



April 2, 2020

TETRAMAX results

SMART ANYTHING EVERYWHERE - CLUSTER

KICK-OFF



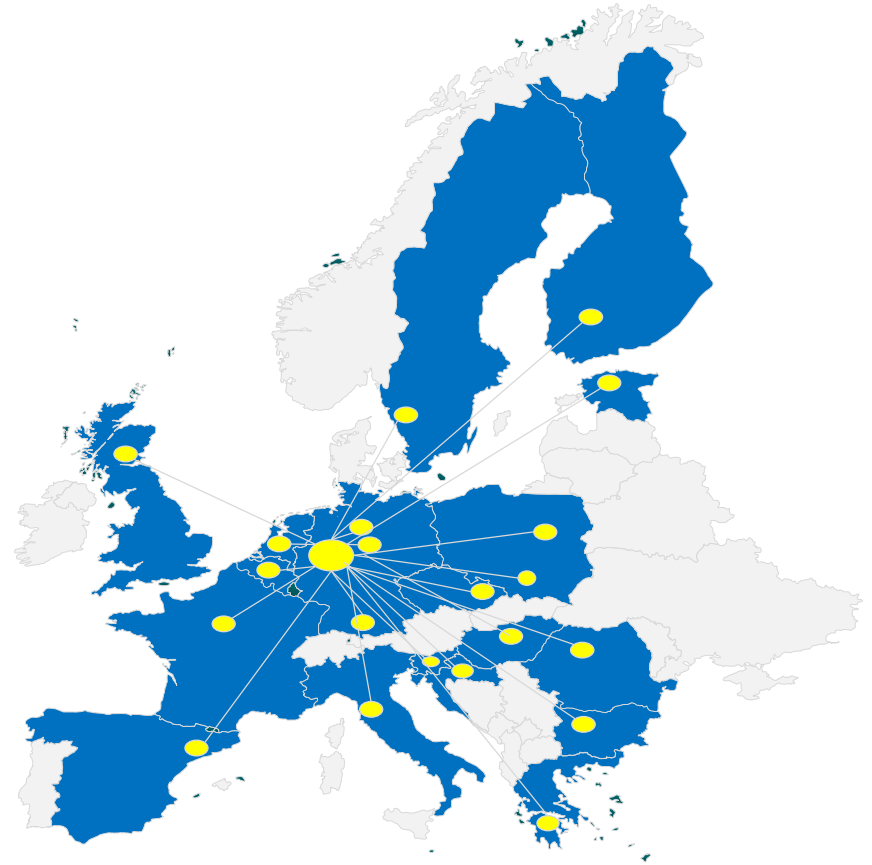
tetramax



RWTH AACHEN
UNIVERSITY

TETRAMAX at-a-glance

- **Innovation Action** from ICT-04-2017 call
- **Thematic focus**: customized and low-energy computing
- **Total budget**: 7 Mio. Euros
- **Duration**: Sep 2017 – Aug 2021
- **23 partners** covering
 - almost all EU countries
 - complementary expertise (technologies, networking, business generation)



