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DT LAUNCH PAD
Enabling Deep Tech Entrepreneurship

# LAUNCH
## magazine


FIREFLY SENSING

NEW VIDEO SERIES

INCUBATION SERVICES PACK

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# WELCOME TO THE THIRD EDITION OF THE DT LAUNCH PAD EZINE

*Over the past months, the DT Launch Pad training programme has brought together an inspiring cohort of early-stage deep tech innovators from across Europe.*

Through intensive workshops, expert mentoring, and peer collaboration, participants have strengthened their ventures, refined their value propositions, and taken significant steps toward transforming cutting-edge research into real-world impact.

In this edition, we shine a spotlight on three participants and their ventures, each tackling complex challenges with bold, science-driven solutions. Their journeys reflect the ambition, creativity, and resilience at the heart of the DT Launch Pad community. We are also excited to introduce our brand-new DT Launch Pad video series, offering a closer look at the training content presented in the DT Launch Pad training programme.

Looking ahead, we warmly invite you to join us in Amsterdam this June for the DT Launch Pad Liftoff event, marking the culmination of Stage 2. This event will bring together early-stage deep tech ventures, investors, universities, and innovation stakeholders from across Europe, all united by a shared goal: turning research into investable solutions.

**Stay connected, stay inspired and enjoy this edition!**

# STAGE 1 COMPLETE


*In December 2025, **DT Launch Pad** reached an important milestone. After 8 weeks of intensive online deep-tech entrepreneurship training, we officially concluded* ***Stage 1 of the Deep Tech Launch Pad training programme.***

**Here's a short recap on what we achieved.**

## Programme Highlights:

**01** We welcomed over 100 registered participants, with 90 actively engaging throughout the programme.

**02** We delivered 8 training modules, supported by 18 trainers and guest speakers, and created 16+ hours of recorded video material.
Video Series - DTLaunchPad


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## Peer-to-Peer Learning & Mentoring:

**01** We organised four Peer-to-Peer Learning sessions, designed to bring you closer to fellow entrepreneurs, exchange challenges and ideas, and co-create solutions together.

**02** Through these sessions, we introduced the international buddy scheme, supported by introduction emails and monthly check-in agendas.

**03** We also provided two mentoring sessions and access to a mentor pool of over 20 experts, who generously shared their time, experience, and guidance


## Final Pitching Competition Events

We organised seven Final Pitching Competition events, delivered both online and onsite, and selected 20 teams to proceed to the Second Stage of the training programme.

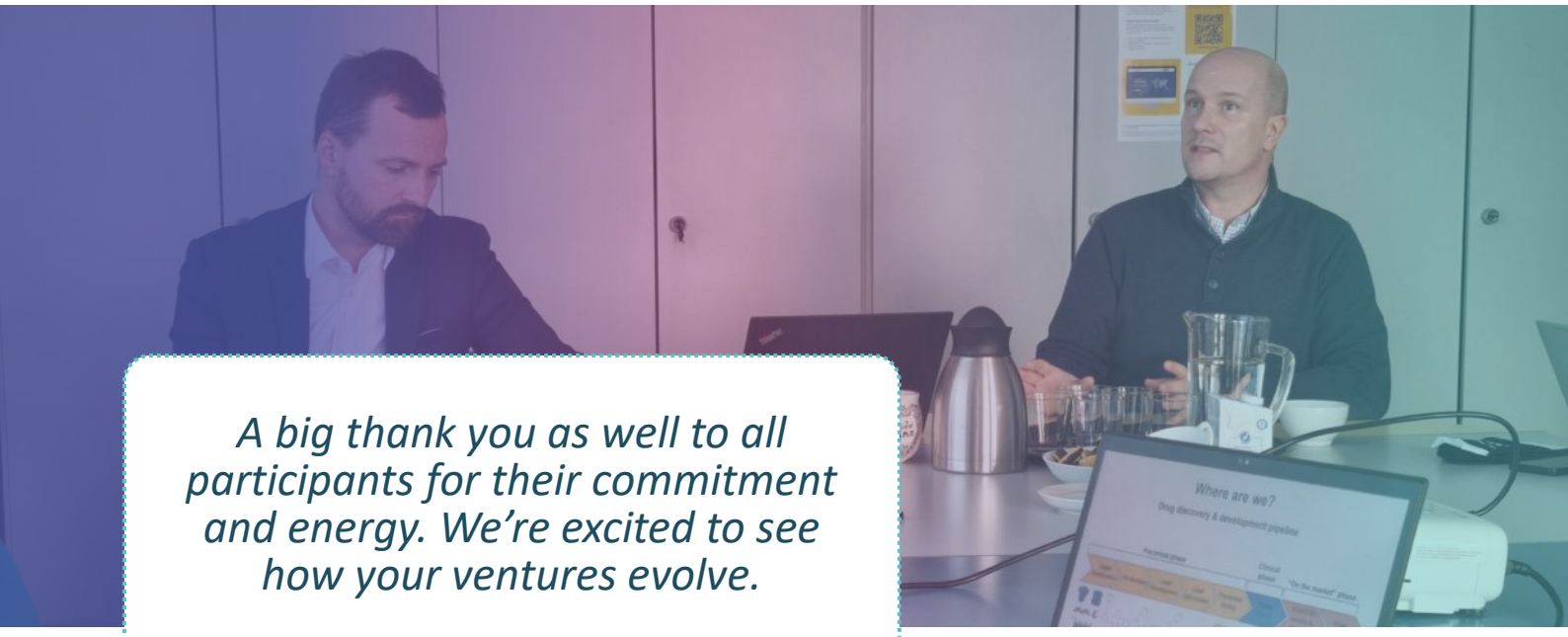
These teams will have the opportunity to present their ideas at the DT Launch Pad Liftoff and to attend the Hello Tomorrow Summit in June. Beyond the winning teams, certificates were awarded to all participants who attended the Final Pitching Events and stayed with us until the very end of the programme.

