EMPOWER MAGAZINE



22.07.2022

SSUE 3

DATA STRATEGY TO SUPPORT SME BUSINESS GROWTH

SME CLUSTER GROWTH CASE STUDY COLLECTION

SMALL COMPANY AGILITY WITH BIG COMPANY SCALE SME GROWTH FROM 12 FRENCH EXPERTS

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein,



www.SMEclustergrowth.eu

WELCOME TO THE SME CLUSTER GROWTH PROJECT NEWSLETTER!

We are glad to share with you the third edition of the SME Cluster Growth Magazine. In this issue, you can find more details about the main results and the upcoming stages of the SME Cluster Growth Project.

In the first pages of this issue, we present our Case Study Collection infographics. This image summarises the experiences of 65 SME managers, experts, and managers of support structures about the growth process in the seven regions involved in the project (<u>p.5</u>).



In particular, the results of interviews with SME founders and incubator managers will give you the big picture about the motivations, challenges, opportunities, and success factors involved in the growth of SMEs in France (p.6). These interviews are a unique collection of over thirty years of experience in helping SMEs to grow.

This issue provides SMEs with some advice on how to create data-driven strategies to meet the needs of the market and achieve business objectives and sustainable growth (p.8). We also present the case study of Takumi Precision Engineering, a company that has found, in collaboration with other organisations, a tool to grow and offer its customers the agility of a small company with the scale of a large company (p.10).

After several months of work, in this edition, we are pleased to introduce you to the training and mobility programme of the project (p.12). For the consortium members, this component is one of the main contributions of the SME Cluster Growth project to promote competitiveness and collective innovation among European SMEs.

Finally, we introduce you to two of our partners. The University of Alcalá, one of the oldest universities in Spain with a long scientific tradition and is ranked among the top 50 higher education institutions in the world for its quality indicators (p.15). Also, UIIN, the main international network promoting university-business collaboration, the development of entrepreneurial and committed universities, and technology transfer (p.16).

We hope you enjoy reading this edition

SME Cluster Growth Project Consortium Members



SME CLUSTER GROWTH CASE STUDY COLLECTION

The **SME Cluster Growth Case Study Collection** represents SME managers, experts who have accompanied several companies in their growth, and managers of support structures such as incubators or accelerators.

SME GROWTH FROM THE PERSPECTIVE OF 12 FRENCH EXPERTS

By Medisa Fočić and Adeline Leroy

12 interviews with experts to gain an indepth undertanding on SMEs growth, challenges, opportunities, needs and success factors.







IMPLEMENTATION OF A DATA STRATEGY TO SUPPORT SME BUSINESS GROWTH

By Fernando Perales Mingo University of Alcalá

SMALL COMPANY AGILITY WITH BIG COMPANY SCALE

Takumi Precision Engineering supply, and work on behalf of, companies in the medical devices, pharmaceutical, aerospace and precision engineering arenas, offering their global clients the ability to develop products from concept, through prototyping and onto the full production run.





CONNECTED CLUSTERS COLLABORATING

By Toni Pienonen & Carolin Otsing, Crazy Town

During the preparation of the SME Cluster Growth Training and Mobility Programme, we came to realise that the world had changed dramatically from what it was when the original project proposal was submitted in February 2020.

MEET 3 OF OUR PARTNERS

06

Momentum UAH UIIN Page 14 Page 15 Page 16

SME CLUSTER GROWTH CASE STUDY COLLECTION

The **SME Cluster Growth Case Study Collection** represents SME managers, experts who have accompanied several companies in their growth, and managers of support structures such as incubators or accelerators. The diversity of profiles shows the growth process from different perspective, accounting for the specificities of each actor potentially involved in the growth process, both within and outside the company. The cases were gathered by the SME Growth project partners to discover general trends and the most striking insights of the growth challenges of engineering SMEs. View the full collection here: **Resources - SME Cluster Growth**



CASE STUDY COLLECTION



DOWNLOAD THE FULL CASE STUDY REPORT HERE: RESOURCES - SME CLUSTER GROWTH

LUST

SME GROWTH FROM THE PERSPECTIVE OF 12 FRENCH EXPERTS



By Medisa Fočić and Adeline Leroy

Institut Mines-Télécom Business School as a partner on the SME Cluster Growth project, has conducted 12 interviews with experts to gain an indept undertanding on SMEs growth, challenges, opportunities, needs and success factors. The interviews with founders, COOs, directors and programme managers of incubators and accelerators, and heads of development programmes at engineering and business schools, are a unique collection of over thirty years experience in helping SMEs to grow.



