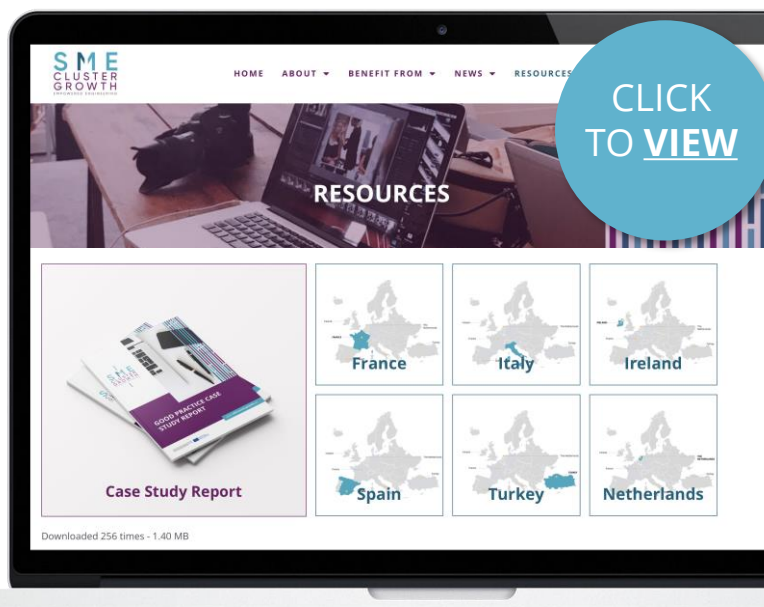
Then we let the group explore barriers and drivers in their growth paths using thematic mapping technique. This small workshop let the participants work together and get to know each other from the very first day. We felt very excited with the motivation, dynamism and openness of the participants in joining in group discussions and sharing their experiences. They acted like a team even though they were representing different SMEs.

The bootcamp on the opening day was followed by training and master classes in later weeks around the main topics such as collaboration with clusters and ecosystem, internationalisation, cooperation with universities, financing growth, value of knowledge and talent. We were delighted to witness rich discussions and further inquiries; the participants of SMEs seemed very involved and motivated during each session. The fact that the majority of the group representing early ages of generation Y could be one of the underlying reasons of this involvement and self-confidence in expressing themselves.

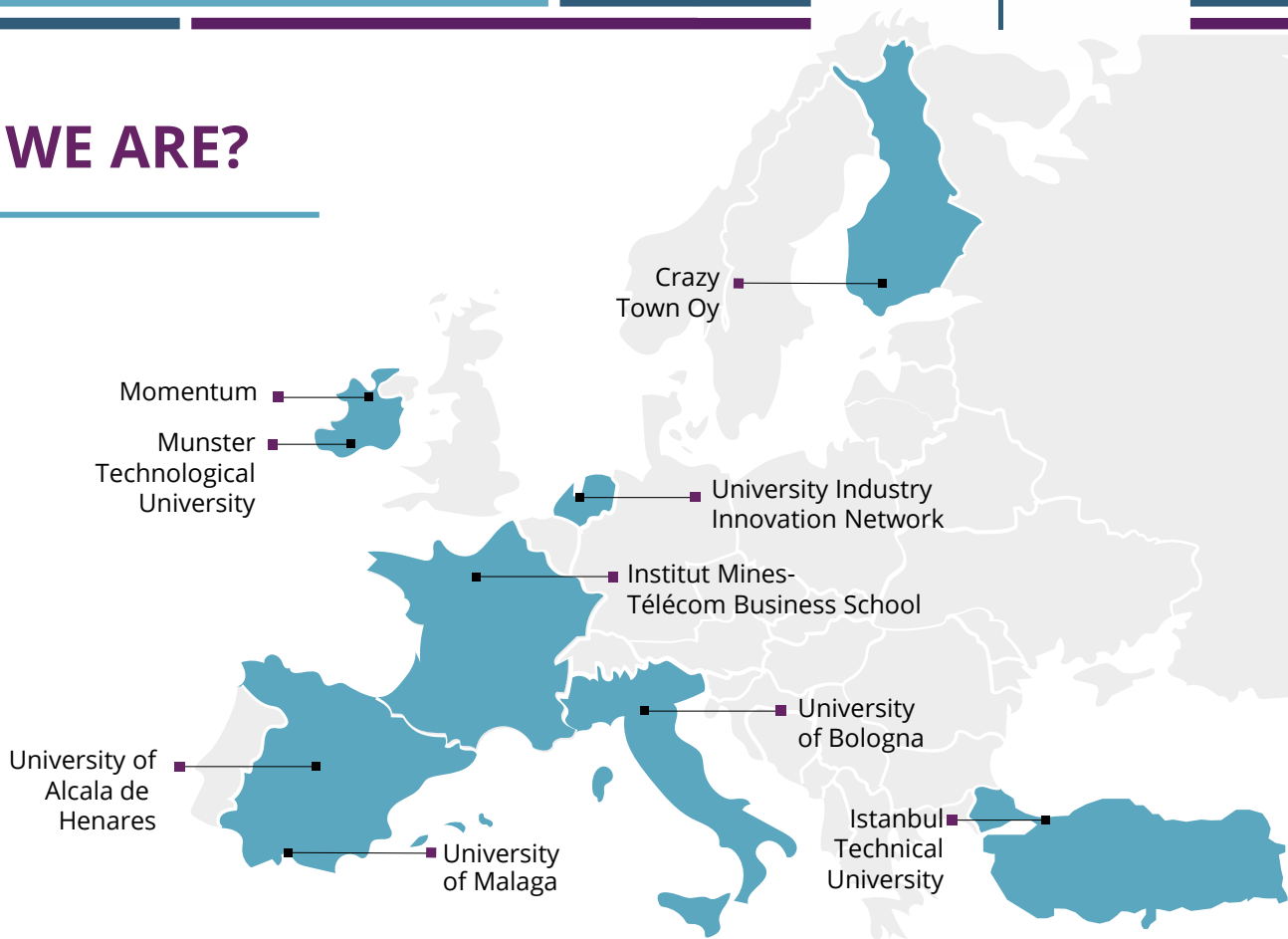
Also, they were working for companies in rising fields such as robotics, smart technologies in agriculture, automation systems, etc. using innovation-based business models. In addition, the participants were either the founders or trusted and empowered employees of the SMEs and some of them were already part of certain clusters and some others had experience in searching and using funding mechanisms. It became apparent that organisations or structures are needed to act as catalyst or boundary spanners in building collaborations between university and company or among SMEs.

As for the main problems put forward in the training period, the participants prioritised access to capital and talent management as critical for the growth of their SMEs. Although they are knowledgeable about the funding mechanisms, they asserted that SMEs were not as lucky as start-ups to reach certain funds, especially in relation with techno parks. They also admitted that an SME should have good self-awareness and be able to search ways to access funds relevant for its financial structure. All participants believed that the most critical factor is human capital and recognise the importance of skill sets in the growth path of any organisation. They clearly put forward that they want to work with smart managers, feel valuable, and add value to their job.

To learn more about the work ITU has done with SMEs in Turkey [visit our Resources page](#), where you can download case studies and Regional Growth Needs Analysis reports.



WHO WE ARE?



Follow our
journey here



www.SMEclustergrowth.eu



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