## Community & Opportunities:

**01** We designed and launched the Opportunity Platform to support you with connections, discussions, resources, and curated opportunities in the deep tech ecosystem. If you have not yet signed up, we warmly encourage you to do so and stay connected with the community.

**02** Our participants were featured across our News channels, e-zines, and social media.

CLICK TO **VIEW**


*A big thank you as well to all participants for their commitment and energy. We're excited to see how your ventures evolve.*

# INCUBATION SERVICES PACK: FROM STRUCTURE TO MOMENTUM


*In January 2026, our training programme officially moved into **Stage 2: the Incubation Services Pack, a six-month journey** designed to help deep-tech innovators turn research into real, scalable ventures. Now, 24 selected teams from across Europe are immersed in the process. What started as preparation has become action, and the momentum is building.*

## 01

## From Ideas to Implementation

**Stage 2 is structured acceleration.**

The focus is clear: help teams move from promising concepts to funding-ready ventures through:

- Structured business development coaching
- Funding readiness preparation
- Legal and regulatory guidance
- Milestone-based mentoring
- Peer-to-peer learning in a Startup Huddle format
- Direct access to expert and industry mentors
- Preparation for DT Launch Pad Liftoff event and Hello Tomorrow Summit (June 2026)

Everything is delivered online, allowing teams to stay focused on building their ventures while engaging weekly with mentors and peers across Europe.

## 02

## The Hands-On Starter Pack: Practical from Day One

**At the start of Stage 2, each team received a Hands-On Starter pack including practical templates, working tools and structured worksheets.**

These resources are actively used in mentoring sessions and peer discussions to refine:

- Proof of Concept validation
- Go-to-market strategies
- Stakeholder engagement
- Funding narratives
- Investor-facing pitch decks

Teams consistently highlight the same thing: the tools push them to move from ideas to measurable milestones. They're thinking differently and working differently.

## 03

## Regular Mentoring: Clear Milestones, Real Accountability

**Each team will complete four structured mentoring sessions aligned with programme milestones.**

This focus is on:

- Setting expectations and defining KPIs
- Reviewing Proof of Concept progress
- Stakeholder mapping
- Refining technology roadmaps
- Funding strategy development
- Early customer validation

This milestone-based approach brings clarity. Mentors work closely with teams to assess progress, challenge assumptions, and define next steps. It's structured, but flexible enough to address each venture's specific needs.