TETRAMAX consortium partners



RUHR
UNIVERSITÄT
BOCHUM

RUB



DAMA-UPC. DATA MANAGEMENT
UNIVERSITAT POLITÈCNICA DE CATALUNYA



CHALMERS



VSb TECHNICAL UNIVERSITY OF OSTRAVA | IT4INNOVATIONS NATIONAL SUPERCOMPUTING CENTER



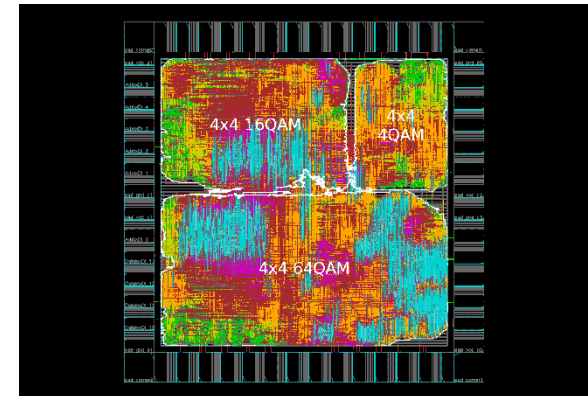
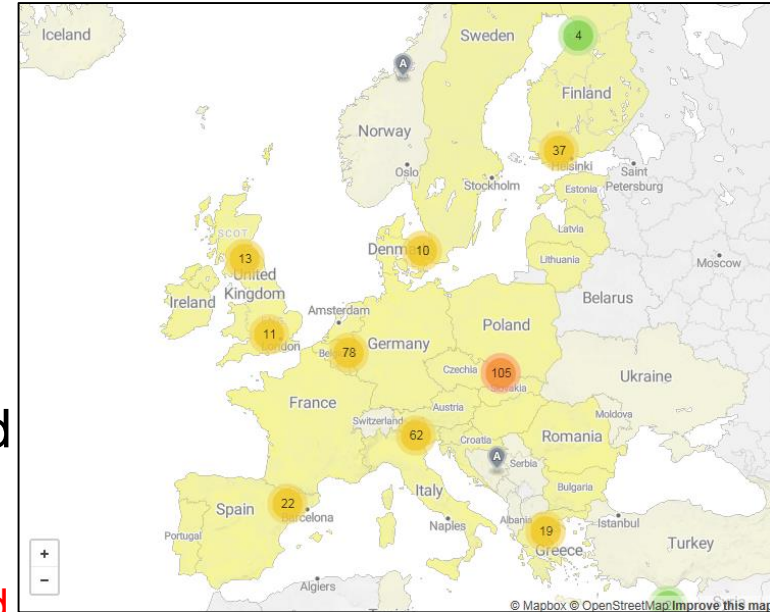
TECHMO

UNIVERSITÀ DI PISA



TETRAMAX overall ambition

- Build up and sustain the **#1 European competence network** in customized and low-energy computing
 - **technology brokerage, one-stop shop assistance and tech training** to SMEs and mid-caps
- Support **50+ industry clients and 3rd parties** in the entire EU with innovative technologies
 - Revenue increase
 - New ICT jobs
 - Cost and energy savings



TETRAMAX activity lines (1)

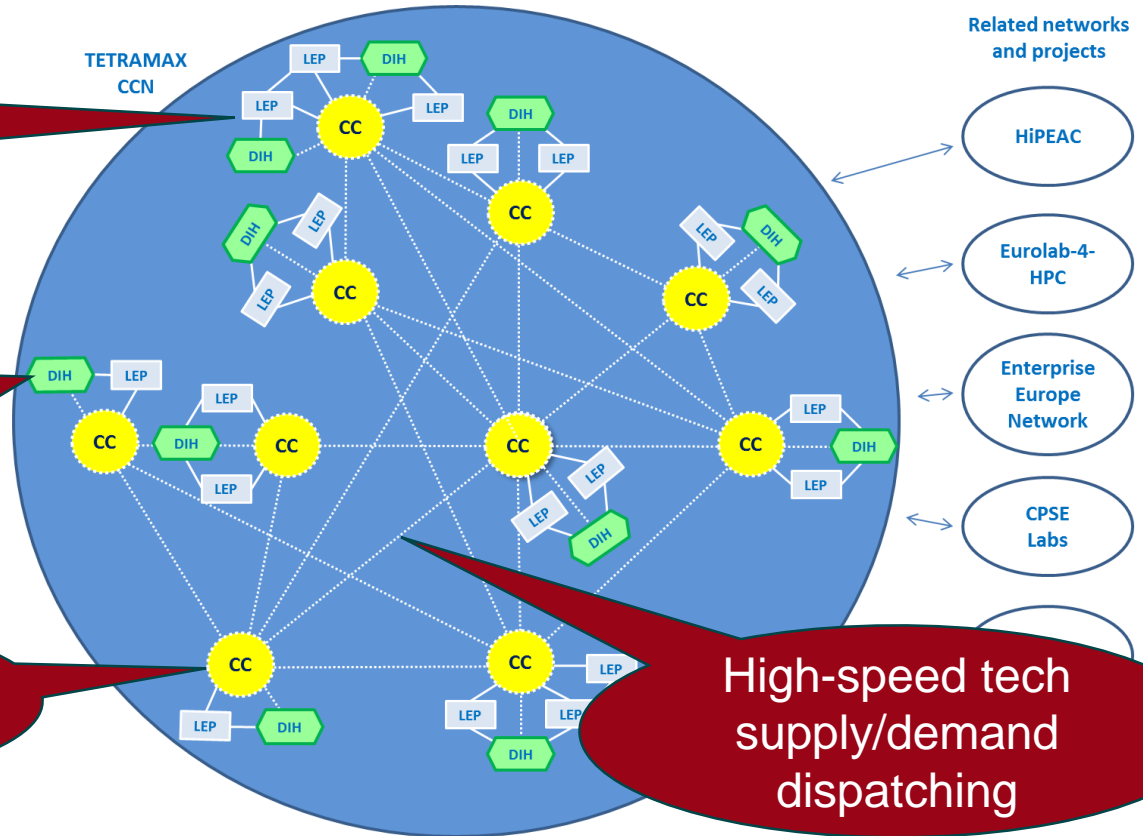
Building and leveraging a **Technology Brokerage Network** in customized and low-energy computing

