Promotion of spin-off activities through VTT Ltd and VTT Ventures Ltd Finland

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^b Vice President - Investment, VTT Ventures Ltd, Finland ^c EU Affairs Manager, VTT Technical Research Centre of Finland, Finland The case study provides a practitioner's perspective on VTT's accelerator for deep tech spin-offs – VTT Ventures Ltd, including the accelerator's key factors of success, its challenges, and impacts.

Topics covered

Deep tech start-ups, accelerator, international investors, business support, interaction with national

VTT Ventures Ltd – the spin-off accelerator

- Since 2010, VTT Ventures Ltd is VTT's in-house accelerator for deep tech spin-offs
- **Mission**: Develop commercialisation ready prototypes from the most promising technologies
- It develops early stage deep tech spin-offs for international markets

Factors of success

- Co-investment in spin-offs with private investors
- Good network of national and international VC's
- Access to a pool of serial entrepreneurs for business and entrepreneurial talent
- VTT Ventures ownership is between 10-25%
- VTT allows researcher to take a **one-year leave of absence** to create spin-offs

Examples of successful spin-offs

- *TactoTek* (IoT & electronics): World leader in injection moulded structural electronics
- *Paptic* (new materials and advanced manufacturing):

 Develops new fibre product with plastic-like properties; estimated revenues in 2020: EUR 200 million
- FocalSpec (imaging and optics): High-resolution 3D imaging
- *MinimaProcessor* (IoT & electronics): World record holder in energy efficient chips; estimated revenues 2020: EUR 100 million
- **Spectral Engines** (sensing and diagnostic): high-performance spectral measurement instrumentation; received EUR 2.4 million EU Horizon 2020 grant
- Spinnova (new materials and advanced manufacturing):
 Develops sustainable alternative to cotton and oil based yarns;
 post money evaluation of EUR 28 million

Selection criteria for spin-offs at VTT Ventures

- → Technological and commercial innovation
- → Team competencies
- → International potential

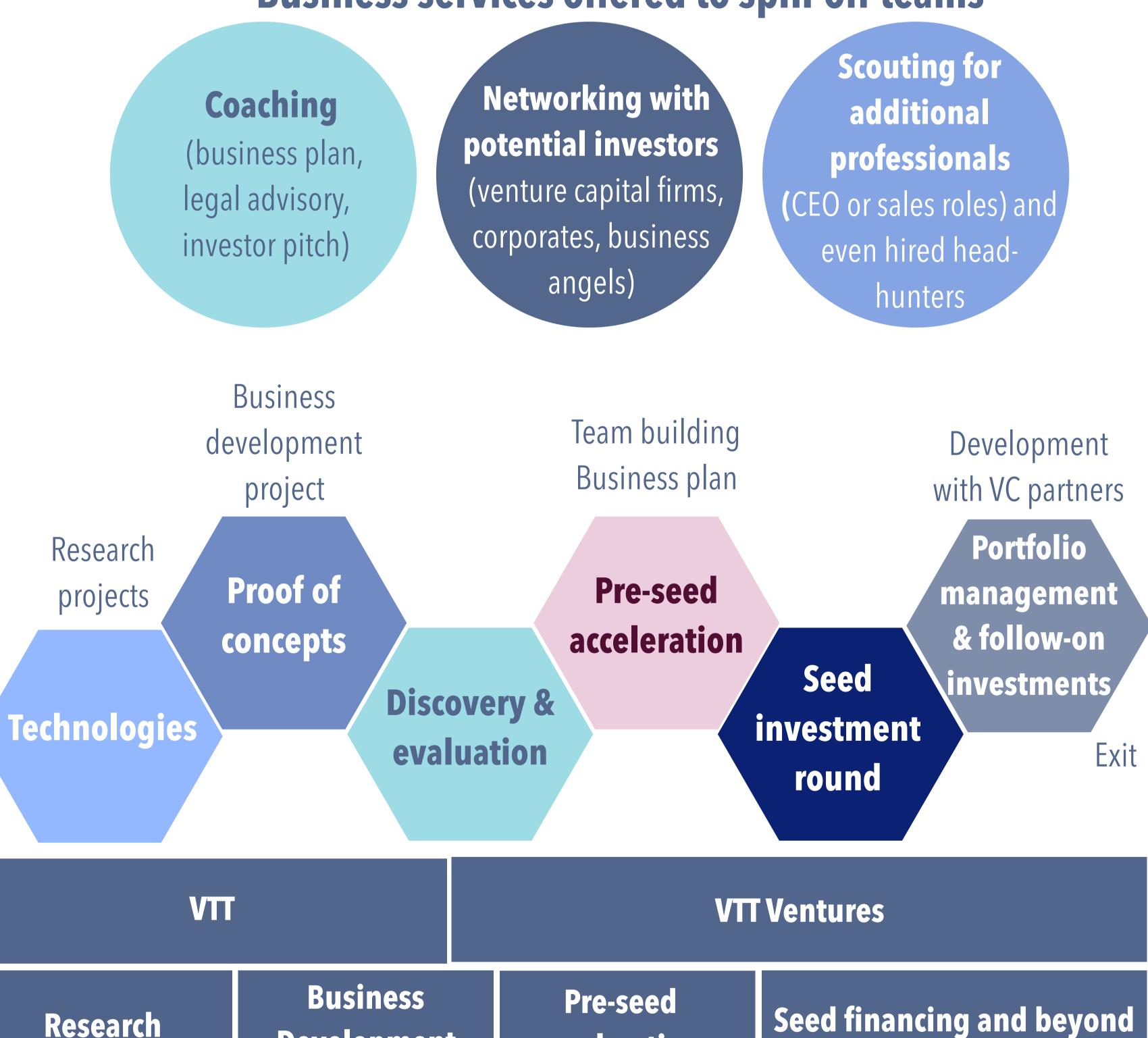
VTT Ltd - the applied research institute

- Established in 1942, the Technical Research Centre of Finland (VTT) is **Finland's** biggest applied research institute
- Annual turnover of EUR 235 million in 2017
- 2017: **69% of revenues from industry**

In-house support for commercialisation:

- BizFund (funds proof-of-concepts)
- iBEX fund (for addressing societal challenge-driven research)
- VTT Ventures Ltd (in-house accelerator for spin-offs)

Business services offered to spin-off teams



Interaction with national policy instruments for start-ups

acceleration

- "New business from research ideas programme" (TUTLI programme) of Business Finland
- VTT co-finances 30% of TUTLI projects

Development

Main challenges

- **Setting-up spin-offs drains** on the best talent from VTT reduces its capacity to attract new contract research
- Danger of high expectations: Valuation of technology should not be too high
- Finding the right business and entrepreneurial people (often the CEO and CFO)

Impact

- 2010-2018: 22 spin-offs, out of which 19 survived
- **2010-2018:** 275 job
- **2017:** EUR 5.4 million turnover
- 2010-2018: EUR 82 million capital raised by spin-offs
- EUR 65 million (80%) came from external investors