Programmes to promote spin-offs at Germany’s Fraunhofer-Gesellschaft

The case study provides a spin-off incubation and company building perspective at Fraunhofer-Gesellschaft, Germany’s leading institution for applied research.

Topics covered
High-tech start-ups, incubator, company building, spin-off support systems

Fraunhofer-Gesellschaft
- Germany’s leading institution of applied research in terms of budget
- 2019: More than EUR 2.5 billion euros annual research budget
- 2019: EUR 2.1 billion (84%) generated through contract research
- 2018: Fraunhofer owns or holds equity in 85 companies from a wide variety of industries

New AHEAD incubator replacing previous spin-off support system
- Just started incubator, based on global best practice
- The Engine, MIT, USA; 13 accelerator, Technion, Israel; Yes!Delft, TU Delft, the Netherlands
- Merger of 4 programmes (F4days, F4days®, FFE, FFL (licensing support)) into one incubator & company builder (AHEAD)
- Inception of Fraunhofer Tech Transfer Fund (FTTF) providing investment funding for spin-offs
- Provides spin-off teams with funding, workshops, training, coaches, contacts to potential co-founders, networking & business intelligence
- Novelty 1: Fraunhofer-external entrepreneurs are part of AHEAD for company building purposes
- Novelty 2: Network of industry companies is connected for market validation & partnership
- More agile structure: On-demand workshops, coaching, networking based on individual needs
- Increased customer and market testing vis-à-vis technology development

Fraunhofer Venture
- Fraunhofer-Gesellschaft initiated its Fraunhofer Venture division in 1999
- Objective: Make innovations usable through spin-offs and lead them to economic value creation
- More than 200 spin-off companies have been supported (as of 2014)
- Team of 25 people (venture managers, lawyers and company building experts)

Technology fields:
- Life sciences
- Energy & environment
- Information & communication
- Manufacturing & processing
- Microelectronics
- Transport & logistics
- Materials & Photonics

OUTPUT
- Spin-off or Licensing deal

Challenges to the policy mix
- Need to increase start-up activity
- Upscaling of spin-off support systems

Interaction with national policy instruments for start-ups
- EXIST programme
- Hightech Pioneers initiative
- Tech Bridge project
- Venture connect
- Digital Hubs

Successful Fraunhofer start-ups:
- Novaled (sold to Samsung in 2013)
- Exacod (sold to Carlyle Group in 2016)

Impacts
- Key figures:
  - 30 new spin-offs in 2018 alone
  - Objective 2022: 2 spin-offs per 1 000 researchers

Fraunhofer 2022 agenda
- New incubator AHEAD developed in 2018
- Objectives: Ratio of 2 spin-offs per 1,000 researchers, increase of the returns in investment

Create awareness for entrepreneurship
- Give visibility to successful entrepreneurs as role models (e.g. Falling Walls initiative)

Reduce complexity of policy mix
- Streamline existing support structures for spin-offs (e.g. Fraunhofer Venture’s AHEAD incubator)
- Combine incubators (e.g. AHEAD) with national funding programmes for research-based spin-offs (e.g. EXIST)
- Venture capital (FTTF)

Upscaling of spin-off support systems
- E.g. Partnership between Fraunhofer Venture, Helmholtz Enterprises, KIT, DLR and RWTH Aachen University tech transfer offices

Policy recommendations
- Support international cooperation
  - Create mobility schemes for entrepreneurs
  - Global best practice: e.g. Cyclotron Road (Berkeley, US), Startup Runway Program (CornellTech, US)
  - From "Erasmus for Young Entrepreneurs" towards "European Entrepreneur in Residence" (EER) model

Lambertus, T., Schmalenberg, J. and M. Keckl (2019), “Case study on programmes to promote spin-offs at Fraunhofer-Gesellschaft in Germany: Case study contribution to the OECD TIP Knowledge Transfer and Policy project.”