- Tight collaboration with HiPEAC and related projects/networks

Local Ecosystem Partner (e.g. SME)

Digital Innovation Hub (e.g. local incubator)

Competence Center (TETRAMAX partner)



TETRAMAX activity lines (2)

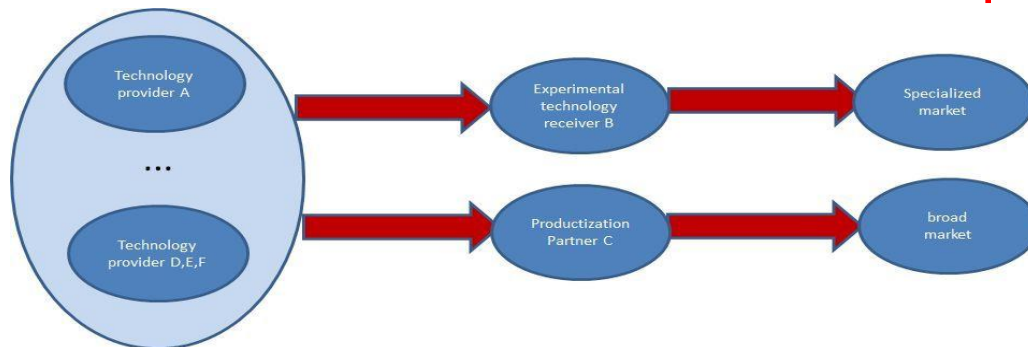
Stimulating, organizing and evaluating 60+ **Technology Transfer Experiments (TTX)** via open calls (3 different types)

1. **Bilateral** TTX (like in TETRACOM, but strictly cross-border)



6-12 months
20k-50k €

2. **Value chain** oriented and **interdisciplinary** TTX



12-18 months
50k-100k €

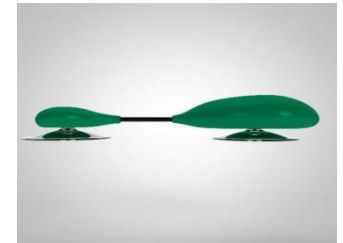
3. **Entrepreneurial** TTX (business prototyping)

3-6 months
20k-30k €

TETRAMAX activity lines (3)