# 04

## 44 Experts, One Ecosystem

**The Expert Mentoring Pool is now open, offering access to 44 mentors across the deep-tech ecosystem.**

The profiles range from:

- University incubator professionals
- Technology Transfer Office business developers
- Experienced deep-tech entrepreneurs
- Corporate innovation managers
- Venture capitalists and angel investors
- Legal and IP specialists

Each team can schedule two expert sessions based on their immediate priorities, whether that's IP strategy, legal setup, pilot partnerships, or investor preparation. The feedback so far? Teams value being able to choose expertise that matches their exact challenge, instead of receiving one-size-fits-all advice.

# 05

## 80+ Ecosystem Opportunities at Their Fingertips

**Beyond mentoring, teams gain access to a Resources & Industry Pool with more than 80 curated opportunities, including:**

- Funding networks and grant pathways
- Legal and regulatory support
- Technical development assistance
- R&D labs and testing facilities
- Business growth expertise
- International ecosystem connections
- Talent recruitment support

For early-stage deep-tech ventures, reducing technical and regulatory risk can make the difference between delay and progress. This infrastructure gives teams a serious advantage.

# 06

## Startup Huddle: Learning from Each Other

**Two Peer-to-Peer Learning Sessions have already taken place, and they are quickly becoming a programme highlight. In each session, 3–4 teams present real challenges.**

The rest of the cohort listens, questions, and offers structured feedback. It's honest, practical and it builds trust. Participants especially value:

- Experience-based feedback
- A safe space to test ideas
- Clear, actionable takeaways
- A growing sense of community

All 24 teams join every session. That shared journey is creating knowledge exchange and long-term connections across Europe's deep-tech landscape.

# 07

## What Comes Next?

**By the end of the Incubation Service Pack, each team will have completed:**

- 4 Regular Mentoring Sessions
- 2 Expert Mentoring Sessions
- 6 P2P Learning Sessions
- Continuous access to the Resource & Industry Pools
- Structured preparation for the DT Launch Pad Liftoff event and Hello Tomorrow Summit in Amsterdam in June 2026. DT Launch Pad Liftoff - DTLaunchPad

The programme will culminate in our DT Launch Pad Liftoff event, where teams will pitch directly to investors, venture capitalists, and ecosystem leaders. For many, this will be their first major fundraising stage. The response so far has been overwhelmingly positive.

## Teams report:

- Greater clarity in strategic direction
- Stronger investor-readiness thinking
- Increased confidence in pitching
- Appreciation for the milestone-based structure
- A deeper sense of belonging to a European innovation community

The combination of practical tools, structured mentoring, peer learning, and ecosystem access is proving powerful.

