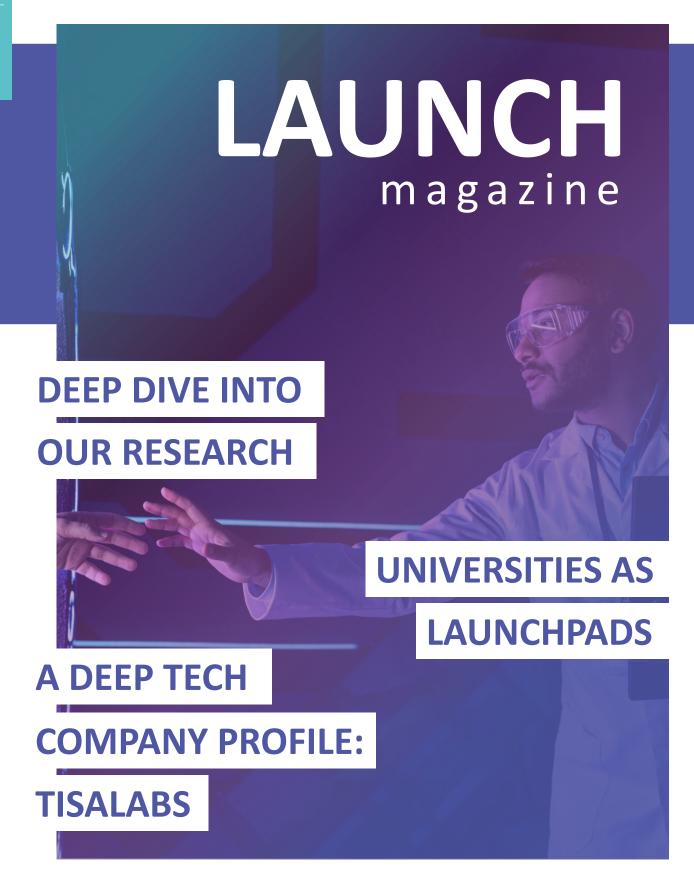
TLAUNCH PAD Enabling Deep Tech Entrepreneurship







WELCOME TO THE FIRST ISSUE OF THE DEEP TECH LAUNCH PAD NEWSLETTER!

PROJECT OBJECTIVIES AND WHO SHOULD JOIN US?





LAUNCH PAD SET TO STRENGTHEN THE EUROPEAN DEEP TECH COMMUNITY

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WELCOME TO THE FIRST ISSUE OF THE DEEP TECH LAUNCH PAD NEWSLETTER!

We are thrilled to launch this newsletter as part of an exciting journey to empower Europe's emerging deep tech talent. Following a successful kick-off meeting in Delft in 2024, our partnership of nine organisations from seven countries has solidified its commitment to driving deep tech entrepreneurship across European regions.



Our consortium of experts includes five universities, TU Delft, Munster Technological University (Ireland), Institut Mines-Télécom Business School (France), Ege University (Turkey), and the University of Ljubljana (Slovenia), which are spearheading efforts to cascade deep tech knowledge within higher education institutions. Our incubator partner, Accent from Austria, brings invaluable on-the-ground startup experience, while our business collaborators, Crazy Town (Finland) and Momentum (Ireland), extend the project's reach and foster community development. Finally, the University Industry Innovation Network (UIIN) from The Netherlands is supporting high-quality staff training to ensure the success of our initiative.

Over recent months, we have made significant progress. Through in-depth desk research, regional asset mapping, and interviews with experts—including educators and entrepreneurs—we've gained valuable insights into the current needs and

opportunities in the European deep tech sector. This effort has culminated in the creation of nine synthesised reports, which are now available for you to explore at dtlaunchpad.eu/research.

Building on this foundation, we are developing a suite of training programmes, as well as pre-incubation and incubation services, to transform pioneering ideas into market-ready solutions in a 'Deep Tech to Market Services' pack.