UNDERTANDING SME GROWTH

Growth can be understood as 'an increase in certain indicators towards the future'. It is also 'an added value combined with business activity and HR capabilities. Crucial to ensuring business growth is keeping sustainability in the business and involving employees to allow them to thrive as the business evolves.



MOTIVATION FOR GROWTH

Some companies grow to keep going, to feel satisfaction that comes with seeing their ideas translated into regulatory provisions, out of natural ambition and passion, for social impact or monetary benefit. However, most of the time, growth is a personal challenge for business owners in a field they are passionate about and is related to personal motives.



CHALLENGES FOR GROWTH

There is an absence of long-term industrial policies at national and European level. There is an absence of legislation at organizational level to successfully manage HR. SMEs do not receive sufficient support from the large groups that support industry. There is a need for training to manage capitalization and the transfer of knowledge. There is a need for expertise at management level to understand the complexity of the organization, and this involves funding to recruit the right people. Another challenge is government. There are obvious preferences for public companies and for private companies who have ties with political structures.



OPPORTUNITIES FOR GROWTH

Some SME owners take advantage of regional ecosystems to accelerate their growth (e.g., accelerators or incubators). Others make strong ties with corporations, medium-size companies, and other business entities to support their growth. Growth can additionally be supported by collaboration for innovation and R&D, with business but with HEIs too. This is particularly relevant today as there is a growing awareness of states, individuals, and civil society to the importance of sustainable challenges that can be resolved in cooperation with diverse stakeholders.





SUCCESS FACTORS FOR GROWTH

Innovation is a top priority today. Well organized HR management in the transformation of the company is another. Excellence in work is an important factor, and it usually goes with quality of staff. Important is the quality of networks, where there is mutual solidarity that allows for growth. A critical success factor is also profitability, as 'growth for growths sake' is a problem. Having a brand is a way to measure its success. Corporate values that involve humility and attentiveness, respect for employees and customer satisfaction, social values, innovation, and diversity also lead to success.



COLLABORATION FOR GROWTH

It is important to collaborate with HEIs and their ecosystem. This usually implies 'speaking the same language'. Other key stakeholders for collaboration are corporations, companies, private and public banks, and other financial institutions that offer funding for the projects (e.g., BPI France), regional accelerators and incubators, and other institutions that offer services such as employee training. All these institutions are a great source of support for growth.



BUSINESS LEADER IMPORTANCE

The values that leaders should possess to assure company growth and success are a desire to bring value to employees and society, sustainability, bring 'new life' to the company, introduce new internal and external rules, be open to innovation, be open to collaboration, and finally trusting your own people is key. *"It is the art of delegating, trusting, pulling employees up, and making yourself dispensable."*



TRAINING NEEDS

employers who start a business, the recommendation is to attend MOOCs, and to age and ensure that their employees are trained in areas that are important for SME growth inovation, HR management, R&D, intellectual property etc.). It is also important that is leaders and employees entrusted to travel internationally are aware of business practices

IMPLEMENTATION OF A DATA STRATEGY TO SUPPORT SME BUSINESS GROWTH

By Fernando Perales Mingo University of Alcalá

ACCESS TO DATA IN THE INDUSTRY

The European private sector is dominated by SMEs (25 million), representing more than 65% of EU employment. How this sector addresses the data strategy implementation can be considered critical for the medium-range sustainability.