## STAGE 2 IS A COORDINATED PUSH TOWARD REAL ACCELERATION

**01**

**From Proof of Concept validation to funding preparation**

**02**

**From peer dialogue to expert input.**

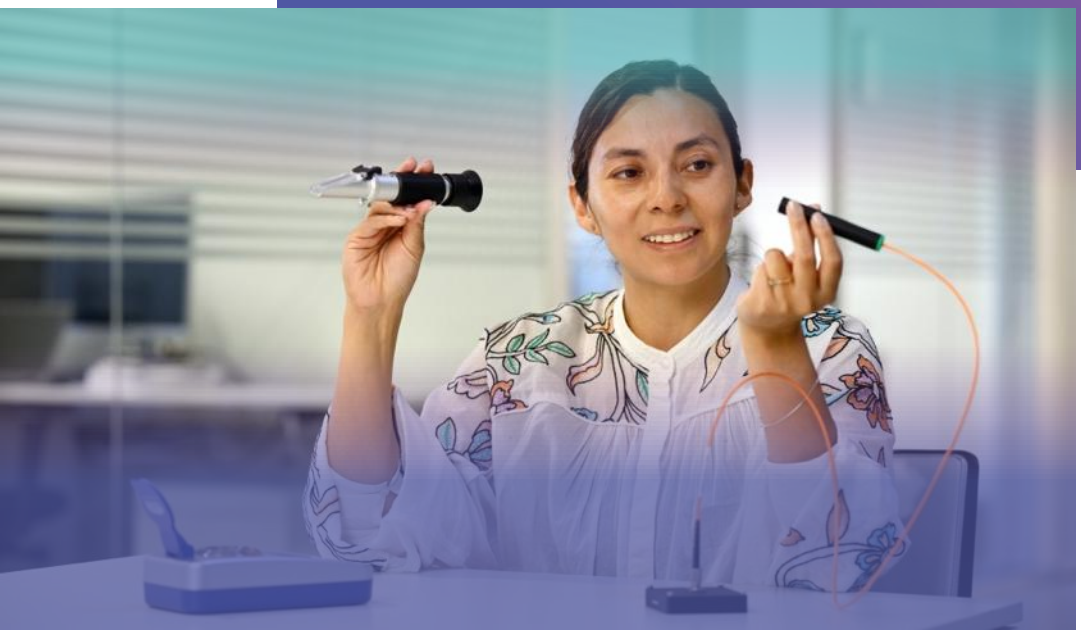
**03**

**From research to readiness.**

*The Deep Tech Launch Pad Programme is steadily shaping a new cohort of deep-tech innovators prepared to engage both the European and global ecosystem.*

# FIREFLY SENSING: SHIFTING THE PARADIGM IN IN-LINE SENSING

*For the past 70 years, many process industries have relied on largely unchanged refractometer technology to monitor key liquid properties. Firefly Sensing is challenging the status quo. Leveraging breakthrough research in photonics, the company delivers real-time insights in areas previously inaccessible, all while significantly reducing costs.*



**CEO Mildred Cano-Velázquez, Firefly Sensing: photonic crystal fibre-tip sensor for concentration sensing. Photonics and Semiconductor Nanophysics group, Department of Applied Physics and Science Education, TU Eindhoven. | Photo credit: Bart van Overbeeke**

## How it began

Mildred Cano, the driving force behind Firefly Sensing, has spent over 15 years immersed in fibre-optic sensing and photonics research. Starting in Mexico and later continuing as a postdoctoral researcher at Eindhoven University of Technology. Throughout this journey, Cano's overarching mission has always been clear: to take innovations out of the laboratory and apply them to tangible, real-world problems.

Transitioning from researcher to CEO has been both thrilling and demanding. "Shifting from the lab to the business world is a major change," Cano reflects. "In research, my focus was on developing optical and photonic sensors. Now, I navigate a landscape with new expectations, timelines, and challenges."

The company's name embodies both its technology and its philosophy. Firefly Sensing develops miniature sensors that use light to track liquid properties such as concentration and refractive index, a measure of how light bends as it travels through a liquid. The combination of small scale, dynamic functionality, and light-based operation made the firefly, a natural emitter of light, a perfect metaphor for the technology.

## Rethinking Liquid Measurements

Today, many liquid-quality monitoring relies on refractometers, instruments that determine refractive index. Traditional refractometers, whether handheld or digital require manual sampling: a liquid is removed from the production line and measured offline. While accurate, this approach is slow and fails to provide immediate feedback, a limitation for rapidly changing liquids.

Inline refractometers do exist, but they tend to be bulky, expensive, and are based on the same technology since the 1950s. Their size and cost restrict their use in smaller reactors, microfluidic systems, and other compact setups. To move towards more sustainable and data-driven production, the industry needs a solution that is small, cost-efficient, and capable of continuous, real-time monitoring.

## A Compact and Cost-effective Solution

Firefly Sensing addresses this gap with a miniaturised inline sensor that continuously monitors liquids as they flow through production lines. The device delivers real-time information on parameters such as sugar content, alcohol concentration, and nutrient levels, enabling manufacturers to optimise product quality, reduce waste, and prevent spoilage without interrupting production.

The sensor itself measures under five millimetres on each side and is connected via optical fibres to a compact light source and readout unit. This unit interprets the optical signal to estimate the refractive index accurately. The overall system is designed to be significantly smaller and more affordable than existing inline refractometers. Its flexible architecture allows installation on virtually any transparent surface, making integration straightforward across a wide range of industrial setups.

The technology builds on years of photonics research, combining nanophotonic sensing elements with novel readout techniques to deliver a solution that is both highly precise and robust enough for industrial environments.

**Photonics and Semiconductor Nanophysics group, Department of Applied Physics and Science Education, TU Eindhoven. | Photo credit: Bart van Overbeeke**

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## Generating Impact

Firefly Sensing's first-generation devices are initially focused on applications in Food & Beverage and Bioprocessing, including dairy, juice, beer, and pharmaceutical production. These sectors represent early entry points where real-time insight into liquid composition delivers immediate operational and sustainability value.