Whether you're an academic, entrepreneur, investor, or policymaker, your involvement can shape the future of deep tech in Europe. We welcome your feedback, ideas, and active participation as we work together to shape the future.

Enjoy our first issue, and thank you for being part of the Deep Tech Launch Pad story!

The Deep Tech Launch Pad Team

PROJECT OBJECTIVES

Discover the potential of connecting Europe's universities with Deep Tech innovators.

DT Launch Pad creates a European Deep Tech Community by providing Deep Tech talent, creating an efficient way to connect Deep Tech talent, expertise, resources and funding; and hosting events to create a thriving ecosystem for deep tech start-ups. Raising awareness around Deep Tech is crucial for all stakeholders involved in the commercialisation process as it fosters collaboration, secures funding, and drives innovation.

WHAT'S ON OFFER?

Training and Incubation

Offering a blend of training programs, pre-incubation, and acceleration services to turn pioneering ideas into market-ready solutions.

Mentorship and Peer Exchange

Connect with experts and peers across Europe through our mentorship programs and peer-to-peer learning initiatives.

Deep Tech Opportunities Platform

An exclusive platform to access deep tech opportunities, including partnerships, internships, and project collaborations.

Events and Workshops

Participate in workshops, seminars, networking opportunities and our flagship Fundraising Fair to gain insights and showcase your innovations.



WHO SHOULD JOIN US?

01

02

03

Higher Education Institutions:

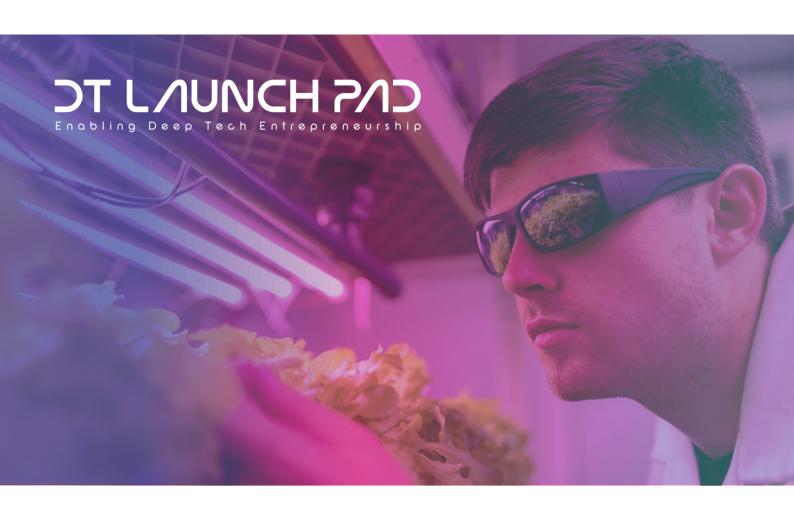
Follow us in shaping the future of European deep tech education. Collaborate, support, and engage with cutting-edge startups.

Innovators:

If you're a deep tech innovator looking for support, training, or a community, find out how DT Launch Pad can help you thrive. Gain access to mentorship, funding, and a collaborative environment to turn your innovative ideas into reality.

Investors:

Invest in the next wave of innovation. Explore investment opportunities within our network of promising deep tech ventures.



DT LAUNCH PAD SET TO STRENGTHEN THE EUROPEAN DEEP TECH COMMUNITY

By Samantha Carty, Momentum



Our new Alliances for Innovation project,
DT Launch Pad is set to enable the
European Deep Tech community by
creating support services, building Deep
Tech talent capacity in partner universities,
encouraging international knowledge
exchange and providing the opportunity to
initiate and sustain Deep Tech start-ups.