Everything from data warehousing to reporting and advanced analytics based on artificial intelligence represents a key tool that, if accessible, supports decision making at all levels of any company¹. Data access and management open up a new market scenario for SMEs²: globalisation to reach broader markets, the development of e-commerce, technology and social media to interact with customers, and the development of artificial intelligence and big data to support strategic decisions. Both access to the data and IT resources represent the best scenario to implement data strategies dedicated to the needs of SMEs. These aspects have become particularly relevant today due to:

- Scientific and technological maturity: Evolution of data variety and open data sources.
- Systems maturity: Access as a service to storage, processing and communication tools and components.
- Market maturity: A digital world to improve business efficiency and cost reduction.
- Social maturity: Related to personal data sharing and privacy.



IMPLEMENTING THE DATA STRATEGY



SME management needs to understand data strategy as a way to achieve business goals and sustainable growth, rather than an objective itself. For example, it can be common for companies to approach and implement services for data collection just for brand awareness and marketing. This implies considerable human and technical resources and adds a significant risk that the (highly skilled) team may consider that their efforts are not integrated into the final products and services, which can be demotivating.

To implement a complete data strategy, consider the following aspects:

- Technical equipment, infrastructure and technologies
- Cultural changes
- Customer experience
- Team re-skilling and capacitation, from technicians to management boards
- Products and services
- Process design

Management must consider all these aspects when defining the short-medium-long range strategy. For that purpose, they can use the traditional tools like SWOT (to define the service position in the market) and PEST (to consider macro-environmental factors) analysis, Porter's 5 Forces (to define the long-term strategy focusing on the forces near the company) and BCG Portfolio Matrix (to analyse the service/product portfolio).

The European Commission is developing a data-driven economy to increase competitiveness and revive economic activity. In this regard, it is considered that the following action points should be implemented at a global and individual level:

- Investment in R&D activities focused on data-related technologies like cloud computing, artificial intelligence, and communication networks.
- Promotion of public-private collaboration to speed up innovation and knowledge transfer.
- Development of standardized data marketplaces to improve the management and ownership of the data used for new business model development.
- Open innovation among all actors, which resulted in better system integration and interoperability as well as integration of real and virtual world.

IMPACT OF DATA STRATEGY ON SME'S

It is clearly stated that implementing the data strategy represents one of the key activities to enable SME digital transformation. The potential impact covers a wide range of aspects directly linked to the SME performance³, such as:

- 1. Competitiveness, supported by information flows, mainly on internet, and networks.
- 2. Creativeness, motivating the development of new production lines, products/services and delivery.
- 3. Growth, both in terms of new team organization and access to new markets.

Intending to implement this strategy, SMEs should understand how data-related technologies might generate the insights required to support the decision-making process.

For example, a proper data strategy implementation allows the generation of new opportunities based on the agility to identify new trends in the market or predictions of production failure as well as complex problemsolving.



SPANISH DATA STRATEGY



In Spain, 98.99% of companies are SMEs, and they account for almost 50% of employment⁴.

Boosted by the pandemic, there are two main initiatives to promote the digitalization of SMEs:

- 1. the re-skilling of the workforce and
- 2. the promotion and creation of cooperative clusters.

The Spanish Government is launching entrepreneurship programs that support a more innovative and technology-based economy. These actions aim to address the main challenges faced by SMEs, such as access to funds, training and access to resources and information.

Therefore, one of the main objectives is to promote the participation and access of SMEs to these initiatives⁵:

- 1. Basic digitalization
- 2. Support for change management
- 3. Disruptive innovation and digital entrepreneurship
- 4. Support for sectorial digitalization
- 5. Coordination, efficiencies and modifications

Summing up, SMEs are now in the best possible scenario to design and implement the right data strategy based on their specific needs to sustain short-, medium- and long-range growth. The broad offer of data-as-a-service components should facilitate access to technology and the fine-tuning of the most appropriate architecture in each case. In addition, there are initiatives at a European and national levels that support SMEs to approach technology and promote their collaboration with universities and research centres.