Although Firefly Sensing was incorporated only last February, the company has already built strong momentum and reached several key milestones. It secured NWO Take-Off Phase 2 funding, and the core scientific work underpinning the technology was published in ACS Nano. The team has demonstrated and presented the technology at leading industry and research events, including the Food Tech Event, TU/e Research Day, Wageningen Agrifood Event, Drinktec, Slush, Web Summit, and NWO Chains.

Firefly Sensing was also selected for DT Launchpad and distinguished itself as the only startup from the Netherlands to advance to Phase 2 of the program. In parallel, the company was recognised in the Academic Startup Competition, where it was selected among the top 32 academic startups nationwide. With growing validation from both industry and academia, the team has now begun expanding, marking its first external hire.

## What's next?

By 2027, Firefly Sensing plans to be in the market and work on a second-generation sensor, while expanding its team with experts from the chemical, food, and beverage sectors to accelerate industrial adoption. The long-term vision is clear: to make compact, inline optical sensing a standard tool for liquid monitoring, replacing bulky legacy refractometers with scalable, real-time alternatives.

By bridging cutting-edge photonics research and industrial usability, Firefly Sensing is demonstrating that even the most established measurement techniques can be reimagined, unlocking better control, greater efficiency, and more sustainable production.

# COSMOTAICS: TURNING SOLAR FARMS INTO WATER-POSITIVE ECOSYSTEMS

***Cosmotaics*** *is an Austria-based climate-tech startup developing a new class of solar infrastructure: systems that prevent panel soiling while harvesting atmospheric water.*

*Our patented technology combines dew collection with passive dust prevention, enabling solar farms to operate more efficiently, sustainably, and with dramatically reduced operational costs.*


The concept is simple yet transformative: at night, our lightweight, retrofittable cover system harvests dew and prevents dust adhesion; during the day, panels produce energy at their maximum potential. This approach simultaneously addresses two major global challenges: solar efficiency loss due to soiling and water scarcity, particularly in arid regions.

Our motivation for joining the DT Launch Pad programme comes from our stage as a rapidly developing but still young deep-tech company. We are currently transitioning from validated prototypes (Technology Readiness Level 5 (TRL5) toward our first full pilot projects in MENA and Southern Europe (TRL6). The Launch Pad's focus on innovation leadership, peer learning, and mentorship aligns perfectly with the challenges we face as we prepare for market entry.

*We are also personally motivated by the community aspect of the programme.* ***Cosmotaics*** *has benefited enormously from* ***multidisciplinary collaboration;*** *our work spans physics, mechanical engineering, atmospheric water harvesting, and solar energy*

Knowledge-sharing with other founders is a huge advantage at this stage, and we are proactively trying to emphasise the importance of sharing. Our startup story is that of a fast-moving, impact-driven journey focused on the future of solar farms in the deserts. Supported by AWS PreSeed and Seed funding, we designed and built multiple prototype classes, tested dew harvesting in Austria, and deployed two Proof of Concept in Egypt in the field of real solar farms. These long-term tests have already demonstrated strong performance in preventing soiling and collecting dew, validating key assumptions of our technology.

## Our Goals Are Clear:

### Short Term

Pilot testing across several climates to refine our pre-commercial model.

### Medium Term

Market entry by 2027

### Long Term

Scaling toward desert greening and Agri-PV applications, where Cosmotaics can enable water-positive energy systems and regenerative land use.

# COMMERCIALISING
# A BREAKTHROUGH PRODUCT


Tympulse Medical

*One of 2026's DT Launch Pad Programme participants is Tympulse Medical, a High Potential Start Up (HPSU) company spinning out from the Royal College of Surgeons in Ireland. Founded by Dr. John Gleeson and Prof. Fergal O'Brien, they are commercialising a breakthrough product that has the potential to dramatically transform the approach to ear drum repair procedures.*

Their technology, TympanoColl, offers significant improvements to the surgical procedure and has the potential to dramatically simplify the "Gold Standard" surgical procedure, allowing it to also be carried out in outpatient clinics with general anaesthetic or patient donor tissue.

EU rule changes governing the approval and market access for implantable medical devices like TympanoColl have significantly increased barriers to these types of devices getting into the hands of EU clinicians, and DT Launch Pad participant and CEO of Tympulse, Dr Gleeson, has been really impressed by the EU-focused network of mentors and advisors opened up by participation in this programme.