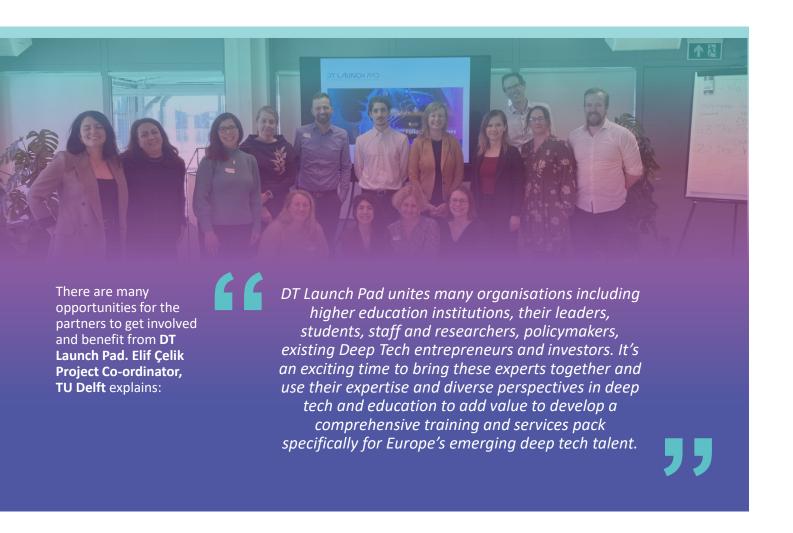


The research project which launched in Delft, The Netherlands on 4th March 2024 is led by Delft University of Technology (TU Delft) which is known for its focus on engineering and technology. TU Delft has a robust program to support entrepreneurship among students and researchers

with a specific Delft Entrepreneurs program that promotes the creation of startups and provides access to workspaces, seed funding, and guidance. The partnership of nine organisations from seven countries represents all drivers of Deep Tech entrepreneurship in European regions.

It includes two Technological Universities, TU Delft and Munster Technological University, Ireland which bring extensive expertise and experience in fostering Deep Tech entrepreneurship; three comprehensive universities (Institut Mines-Télécom Business School in France, Ege in Turkey and University of Ljubljana, Slovenia) providing alternative expertise and will cascade Deep Tech knowledge to European comprehensive universities. An incubator Accent

from Austria brings on-the-ground knowledge of the start-up process while two business partners (**Crazy Town**, Finland and **Momentum**, Ireland) enhance the reach of the project, community development and sharing of outputs; and a university network, education and training provider, the University Industry Innovation Network (**UIIN**) from The Netherlands to provide high-quality staff training.



Over the next three years, DT Launch Pad will examine the needs and opportunities for Deep Tech at the participating HEIs and incubators through research and asset mapping. The project will implement a 'Deep Tech to Market Services' pack, which includes a tailored training program, mentorship opportunities, and peer-to-peer exchanges. The DT Launch Pad platform will aggregate deep tech opportunities to promote international team building and resource sharing. The project will culminate in a Europe-wide

Fundraising Fair, providing a stage for deep tech talent and trainees to showcase their innovations to potential investors.

DT Launch Pad is funded under the Erasmus+Alliances for Innovation programme which aims to strengthen Europe's innovation capacity by boosting innovation through cooperation and flow of knowledge among higher education, vocational education and training and the broader socio-economic environment, including research.

DEEP DIVE INTO OUR RESEARCH

UNDERSTANDING DEEP TECH COMMERCIALISATION AT UNIVERSITIES

By **Jose Villagran,** Deputy Manager R&D Projects at UIIN

The DT Launch Pad project aims to bridge the gap between groundbreaking scientific innovations and their application in real-world markets.



Known for addressing complex societal challenges with long R&D cycles and requiring substantial capital investment, deep tech demands a unique approach to successfully commercialise innovations.

As part of the DT Launch Pad initiative, the consortium embarked on a comprehensive research phase to identify the opportunities and challenges in the commercialisation of Deep Tech innovations, while trying to understand the status quo of deep tech support at universities in Europe.

This article delves into the methodology and key findings from our research, providing valuable insights for stakeholders across academia, industry and government.