- 1. Data Strategy: The missing link in Artificial Intelligence-Enabled Transformation. Harvard Business Review. 2021
- Joao Florencio da Costa Junior et al. "The Impact of Big Data on SME's Strategic Management: A Study on a Small British Enterprise Specialized in Business Intelligence". September 2018. URL: <u>https://doi.org/10.5430/jms.v9n4p10</u>

3. Nasrollahi, M.; Ramezani, J.; Sadraei, M. The Impact of Big Data Adoption on SMEs' Performance. Big Data Cogn. Comput. 2021, 5, 68. https://doi.org/10.3390/bdcc5040068

4. Spanish SMEs digitalization plan 2021-2025

^{5.} SME Strategic Framework. Estrategia PYME, Ministerio de Industria, Comercio y Turismo 2019.

SMALL COMPANY AGILITY WITH BIG COMPANY SCALE

As part of <u>Munster Technological University's</u> work on the SME Cluster Growth project they met with Gerry Reynolds, founder, owner and Managing Director of <u>Takumi Precision Engineering</u>. Kevin Fitzgibbon, the Science and Engineering faculty representative with <u>MTUs' Extended Campus</u>, discovered the company's origins, insights and challenges. Takumi Precision Engineering supply, and work on behalf of, companies in the medical devices, pharmaceutical, aerospace and precision engineering arenas, offering their global clients the ability to develop products from concept, through prototyping and onto the full production run.

Gerry spoke about his own collaboration journey in bringing Takumi Precision Engineering from an annual turnover of IR£250,000 per year in 1998 to €7 million per year in 2020. He said he understands how easy it is as a business owner to keep your head down and stay working, and not connect with the 'outside world'.

"

Gerry said... Being an owner/manager of an SME can be a lonely place.

But he has always had a few people around as a sounding board, a few leaders of industry or older owner-operators of SMEs to bounce ideas off, and 'check his sanity' at times. Engaging with Enterprise Ireland helped further his connection to the wider SME sector. In particular, he names his involvement in the Leadership 4 Growth programme that allowed him to engage with more like-minded people, so that he now fully appreciates the huge benefits to networking and collaborating.

"

Not leaving your business can leave (business owners/managers) unable to see the wood from the trees. Connecting and talking to others is where you get the ideas for the next pivot or the next initiative that might lead to the next thing, because there's no master plan, it's an evolution. Gerry is a founding member of <u>Emerald Aero</u>, a cluster group of eleven companies who have worked together since 2014 on the basis that they are stronger together. Emerald Aero collectively deliver precision engineering, plastics moulding, tooling, 3D printing, fabrication, surface treatment, thermoforming and Multi-Axis CNC. The sharing of knowledge and a combined digitisation system has been created based on the sharing of their best practices, coming together as one.

Through this cluster, Gerry believes customers receive the agility of a small company with the scale of a large company. The eleven companies market themselves collectively by attending trade shows and engaging pathfinders – people tasked with international marketing. He feels going to national and international events or trade shows is much more enjoyable and impactful as part of a group. In Gerry's own words,



We didn't form a cluster, we formed a gang. I've been that soldier where you go over to a show in the UK, or France, and you put up your little banner, you're there on your own, it's a lonely place to be. But if you go over there as a group, there's a bit of noise, some laughing and joking, you have a bigger presence. You will have a bit of craic that night and you find you attract more people so you're suddenly growing your network. You know everyone thinks business is done by companies, it's not, it's done by individuals.

SMALL COMPANY AGILITY WITH BIG COMPANY SCALE



Gerry Reynolds of Takumi Precision Raheen and LIT president Prof. Vincent Cunnane

Becoming involved in the cluster has been a very positive experience for Gerry and Takumi, and each of the eleven cluster companies has grown year-onyear. The companies energize each other, combine resources, collectively market themselves, share experience, and crucially, they sub-contract business to each other, which was unprecedented before they formed the cluster. The customer deals with one company, one point of contact and the workflow is spread out amongst the cluster through good relationships and good management.

Gerry is very passionate about the potential for SME cluster growth in Ireland, encouraging other business owners to get involved, saying that it's only by talking and collaborating that he learned. He's motivated to see the engineering manufacturing base grow in Ireland further before he retires. Gerry remembers in the mid-80s when a Japanese company sent a representative to research Ireland as a potential manufacturing location. He said the Japanese have a metaphor of a company as a tree and the supply chain as the roots. The tree can only be strong if the roots are strong. He remembers this gentleman saying Ireland had no roots in engineering manufacturing.

