

Overview of Photovoltaics Thrusts through SBIR/STTR Program at NSF

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SBIR/STTR Program
Industrial Innovation and Partnerships
National Science Foundation

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Golden, CO

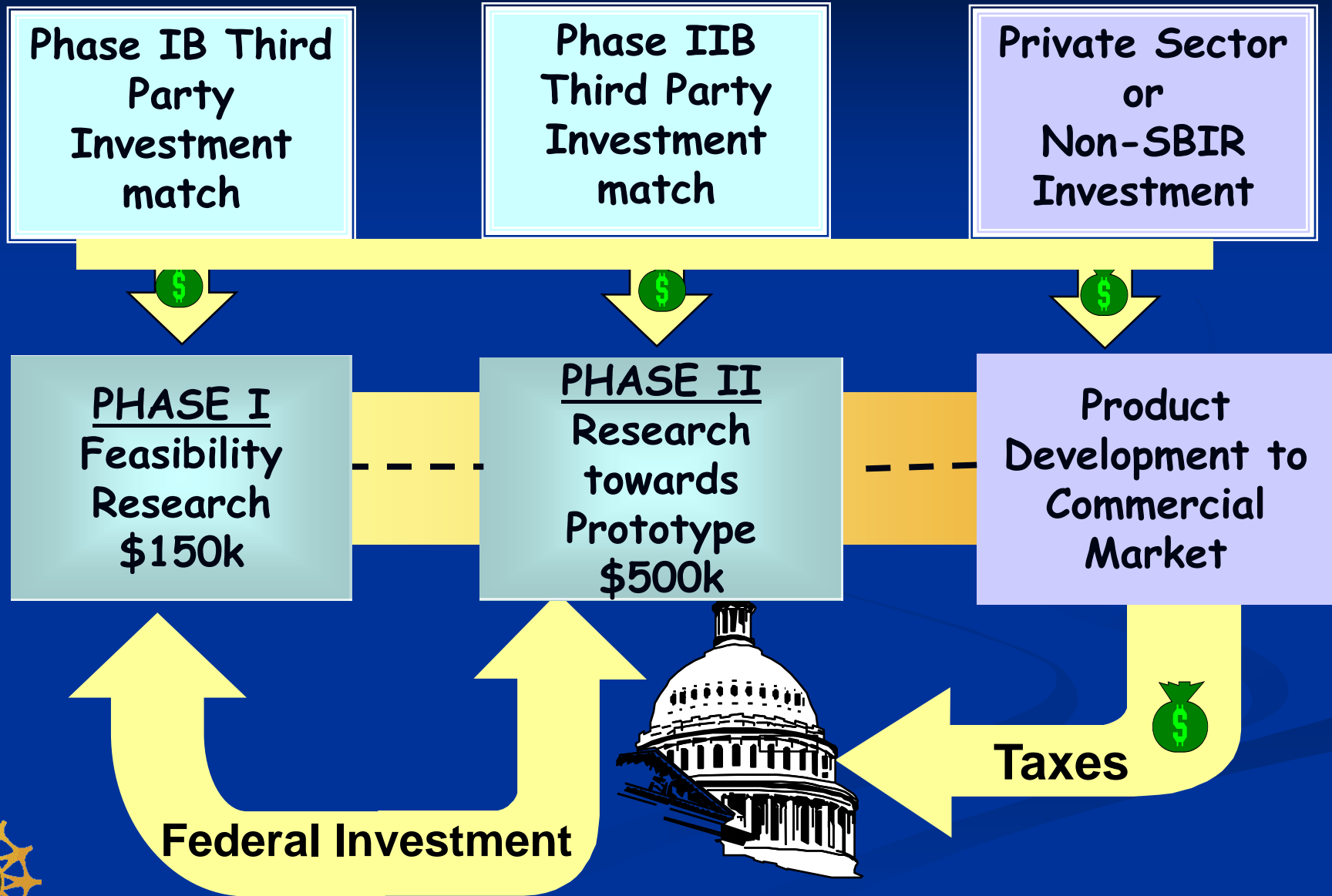
SBIR & STTR Programs

- **SBIR = Small Business Innovation Research**
- **STTR = Small Business Technology Transfer Research**

