

# Innovation and access to technology by small businesses for products/processes/services in Germany

**Global Entrepreneurship Monitor Germany (GEM)** 

Dr. Natalia Gorynia-Pfeffer, Armin Baharian (GEM Team Germany) Gefördert durch:



aufgrund eines Beschlusses des Deutschen Bundestages

# Agenda

- **1.** Introduction and Overview: Innovation landscape in Germany
- 2. Global Entrepreneurship Monitor Germany: Innovation in numbers
- **3. Deep dive:** Three innovation programms (with a global angle)

## The German economy

- > 99,6 % of companies in Germany are SMEs
- > 58,2 % of jobs in Germany are within SMEs
- 1.300 "hidden champions" in Germany, which is almost half of all hidden champions worldwide

Institut für Mittelstandsforschung Bonn, 2021

# The German research landscape Facts and Figures

- More than 1,000 public and publicly funded institutions for science, research and development
- > Over 400 research and innovation networks and clusters
- > 708,000 staff in R&D, including 434,000 researchers
- > More than 45,000 patent registrations worldwide (5th place)
- Expenditure on R&D: 3.13 % of GDP (2021)

Deutscher Akademischer Austauschdienst (DAAD) (2021): "The German research landscape". Berlin.

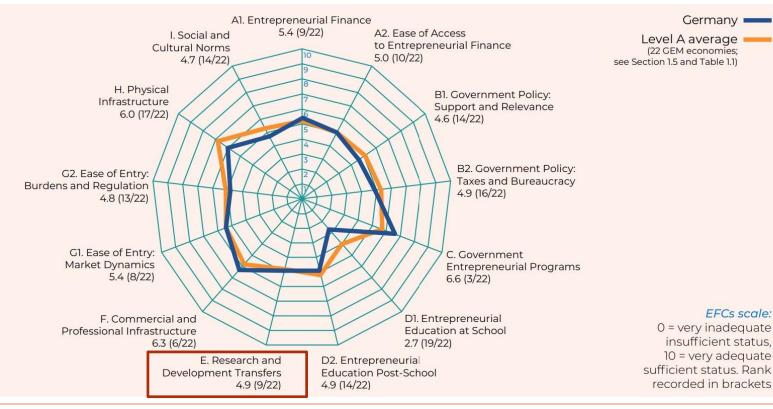
# **R&D policy framework in Germany** Research infrastructure

- Research institutes: The Max Planck Society, the Fraunhofer Society, the Helmholtz Association of German Research Centres, the Leibniz Association
- Research at Universities of Applied Sciences
- Federal Agency for Disruptive Innovation (SPRIND)
- German Agency for Transfer and Innovation (DATI)
- Federal Funding Advisory Service on Research and Innovation

# **R&D policy framework in Germany** Initiatives and public funding

- High-Tech Strategy 2025: national approach which integrates numerous research and innovation activities and involves all government departments.
- Start-up Strategy: to make it easier to create spin-offs from universities, and to set up these businesses digitally.
- > The German Federal Ministry for Economic Affairs and Climate Action:
  - "From the idea to market success" initiative
  - Central Innovation Program for SMEs (ZIM)
  - "WIPANO Knowledge and Technology Transfer through Patents and Standards"
  - EXIST Transfer of Research from universities

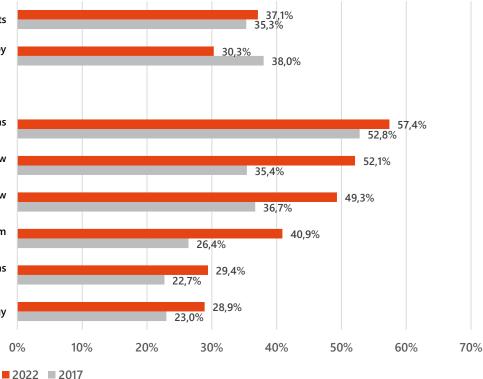
### **Expert ratings of the Entrepreneurial Framework Conditions** NES Germany 2022



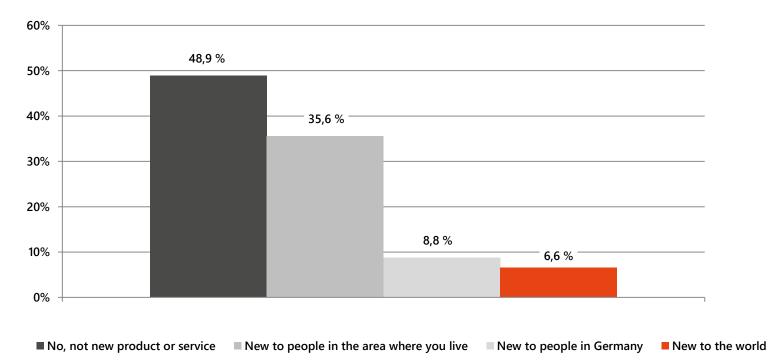
### Expert ratings R&D Transfer + Market openness NES Germany 2022 + 2017