Understanding deep tech and

and its commercialisation stages

Deep Technology or "Deep Tech" refers to organisations, institutions or startups that seek developing advanced technological solutions to address larger-scale societal challenges. Deep tech entities engage in extensive research and long development cycles to apply emergent scientific or engineering breakthroughs by translating them into innovative products or services. The uncertainty surrounding deep tech is an essential element of what makes it unique.

These innovations typically involve a high degree of novelty, interdisciplinary research and require significant capital expenditures to be developed.

Due to these and other factors, the path to market is not easy for deep tech ventures, which calls for a more structured approach to commercialisation and commercialisation support at universities.



The commercialisation process for deep tech can generally be broken down into three critical stages:

01 Pre-Incubation:

This initial phase involves refining the core idea, understanding market needs, and exploring suitable business models. The goal is to transform scientific discoveries into viable business propositions. **Technology Readiness Level (TRL) is up to 3**

Incubation:

In this stage, the focus shifts to developing the technology further, securing intellectual property rights and working towards finding the product-market fit. This is where prototypes and demos are being developed and field-tested to gauge customer interest and gather feedback. The certifications and regulation compliance are also completed during this period.

TRL is between 4-6

O3 Acceleration:

The final stage focuses on the commercialisation stage, including market entry, validation of a product-market fit, scaling the business, securing investment, and expanding market reach. It often involves strategic partnerships and leveraging networks for growth and market penetration.

Research methodology

During its first months of implementation, the DT Launch Pad project conducted extensive research, mostly qualitative, to gain a comprehensive understanding of the factors impacting Deep Tech commercialisation, as well as the skills and competencies needed to succeed in taking innovations from lab to market.

As part of the research process, the consortium has undertaken the following activities:

01 Interviews with Experts

Over 80 interviews were conducted with deep tech experts, educators and incubation professionals. These discussions provided firsthand insights into the current challenges and needs within the deep tech ecosystem.

Literature Reviews:

The consortium performed in-depth literature reviews at both regional and global levels. This helped to contextualise findings within a larger framework of existing research and practices, while ensuring that region-specific aspects were not overlooked.

Roundtable Discussions:

Six roundtable discussions were organised, bringing together diverse stakeholders to validate initial findings. These discussions facilitated a dialogue amongst academia, industry and policymakers, ensuring a broader perspective on the issues at hand and helping the consortium test the relevance of its findings.

Internal Sensemaking Workshop:

To synthesise these insights and prepare for the next phases of the project, an internal sensemaking workshop was held among the members of the consortium. This collaborative environment allowed for the crystallisation of ideas and the formulation of strategic directions towards the development of the DT Launch Pad training programme and (pre-)incubation and acceleration services.





As the research approached its conclusion, several themes emerged as crucial to the success of deep tech ventures.

01

Essential skills for deep tech success:

Research showed that deep tech entrepreneurs require a unique skillset to succeed. Beyond entrepreneurial competencies, there is a strong need for interdisciplinary knowledge to navigate the complexities of scientific innovation. Skills in areas such as technology management, business development and regulatory understanding were highlighted as essential.

02

Barriers to commercialisation:

The research underscored several barriers hindering the commercialisation process. One of these barriers is market fragmentation, where the diversity of global markets poses challenges in aligning products across different regions, which ties in closely with the differences in regulatory environment. Funding is also a considerable challenge for deep tech ventures, particularly when it comes to acquiring financial support to transition from proof of concept to market readiness. Additionally, as briefly mentioned, regulatory challenges often complicate the scaling of deep tech ventures, requiring proactive engagement with policy frameworks and making it very difficult for deep tech innovations to make it to market, and even more to expand into other markets.

03

The need for tailored support structures:

Many interviewees, as well as the literature, emphasised the importance of having customised support platforms that cater to the unique needs and features of deep tech innovations. Traditional incubation models often fall short in addressing the specific challenges faced by deep tech entrepreneurs. Collaborative support systems that involve academia, industry and government, were highlighted as essential to providing the resources and networks necessary for deep tech ventures to thrive.