**Dr Gleeson says,** *"We had previously brought an implantable medical device into hospitals in Ireland and the UK, but struggled to get these devices into the hands of mainland EU surgeons. DT Launch Pad is already offering meaningful ways to accelerate our commercialisation pathway with this new implant technology".*

**Dr Gleeson recently engaged with DT Launch Pad's expert mentor network member, Kustaa Valtonen. Dr Gleeson added,**

*"Without participating in the DT Launch Pad programme, we would have struggled to engage with such esteemed and active EU investors. The insight gained from just the first session has already given us pause for thought in terms of our Go-To-Market strategy, specifically in the EU, and is helping us understand the contemporary funding and commercialisation status within the EU, something that is absolutely critical given the tumultuous nature of changes to the medical device regulatory changes over the past 5 years."*

**Finnish entrepreneur and angel investor, Kustaa Valtonen, commented on his input,**

*"I'm happy to hear that my advice was well received. It felt like John really needed some different perspectives to help him look at his business case from different angles and approach the investors in a more human way. How to talk with investors and how to position your company/product the best are not easy tasks. It's important nowadays to be knowledgeable about how the different markets work and not get caught up in the geopolitics of things. I am really not an expert in medical products or services, but having coached, mentored and invested in hundreds of startups around the world, I do know a little bit about business development and investing. Angel investing and venture capital are my domains, along with sales and marketing."*

## *The DT Launch Pad programme offers critical insights for founders, particularly companies like Tympulse, that are traditionally focused on US-market entry first, as a result of the shorter route to market.*

However, the EU market entry approach has always been significantly different to that required for the US, even more so in light of administration changes at a global level. DT Launch Pad allows early-stage companies like Tympulse access to critical EU intelligence and expertise, making it much more attractive and viable to create a Go-To-Market strategy for EU market access (in parallel with their US approval plans). This dramatically reduces the risks for early-stage, capital-heavy medical device startups, and improves the competitiveness of EU-led innovations in line with contemporary EU strategy.

Tympulse Medical is currently at Technology Readiness Level (TRL) 6 and is setting up manufacturing operations in Ireland, having completed two preclinical tests of the product and published their 1st scientific paper on the technology with a US clinical lead. With more than 200 million people globally suffering from preventable hearing loss due to non-healing, burst eardrums, Dr Gleeson is thrilled to have been selected and hopes to leverage this network to pitch to new EU investors and add EU ear surgeons to Tympulse's growing network of early adopters for the technology.


CLICK TO **VIEW**

For more information, visit:
**www.tympulsemed.com**

# INTRODUCING OUR NEW DT LAUNCH PAD PROGRAMME VIDEO SERIES

*The training content from the DT Launch Pad programme inspires our new video series. It's designed to help transform breakthrough ideas into high-impact ventures. Whether you are a student, researcher, innovator, or entrepreneur, this series offers a practical, accessible introduction to the essential building blocks of deep-tech innovation.*

**Across the videos, you can explore core topics such as:**

01 **Foundations of Deep Tech**:
Understanding what sets deep tech apart

02 **Ideation, Market Development & Opportunity Assessment**:
Turning research into viable opportunities

03 **Business Model Development**:
Building pathways to sustainable impact

04 **Prototyping & Validation**:
Moving from concept to real-world testing

05 **Intellectual Property & Protecting Innovation**:
Safeguarding your discoveries

06 **Partnerships & Ecosystem Building**:
Collaborating for growth and scale

07 **Leadership in Deep Tech**:
Navigating complexity and driving innovation forward

Check out the 7 videos here: **Video Series - DTLaunchPad**


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# MOMENTUM

## DRIVING IMPACT IN DT LAUNCH PAD

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

Celebrating over 20 years in business, Momentum's team staff and specialists deliver innovation and entrepreneurship programmes through in-person training, facilitation, mentoring and web-enabled distance learning, specifically webinars and e-learning environments. 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.

Momentum's role in DT Launch Pad is to reach people, create engagement and deliver real impact. As the lead communication and dissemination partner on DT Launch Pad, Momentum brings its expertise in generating the best possible impact on national, regional and international levels. With marketing at its core, Momentum operates an in-house marketing division specialising in brand development, content generation, communication, public relations strategies, digital media, and social media development of high-impact promotional campaigns.