"

I'd like to think that 40 years later, not alone have we caught up, but we've passed the Japanese in terms of some of the things we're doing. That's one thing that motivates me is to ensure that Ireland Inc., by the time I retire, we're in a good place, and we're able to compete, and that nobody will ever come over here again and say there are no roots.

CONNECTED CLUSTERS COLLABORATING

By Toni Pienonen & Carolin Otsing, Crazy Town

During the preparation of the SME Cluster Growth Training and Mobility Programme, we came to realise that the world had changed dramatically from what it was when the original project proposal was submitted in February 2020.

The pandemic and the war in Ukraine have disrupted value chains and markets for many SMEs. This has happened simultaneously with a global talent shortage and the increased need for upskilling the existing workforce. While the need and justification for the programme was as valid as before - even more so - we had to make a few adjustments on how it was to be implemented. The mobility element was switched to digital to facilitate access to the destinations for as many SMEs as possible. Each destination was themed to showcase the different strengths of a local cluster and ecosystem. This makes it easier for SMEs to identify the most interesting locations, where they see business opportunities.

We want to highlight that these virtual mobility sessions are not ordinary webinars that promote a specific region for international companies. What's different here is the idea of "connected clusters collaborating together". If your SME is part of a region / cluster that is participating in the SME Cluster Growth project this already helps you to build trust and approach international peers from another Cluster Growth region. The project vouches for you.



Pienonen





As social capital is one of the most important prerequisites for any kind of business, we can say that the participation in both the training and mobility will connect you with like-minded individuals region and your own elsewhere. Following the virtual visit, and with the help of the training program, we hope that the participants are equipped at some point to move from ideas to implementation. The SME Cluster Growth consortium and its network will be there for you, whether it's a large initiative or just a gentle step in a new direction.

This is another realisation we made during the preparation. The concept of "growth" can mean many different things for SMEs and their key personnel. We want to help everyone understand what growth means for them - whether for example it's growth in turnover, social capital, access to new markets, utilisation of new technology, new skills or personal growth.

We hope that the upcoming training and mobility program will nurture collaboration, resilience and curiosity among participants. The last 2 and a half years have shown that such dexterity is needed. As the saying goes, if you want to go fast, go alone. If you want to go far, go together.

MOBILITY DESTINATIONS INFORMATION





rventura@uma.es

Jan 16th -31st 2023

Smart cities & IT





MOBILITY DATE



MEET THE PARTNERS

Momentum is one of Ireland's leading innovation and entrepreneurship specialists, recognised as thought-leading strategists, facilitators, and educators in transformation through innovation.

Founded in 2003, Momentum's team spans 24 staff and specialists who deliver over 50 entrepreneurship innovation and programmes per annum, through in-person training, facilitation, mentoring and webenabled distance learning, specifically webinars and e-learning environment. Each year they equip over six hundred learners through their sought-after classroom training courses and thousands of others through Momentum's blended learning and online courses.

As the lead dissemination partner on the SME CG project, Momentum brings forth its expertise in generating the best possible impact on national/regional/ international levels. With marketing at its core, Momentum operates an in-house marketing division specialising in brand development, content generation, communication, and public relations strategies, digital media and social media development of high-impact promotional campaigns.

Sharing and promoting are integral components of the SME CG project. Through a carefully crafted Dissemination Plan, Momentum has put in place the best channels to promote the project and to achieve targets set by the consortium. Samantha Carty, Project Lead shares, "For us, it is about creating a strong and clear visual identity for SME CG to engage with our target audience through carefully crafted interesting content with high impact designs on blogs, promotional materials, the dedicated website, and multiple social media channels."

Momentum is therefore very excited to be the brand and communication architect behind the SME CG project. Make sure to visit it <u>website</u> for more information on the project and follow us for updates!