Conclusion

Based on the research findings, it becomes clear that a tailored approach is required for the successful commercialisation of deep tech innovations. Collaboration across academia, industry and government is key to creating an environment that fosters innovation and breaks down the existing barriers. Institutions must work hand in hand to develop training programmes that equip entrepreneurs with the skills necessary for translating scientific research into commercial success.



Furthermore, governments and regulatory bodies play a crucial role in facilitating a supportive ecosystem, ensuring that regulations evolve in sync with technological advancements. By engaging with policy frameworks, stakeholders (i.e., academia and industry) can help design a regulatory landscape that encourages innovation while safeguarding societal interests.

In summary, the DT Launch Pad project's research phase has set the consortium on the right track to develop support structures for deep-tech commercialisation at universities. By recognising the existing challenges and addressing them through a collaborative, customised approach, universities can significantly enhance the potential for breakthrough innovations to make it to market and, ultimately, address societal challenges. As the project moves into its next phase, these insights will guide the implementation and development of effective strategies for Deep Tech incubation and growth.

UNIVERSITIES AS LAUNCH PADS:

FOSTERING DEEP TECH STARTUPS IN FRANCE

Deep Tech is revolutionising industries and economies worldwide. Powered by groundbreaking scientific and technological advancements, these innovations hold the promise of addressing humanity's most pressing challenges. France has established itself as a leader in this domain, cultivating a thriving ecosystem for deep-tech startups.

At the core of this ecosystem are universities, which play a crucial role in nurturing entrepreneurial talent and bridging the gap between academia and the market.

Universities are more than just institutions of learning; they are incubators of innovation. By providing the ideal environment, resources, and support, they can significantly contribute to the growth and success of Deep Tech startups.

strategies include:

01

Creating a Conducive Entrepreneurial Ecosystem:

Universities can foster a culture of innovation by offering dedicated spaces, resources, and programs for aspiring entrepreneurs. This includes incubators, accelerators, and mentorship programs tailored to Deep Tech ventures.

02

Equipping Researchers with Entrepreneurial Skills:

Traditional academic training often overlooks business acumen. Universities should integrate entrepreneurship education into their curricula, empowering researchers to understand market dynamics, business models, and financial management.

03

Facilitating Industry Collaborations:

Partnerships between academia and industry are essential for transforming research into commercial products. Universities can proactively seek collaborations with companies to identify market needs, co-develop technologies, and provide access to talent.



INTERVIEW WITH DAP HARTMANN ON DEEP TECH ENTREPRENEURSHIP



Dap Hartmann is an Associate
Professor of Innovation and
Entrepreneurship at Delft University
of Technology (TU Delft), known for
his course "Turning Technology into
Business," where students evaluate
the commercial potential of TU Delft
inventions, often patents.

With a background in astrophysics and his multiple awards for work entrepreneurship education, Hartmann has seen firsthand the complexities of building deep-tech startups. According to Hartmann, many of the technologies we work with at TU Delft are 'deep tech'—new developments that require extra steps to reach society. Deeptech startups are particularly challenging; unlike general entrepreneurship, where things are more predictable, deep tech introduces more complexity.

What should be considered

when teaching deep

tech commercialisation?

"At TU Delft, we benefit from having access to highly skilled people. We do make sure that students include members from diverse disciplines, so the conversation isn't about the inner workings of the technology but about its market potential. A key focus is balancing technical confidence with practical business thinking, which often requires someone on the team who doesn't fully understand the technology."

How do you advise students

on working with patents

and industry partners?

"I don't bring in industry partners directly, but I encourage students to search patent databases for similar technologies. Patents can identify potential collaborators or competitors and reveal what industries might use their technology. For example, automotive and medical industries may use similar technology without competing directly, providing partnership opportunities."