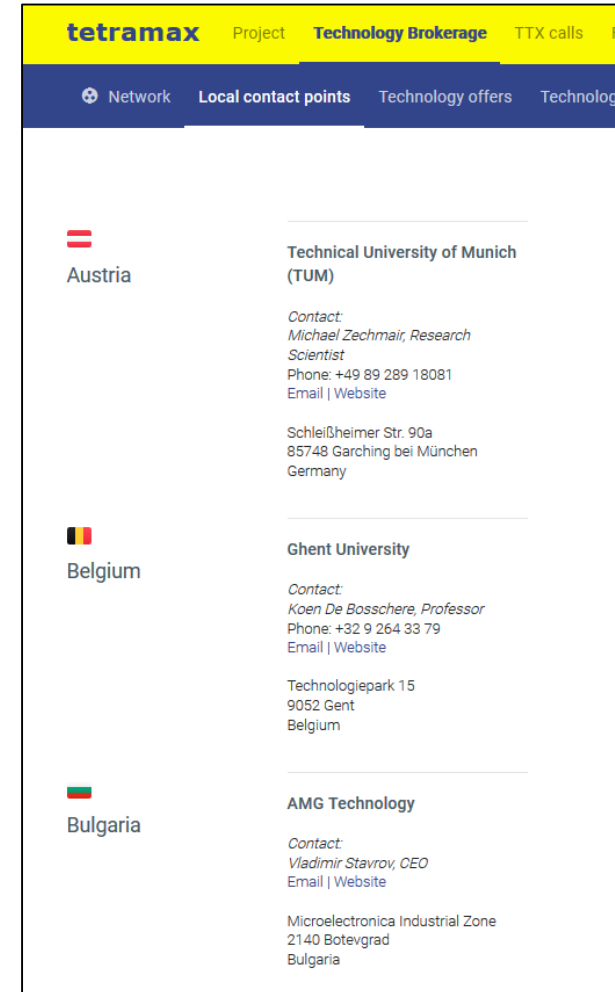
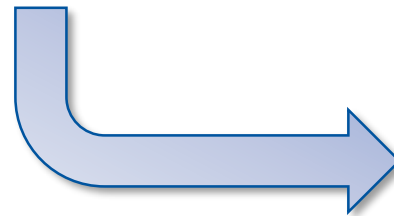
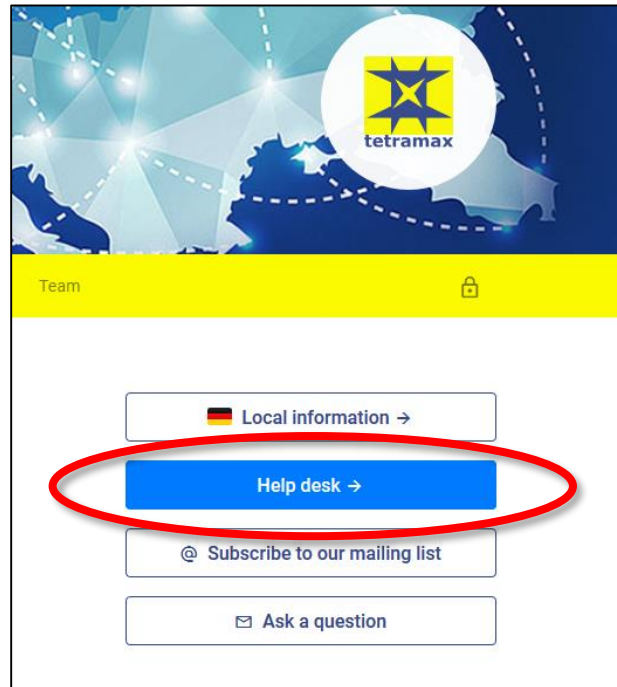
Paving the way towards **self-sustainability**

- TETRAMAX provides “**seed funding**”
- Development of customized “**business plans**” at three levels:
 1. Individual TTX
 2. Individual Competence Centers
 3. Entire Technology Brokerage Network
- **Revenue sources:**
 - New business generation (products, start-ups, services)
 - Investment acquisition (VC, private equity)
 - Leveraging ESIF and other regional funds



Help desk service

- Provision of “one-stop shopping” information and first-level support to clients by dedicated contact persons at each CC
- Recorded individual activities:
 - P1: 500+
 - P2: 800+