In Germany,

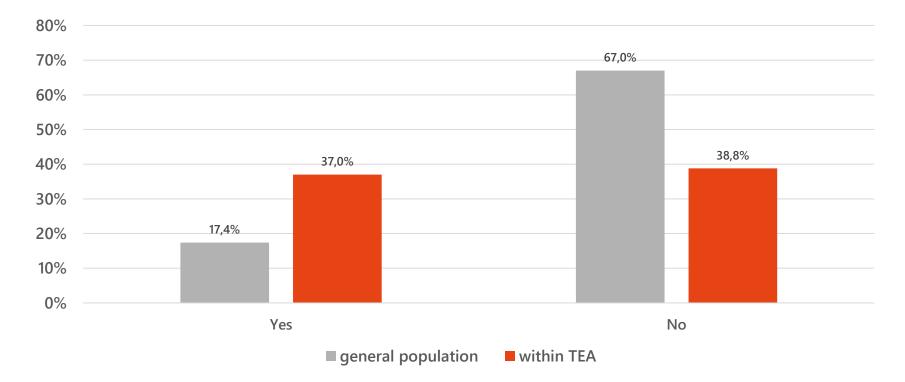
...new and growing firms can easily enter new markets ...new and growing firms can enter markets without being unfairly blocked by established firms ...there is good support available for engineers and scientists to have their ideas commercialized through new and growing firms ...the science and technology base efficiently supports the creation of world-class new technology-based ventures in at least one area ...there are adequate government subsidies for new and growing firms to acquire new technology ...new technology, science, and other knowledge are efficiently transferred from universities and public research centers to new and growing firms ...new and growing firms have just as much access to new research and technology as large, established firms ... new and growing firms can afford the latest technology



#### Innovation: New Products or Services APS Germany 2022



### **Digital skills: Basic skills in programming** APS Germany 2022



# **Innovation: German Accelerator**

- > Funded by the German Federal Ministry for Economic Affairs and Climate Action
- German Accelerator empowers German startups to scale globally
- Offices in Germany, America (Boston, New York, Silicon Valley), Singapore and Japan (Tokyo)
- Through highly-customized programs, mentoring from local experts, as well as access to a vast network of business partners and investors, German Accelerator helps startups from all stages and across various industries on their way to international success.
- German Accelerator doesn't take any equity from startups

The **Kickstart** program supports early-stage German startups with the knowledge and tools needed to build and grow a scalable, global business right from the start.

**Market Discovery** program that helps startups explore new markets in Asia and South America to assess their suitability for a new region.

Market Access program that helps startups successfully enter the U.S. or Asian markets.

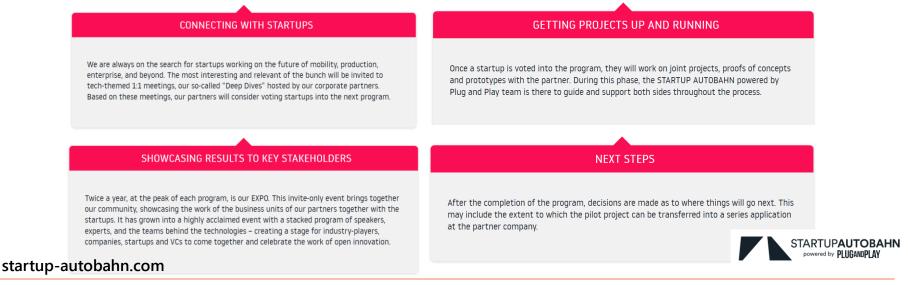


#### www.germanaccelerator.com

# **Innovation: Startup Autobahn**

- > Connects startups with industry-leading corporate partners to pilot their technology
- Corporate Partners (37) include Mercedes Benz (Daimler), Porsche, Hyundai, Bosch, BASF, Deutsche Post DHL Group, University Stuttgart
- > Shared space located in Stuttgart (Germany) and the US
- > Startups working on hard- or software solutions for mobility, production, or enterprise can join

Accelerator program with 4 steps:



# **Innovation: Digital Hub Initiative**

- > Funded by the German Federal Ministry for Economic Affairs and Climate Action
- Offices in 12 German cities
- > Each location has a specific focus: for example Fintech in Frankfurt
- > Startups that focus on digital innovations can join the program
- Startups are connected with: Science, SMEs, Corporates and Investors





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