What skills do students need to succeed in deep tech?

"An interest in technology-based innovation is essential, but they don't need in-depth knowledge—just the ability to identify potential markets and customers. Students should also build networks with experts to stay updated, as deep tech often evolves quickly, especially in areas like AI. If students are capable of basic market research, they can work in deep tech, provided they stay connected to those with specific expertise."

"Deep-tech founders have to track trends carefully—otherwise, by the time they launch, their innovation could already be outdated. They need to project how the field will evolve to remain relevant."

Dap Hartmann

What unique challenges do

deep-tech entrepreneurs face?

"Deep-tech ventures demand more time, money, and endurance. The market might not be ready, or the technology may need years to mature. It takes more confidence and persistence to get through that. Deep-tech founders have to track trends carefully—otherwise, by the time they launch, their innovation could already be outdated. They need to project how the field will evolve to remain relevant."

What unique challenges do

deep-tech entrepreneurs face?

"It's important to include examples, case studies, and even case templates based on real-world scenarios. For instance, a technology might not be ready for the final, ambitious application students envision, so we first look for easier applications to help refine it. Teams with members from non-technical backgrounds help too. When everyone's on the same page, it forces the team to focus on the broader picture instead of technical details."

Should deep tech be

classified as its own category?

"I'm cautious about making deep tech a separate category. Technology lies on a continuum of complexity. Creating a rigid classification like 'deep tech' can limit flexibility and create artificial divisions. A flexible scale—from basic tech to deep tech—works better, since needs vary widely. The question should be: Why does deep tech require unique support? A quantum computer and a paperclip both involve tech, but they exist on different ends of that spectrum."

Final Reflections?

"For deep-tech education, staying current is key. I update my course every year because old examples quickly lose relevance. A big part of my approach is asking students to find recent examples, so the learning stays interactive. Deep-tech entrepreneurship requires us to be adaptable; it's a demanding field but incredibly rewarding if you stay informed and open to change."

A DEEP TECH COMPANY PROFILE: TISALABS

In the vibrant tech landscape of Cork, Ireland, deep tech companies are reshaping industries and redefining possibilities. Not only are they advancing technology but they are also contributing to the economic and social fabric of the community. One of these companies is <u>Tisalabs</u> based in the Rubicon Centre, Munster Technological University, Bishopstown in Cork.

Tisalabs, a leading technology company, is at the forefront of technological innovation, leveraging the power of artificial intelligence, machine learning, and cybersecurity to solve complex challenges and drive transformative change.

With a focus on IoT and cybersecurity, Tisalabs is designing sophisticated IoT systems, securing critical infrastructures, and developing intelligent Al-powered solutions. By using deep tech, the company delivers advanced, future-proof technologies that provide measurable value to businesses across industries such as space, agriculture, transportation, manufacturing, smart cities, and energy.

A Commitment to Excellence and Innovation

Tisalabs' dynamic team of experts specialises in creating secure and innovative solutions. Through a proactive and creative design methodology, they use cutting-edge advancements in AI/ML, edge computing, and cloud analytics to ensure innovation and excellence in their solutions.

The company's collaboration with esteemed organisations like the European Space Agency and the Disruptive Technologies Innovation Fund further solidifies its position as a leader in deep tech. Tisalabs' SaaS and PaaS platforms showcase its expertise in integrating deep tech to enhance business security, compliance, and usability.



Cybersecurity Redefined

TisaLabs is revolutionising cybersecurity by harnessing AI to build intelligent systems capable of detecting threats and intrusions with high precision, automation, and user-centric management. Using AI, the company helps businesses achieve compliance with cybersecurity frameworks such as NIS2, NIST, ISO, and CIS, empowering organisations to strengthen their security posture effectively.

Our Al-powered solutions provide real-time intrusion detection and prevention by identifying anomalies from normal traffic and behaviour. This enables organisations to proactively respond to threats and minimise potential damage.