Technology brokerage

- Online brokerage portal to post technology offerings and requests
- Managed by dedicated Chief Technology Broker

The screenshot displays a web application for technology brokerage. At the top, a navigation bar includes 'Network', 'Local contact points', 'Technology offers' (the active tab), and 'Technology requests'. A 'MANAGEMENT' icon is visible in the top right. Below the navigation bar, there is a search bar with the placeholder text 'Search offers by title, keywords...'. On the left side, a sidebar contains a '+ Post offer' button and a 'Filter by technology areas' section. The filter section lists various categories, with 'ALL' selected. The main content area features three technology offerings:

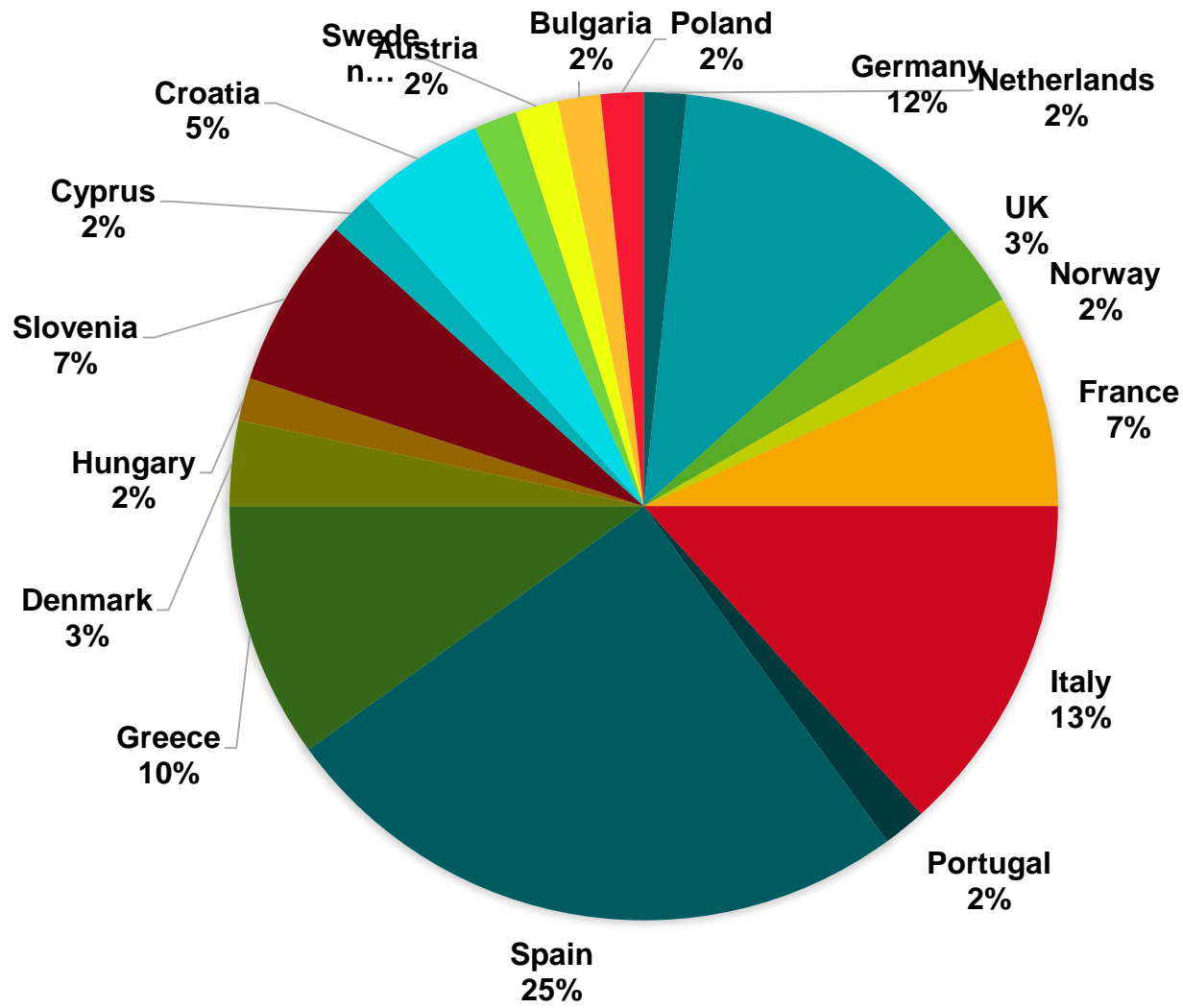
- Micro-energy harvesting using integrated PMU and solar cell on chip**: Offered by *The University of Santiago de Compostela*. The description states: "With the rise in IoT, innovative energy harvesting solutions as needed to power sensors and devices. Connecting these sensors and devices to a fixed power source is often not ideal nor possible." A 'Read more' link is provided.
- Distributed Ledger Technology / Blockchain**: Offered by *IOTA Foundation*. The description states: "IOTA Foundation is working to create Digital Trust in distributed data and IoT/M2M environment (Data integrity, security, identity, e-privacy), Feeless data (stream) monetisation /micropayment for ...". A 'Read more' link is provided.
- IOT Energy Management for Hotel Rooms**: Offered by *SENS*. The description states: "SENS is an energy management company that leverages technology to reduce energy consumption and energy costs." A 'Read more' link is provided.