So far, Momentum has developed an engaging project website and digital presence, social media and online campaigns and produced the DT Launch Pad Video series. They also support tracking audience reach and engagement, collecting participant feedback and measuring how activities influence skills and behaviours. Momentum is responsible for building the deep tech community platform, which is helping to connect people across the ecosystem, including students and researchers, to entrepreneurs and industry. The DT Launch Pad Platform offers opportunities, connections and access to exclusive resources to help grow a stronger, more connected European Deep Tech community.

As one of the two business partners, Momentum's activities underpin the work done by the higher education institutions and raise awareness outside these communities to support the integration of all stakeholders in the different phases of the project. Through their large network, they widely share and promote the project results and outputs, as well as set the foundation for further implementation of the results of the project beyond its lifetime.


**Samantha Carty, Momentum Lead, shares,**

"We have put in place the best channels to promote DT Launch Pad and created a strong, clear visual identity to engage our target audience. The DT Launch Pad platform is a dedicated space for mentors, participants and entrepreneurs to find and share opportunities and resources, as well as connect and ask for what they need to progress their business ideas." Momentum is proud to be the brand and communication architect behind DT Launch Pad.

# TU DELFT - DELFT CENTRE FOR ENTREPRENEURSHIP

*The Delft Centre for Entrepreneurship (DCE) is the entrepreneurship education and research hub of TU Delft, one of Europe's leading technical universities. Founded in 1842, TU Delft is internationally recognised for its strength in engineering, applied sciences, and technology-driven innovation.*


With a strong focus on solving real-world challenges, the university combines cutting-edge research with practical application and close collaboration with industry and public partners. Entrepreneurship plays an important role within TU Delft's broader innovation strategy. The university has a strong track record in spin-offs, technology transfer, and venture creation, particularly in deep tech domains such as energy, health, AI, robotics, climate technology, and advanced materials. Its ecosystem brings together researchers, students, startups, investors, and corporate partners, creating an environment where scientific discoveries can evolve into scalable ventures.


*Within this context, **DCE promotes entrepreneurial** thinking across all faculties and supports students, researchers, and aspiring founders in **transforming technical knowledge into sustainable value.***

DCE offers a broad portfolio of educational and capacity-building activities, including bachelor-level minors, master electives, PhD courses, workshops, and challenge-based programmes. These initiatives guide participants through the essential stages of venture development — from opportunity recognition and customer discovery to business modelling and validation.