Transforming Industries, One Innovation at a Time

TisaLabs is making significant strides in transforming various industries. For instance, the Secure Sat project for the European Space Agency ensures end-to-end security for satellite communication by implementing advanced encryption techniques, using deep tech for optimal reliability and protection, and integrating active identity verification and validation systems. Additionally, TisaLabs is committed to proactively identifying and addressing vulnerabilities in software packages before they are released, helping to maintain a strong and future-proofed cyber resilience.

In the energy sector, TisaLabs' Trident Project empowers residents to participate in energy trading while promoting renewable energy adoption. By utilising AI, machine learning, and advanced analytics, the project enables efficient energy generation, storage, and redistribution. This approach reduces energy costs for consumers, supports sustainability, and decreases dependence on non-renewable

Driving Sustainable Innovation

TisaLabs actively collaborates with industry leaders, research institutions, and government agencies to drive innovation and tailor solutions to clients' unique needs. Upholding the highest security standards, the company continuously explores emerging technologies

and trends to deliver scalable, secure, and transformative solutions. By combining technical expertise with a customer-centric approach, TisaLabs is positioned to shape the future of technology and drive sustainable innovation.



MEET THE PARTNER

ACCENT INKUBATOR

accent Inkubator GmbH is the high-tech incubator based in Lower Austria, dedicated to nurturing innovative startups and spin-offs, particularly those emerging from scientific environments.

With nearly two decades of experience, accent provides tailored support to aspiring entrepreneurs, guiding them from concept to market success. accent has supported many startups that have achieved significant milestones. Companies like Cyan Cycle, p4b, and VRASQA exemplify the success attainable through accent's comprehensive support system.



The services and support accent offers include

- Business Development Support:
 - accent's interdisciplinary team offers personalised assistance in crafting robust product and business strategies, ensuring each startup's unique needs are met.
 Intellectual Property Strategy: Through collaboration, accent provides expertise in developing customized IP strategies, and safeguarding innovations effectively.
- Funding and Financing Guidance:

As part of Austria's AplusB program, accent integrates into the national funding landscape, connecting startups with major funding bodies like AWS and FFG.

- Partnering with networks such as i2b and the Austrian Angel Investors Association (AAIA), accent facilitates connections to business angels and venture capital, enhancing startups' financial opportunities.
- Accent organises sessions with specialists covering essential topics like marketing, sales, corporate law, financial planning, and investor relations, equipping startups with comprehensive knowledge.
- International Programs:
 Initiatives like the ClimAccelerator focus on climate impact and clean technologies, supporting startups dedicated to environmental sustainability.

INTERNATIONAL COLLABORATIONS:

accent actively engages in European projects to enhance innovation services across sectors.

The "InnoMob" project, in partnership with six European incubators and research institutions, aims to advance innovation in the mobility sector. accent is a key partner in the DT Launch Pad project, contributing to the development of coordinated support services and the cultivation of deep tech talent across Europe.

Their core activities include:

Research and Asset Mapping

accent engages in comprehensive research to understand the needs of the deep tech community, particularly within Higher Education Institutions (HEIs). This involves conducting literature reviews, asset mapping, and primary research through interviews

and roundtable discussions with deep tech experts and educators. The insights gathered inform the development of tailored support services and training programs.

Designing Support Services

Based on these research findings, accent assists in creating the "Deep Tech to Market Services" pack, which includes training programs, incubation services, mentorship schemes, and peer-to-peer learning

frameworks. These resources are designed to equip deep tech entrepreneurs with the necessary skills and support to commercialise their innovations.

International Knowledge

accent facilitates the exchange of knowledge and best practices across the European deep tech community, creating collaboration among HEIs, industry experts, and entrepreneurs. This collaborative approach aims to build a robust ecosystem that supports deep tech innovation and commercialisation.