Open call schedule

- **Total number** of proposals received so far: 168 (over 8 calls), 140 involving SMEs
- **Remaining** calls:
 - 4th Bilateral TTX: closes April 30, 2020
 - 4th Value Chain TTX: closed, under evaluation
 - 3rd Entrepreneurial TTX: opens April 30, 2020

	Call 1	Call 2	Call 3	Call 4
Bilateral TTX	Nov 2017 TTX duration: 6-12 months	Oct 2018 TTX duration: 6-12 months	Sep 30, 2019 TTX duration: 6-12 months	Jan 31, 2020 TTX duration: 6-9 months
Value chain oriented interdisciplinary TTX	Feb 2018 TTX duration: 12-18 months	Dec 2018 TTX duration: 12-18 months	Aug 31, 2019 TTX duration: 10-12 months	Nov 30, 2019 TTX duration: 10-12 months
Entrepreneurial TTX	Aug 2018 TTX duration: 3-6 months	Aug 31, 2019 TTX duration: 3-6 months	Apr 30, 2020 TTX duration: 3-6 months	n/a

How TTX proposers are spread across Europe



TTX proposals received/granted per call

TTX type	Call 1	Call 2	Call 3	Call 4
Bilateral	Nov 17 31/6	Oct 18 26/5	Sep 19 36/4	Jan 20 OPEN
Value chain/interdisciplinary	Feb 18 14/3	Dec 18 16/2	Aug 19 9/2	Nov 19 13/x
Entrepreneurial	Aug 18 16/4	Aug 19 8/3	Apr 20	-

Average acceptance rate: 17%

TTX awards and promotion

- **Highlighting TTX with outstanding impact** by featuring success stories in the newsletter, video clips
- First award handed out at the HiPEAC Conference, Bologna, Jan 2020 to the team of **TTX “CARROTS”**



Carrots: Cooperative ARchitecture for gaRdening with Open moniToring Systems

Tomappo is a digital gardening assistant enabling anyone to grow their own vegetables. Within Carrots, Lively's social sensors will be customized for use with Tomappo. This will add new dimension to Tomappo leading to a better product for users and new revenue stream for company receiving technology, while also benefit the owner of the technology by providing a new use-case for their sensors.