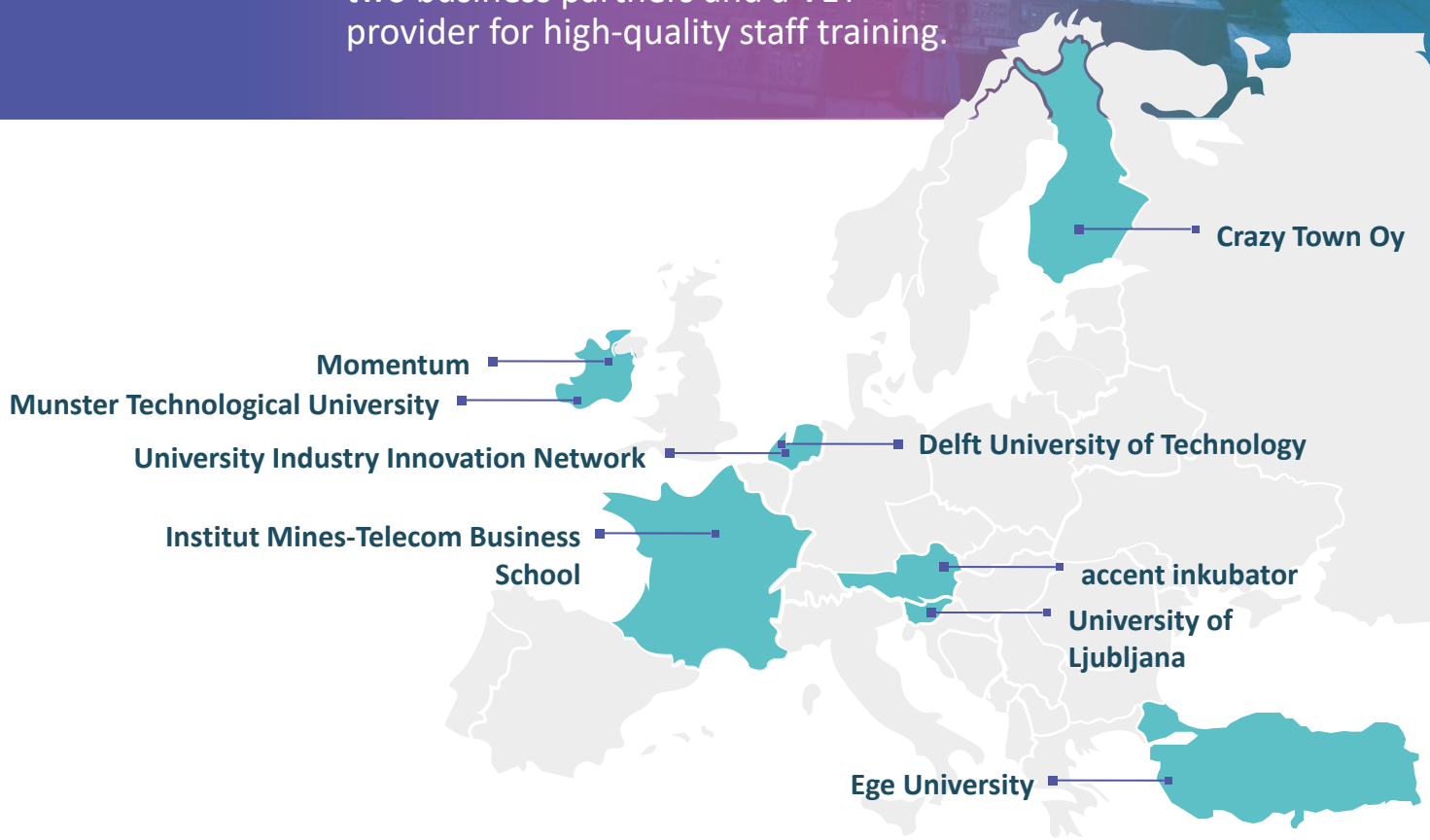
A key strength of DCE is the integration of education with practice. Beyond classroom teaching, participants engage in applied projects, interdisciplinary teamwork, and interaction with experienced entrepreneurs and ecosystem partners. Close collaboration with organisations such as YES!Delft, Delft Impact and Innovation Centre, and Delft Enterprises further connects learners to incubation, funding, and mentorship opportunities. Through this integrated approach, TU Delft and DCE contribute to strengthening Europe's capacity for technology-based entrepreneurship while fostering responsible and impact-oriented innovation.

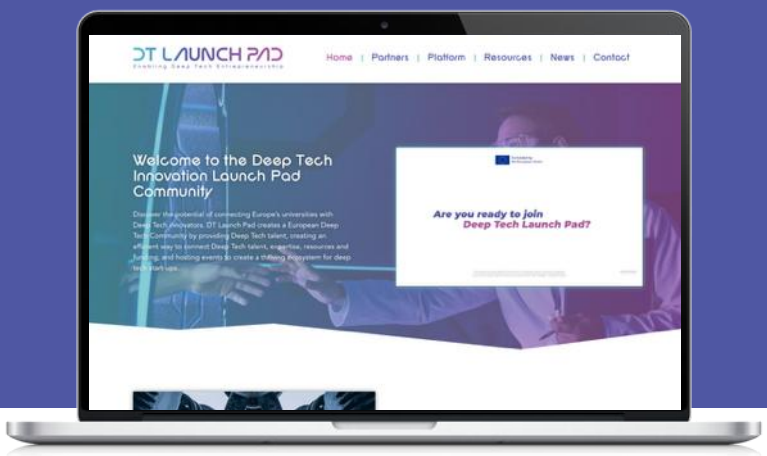
DCE has long supported students and researchers in turning technological research into impactful ventures, particularly by helping graduates explore how their thesis work can evolve into real-world applications and businesses. Through DT Launch Pad, DCE contributes this experience by bringing structured entrepreneurship training and access to experienced mentors who guide participants in translating their technologies into meaningful impact.


CLICK TO **VIEW**

# 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.




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

**Follow Our Journey**

www.**dtlaunchpad**.eu

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