MEET THE PARTNER

UNIVERSITY OF LJUBLJANA:

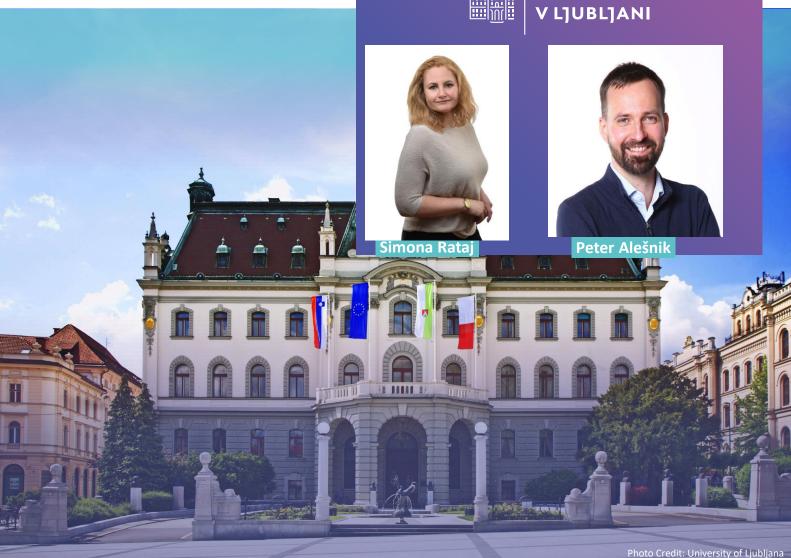
DRIVING DEEP TECH INNOVATION **IN SLOVENIA**

The University of Ljubljana (UL) plays a pivotal role in fostering innovation and economic growth in Slovenia, particularly within the burgeoning deep tech sector.

Its commitment is evident in its active participation in the DT Launch Pad project, a European initiative aiming to boost the deep tech ecosystem.



UNIVERZA



UL's involvement highlights **several key reasons why deep tech is crucial** to the university's mission:

Strengthening Research Excellence:

UL recognises deep tech as a driver of cutting-edge research. The university's commitment to fostering deep tech reflects its dedication to supporting research that tackles complex societal challenges and pushes the boundaries of scientific knowledge.

Cultivating Talent:

UL is actively engaged in developing a highly skilled workforce capable of navigating the complex landscape of deep tech commercialisation. Their training programs strive to address the unique skill gaps in deep tech, combining technical expertise with business acumen.

UL's participation in DT Launch Pad demonstrates its commitment to bridging the gap between research and industry. The university recognises that strong industry partnerships are crucial for translating research into commercially viable products and services, fuelling economic growth. This includes fostering spin-offs and technology transfer activities.

UL views the development of the deep tech sector as a crucial engine for Slovenia's economic growth. By supporting deep tech ventures, the university contributes to creating high-value jobs,

Addressing Societal Challenges:
UL recognises that Deep Tech's innovative solutions have the potential to address some of the most pressing societal challenges, aligning its research and development efforts with national priorities.

attracting investment, and enhancing Slovenia's international competitiveness.

The University of Ljubljana's strategic focus on deep tech reflects a forward-looking vision that recognises the immense potential of this sector to drive innovation, economic progress, and societal

advancement in Slovenia. Their active engagement in initiatives like DT Launch Pad positions UL as a leading institution in shaping Slovenia's future in deep tech.



WHO WE ARE?

Our consortium represents all drivers of Deep Tech entrepreneurship in European regions. This includes two technological universities, three comprehensive universities; an incubator/accelerator to bring on-the-ground knowledge; two business partners and a VET provider for high-quality staff training.

Momentum • Munster Technological University Delft University of Technology **University Industry Innovation Network Institut Mines-Telecom Business School** accent inkubator **University of** Ljubljana **Ege University**



Join **DT Launchpad today** and be part of a thriving ecosystem that fosters innovation, collaboration, and growth.

Follow Our Journey





Crazy Town Oy

www.dtlaunchpad.eu