Lively
Italy

PROVENTUS, računalniške storitve, d.o.o.
Slovenia

New TETRAMAX Technology Transfer Experiment - CARRO...
Später ansehen Teilen

See e.g. YouTube

Poster sessions

- Adopted from **TETRACOM** project
- Organization of **two poster sessions at major events** presenting all active or concluded TTX
- 1st session organized at the **HiPEAC conference, Bologna, Jan 2020**
- 2nd session planned for **HiPEAC conference, Budapest, Jan 2021**



Industrial Advisory Board

■ 2nd IAB meeting: Sep 26, 2019, Aachen

Celia Pelaz

Member of the Executive
Committee, Head of Spectrum
Dominance & Airborne Solutions
HENSOLDT
LinkedIn



Darya Yegorina

CEO & Founder
CleverBooks
LinkedIn



Gabriel Almeida

Principal Engineer
HARMAN International/Samsung
LinkedIn



John Goodacre

Chief Scientific Officer
Kaleao Ltd
LinkedIn



Laima Kaušpadienė

CEO Sunrise Valley Science and
Technology Park
and Member of the Governing
Board of the European Institute of
Innovation and Technology (EIT)
LinkedIn



Matthias Weiss

Managing Director
CommSolid GmbH
LinkedIn



Oscar Gallego Castilla

GE Digital Europe Director & GE
Digital Spain Chairman of the Board
General Electric Digital
LinkedIn



Tero Rissa

Principal System Architecture &
DSP Specialist
Xilinx Finland
LinkedIn



Wilken Engelbracht































Partner
Tengelmann Ventures (TEV)
LinkedIn



New feature: VC landing page


Looking for the next unicorn in ICT applications like autonomous vehicles, smart mobility, or healthcare?

TETRAMAX helps to make European startups investor-ready. Find the brief profiles of some founding teams below. Feel free to contact them directly, or send an email to investors@tetramax.eu.

 Dependable systems, cybersecurity.  Kiefersfelden, Germany  Dresden, Germany	 Next-gen geolocation technology for asset tracking in infrastructure and logistics, and for autonomous navigation.  London, United Kingdom  Barcelona, Spain	 Environment, Decision Support System.  Genoa, Italy	 Servers, datacenters.  Cambridge, United Kingdom
 Chemistry, advanced materials.  Barcelona, Spain	 Energy, manufacturing.  Cluj-Napoca, Romania	 Mobility.  Amsterdam, Netherlands  Brussels, Belgium  Tallinn, Estonia	 Automated Manufacturing & Intralogistics.  Hannover, Germany
 Semiconductors, financial, data analytics, healthcare (genomics, bioinformatics), machine learning.  Athens, Greece  Wilmington, DE, United States	 Mass storage industry, application drivers: data centers, AI, autonomous drive,...  Montecatilli, Italy  Perugia, Italy	 Medical device, cardiology.  Ljubljana, Slovenia	 Sports and health technology.  Gothenburg, Sweden

New feature: VC landing page

- Brief investor-ready start-up/scale-up **profile templates** created based on various **investor interviews**
- Example:

Techmo Sp. z o.o.		Visit website
Team	Bartosz Ziółko , CEO Tomasz Jadczyk, CTO Piotr Stankiewicz, CBDO Szymon Pałka, CSO	TECHMO Voice Technologies
Desired investment	Series A.	
Market sector(s)	Banking, Insurance, Customer Service, IoT.	
Technology description	We implement business solutions in the field of speech technology, natural language processing and sound virtualization. We are provider for speech recognition systems - ASR (Automatic Speech Recognition), speech synthesis - TTS (Text-To-Speech) and speech analysis.	
Potential	In 2019, The global speech analytics market was worth 1,34 bn USD (4,24bn USD in 2026). According to the forecast, in 2023, the Customer Service Automation market will be worth 11 bn.	
Locations	 Cracow, Poland	

Management team

- **Project Coordinator**
 - Rainer Leupers, RWTH Aachen
- **Technical Project Officer**
 - Dominik Šišejković, RWTH Aachen
- **Financial and Administration Officer**
 - Eva Haas, RWTH Aachen
- **Dissemination and Communication Officer**
 - Katrien Van Impe, Univ. of Ghent
- **Web admin**
 - Eneko Illaramendi, Univ. of Ghent
- **Chief Technology Broker**
 - Wei Jan Wang, Chalmers Univ.



www.tetramax.eu