The sector of th





MEET THE PARTNERS

The University of Alcala (UAH), whose origins date back to 1499, is a leading university in Spain. It is one of the best medium-sized Spanish universities, with fifteen faculties teaching over 20,000 undergraduate students across 40 degree programmes and 5,000 post-graduate students in 86 masters and doctorate programmes.

The UAH is part of the world's three most prestigious university rankings: QS World University Ranking (QS WUR), Times Higher Education World University Ranking and Shanghai Academic Ranking of World Universities (ARWU). It has obtained excellent results in the QS Stars University Ratings. This ranking has given UAH the highest rating in Internationalisation, Teaching, Employability, Infrastructure, Innovation and Social Commitment. UAH is the only Spanish university to have achieved the 5-star distinction and one of the 47 universities in the world that holds this status. Every year this university welcomes more than 6,000 international students from other countries, making it the second leading Spanish public university to attract international students, according to the QS WUR.

As a part of the university, the Technology Transfer Office serves as a liaison between UAH and its socioeconomic research environment, fostering collaboration between the university's research groups and companies to promote RDI actions and technological support. It, among other goals, serves as a link for innovation to facilitate the connection of the scientific-technological results obtained in UAH with enterprises. In this sense, the role of the TTO-UAH focuses on increasing the levels of effective collaboration between the university's faculties and schools and companies as well as promoting the dissemination of technological results to these companies and the rest of society. For this purpose, a series of activities are carried out to promote the scientific and technological capacities of the university, in support of the research groups, so that

they become known by the industry. These are done through channels, instruments and mechanisms that allow for effective connections between the RDI agents and the transfer system. So that it results in an appreciable improvement in public-private collaboration between the University and the productive sector.

UAH labels the "Intelligence, innovation, internet and information" Research Unit (I4) as a "high performance" research group. Having produced weighty research activity in several fields in the last 15 years, I4 has achieved significant outputs in terms of scientific knowledge and funding. Given its extensive research and transfer history, I4 has not only the experience and background in coordinating and participating in projects at both national and international levels but also strong links with the technology transfer office at UAH, a key link between the university research groups and industry.

In SME Cluster Growth, UAH leads work package 4. With their background in professional study programme development and implementation UAH oversees all activities and is directly involved in tasks performed. They are developing the pilot testing strategy for the implementation of the Mobility and Training Programme, coordinate collection and analysis of the feedback from participants, and produce the final versions of the toolkits and the guidelines. UAH also implements the programme in their own institution and collects feedback from participants in its ecosystem for evaluation.



MEET THE PARTNERS

UIIN

UIIN is an international leader on universityindustry engagement, entrepreneurial & engaged universities and knowledge transfer. UIIN is dedicated to advancing the future of higher education institutions and supporting their global community of university-industry professionals. They conduct research, organise events and provide training and consultancy services to our community of +80 organisational and 500+ individual members.

Founded in 2012, UIIN responded to a developing need within university-industry interaction moving away from the linear process of technology transfer and a shift towards a more holistic and strategic approach by all stakeholders involved. With their consulting offerings, professional training and events, the UIIN team actively convert research into practice and support universities, business and government in developing stronger and more strategic relationships, more future-oriented institutions and ultimately building a knowledge society for a better tomorrow.

University Industry Innovation Network Advancing the future of university-industry engagement

> CLICK TO **VIEW**

Within the SME Cluster Growth project, UIIN will design the Valorisation and Capacity Building agenda and execution of the project. UIIN will also play a role in the dissemination and promotion of the project and its results. As a prominent network organization, UIIN has a unique ability to understand and bring together entrepreneurship education and business. By making use of its highly international profile and wide European reach of relevant stakeholders, UIIN will contribute to the creation of value and the effective exploitation of project results. UIIN will also be leading the Sustainability and Exploitation activities, guiding the consortium through potential models of sustainability that will ensure the utilization and replication of project outputs and approaches after the end of the funding stage.

Additionally, UIIN has supported, and will continue to do so, the leaders of other work packages by sharing their expertise at the research stage and designing training programmes. The tangible results of some of these activities are expected to become visible in the coming months.