Goal: to enable the commercialization of high-risk, high payoff technologies

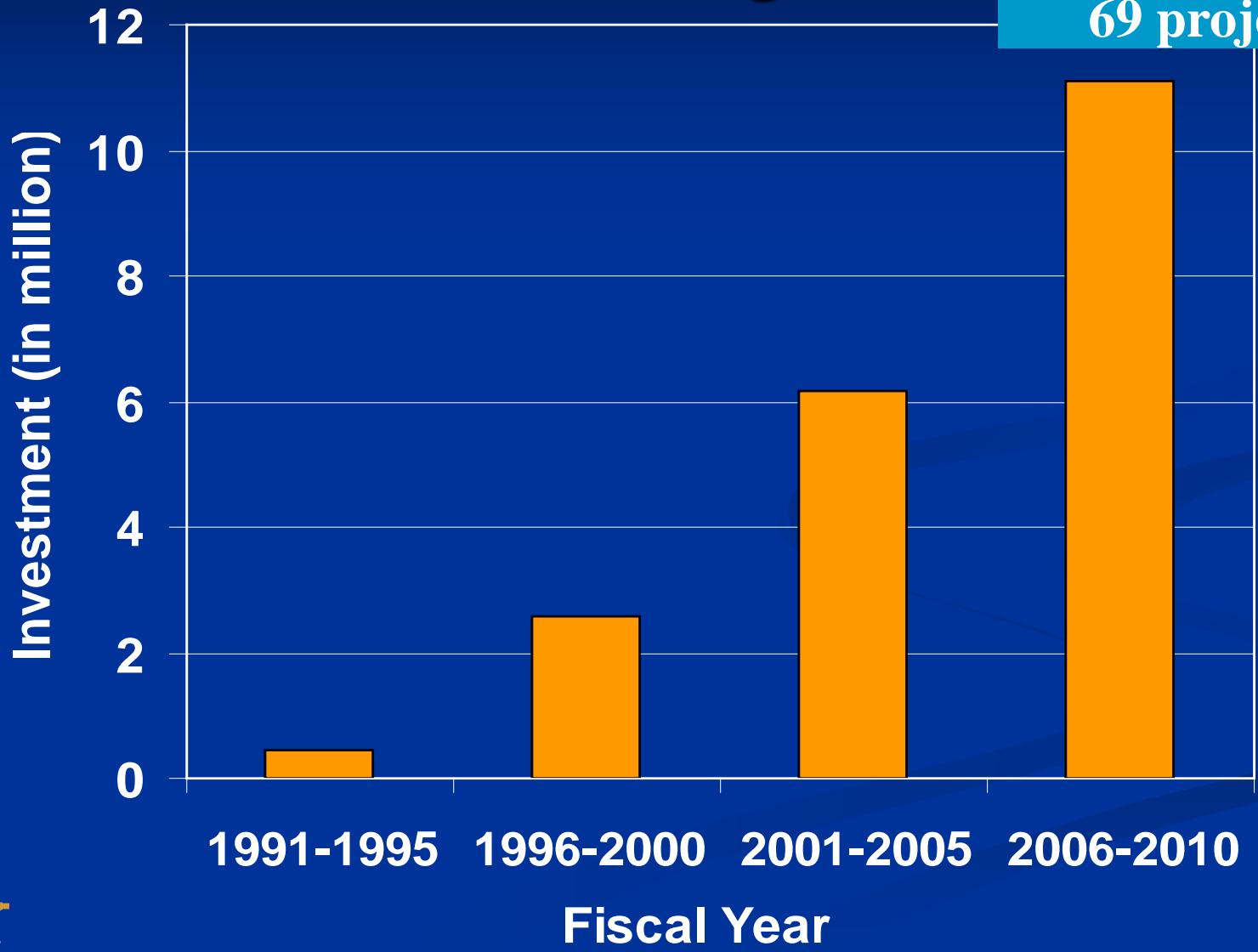


NSF SBIR/STTR Innovation Model

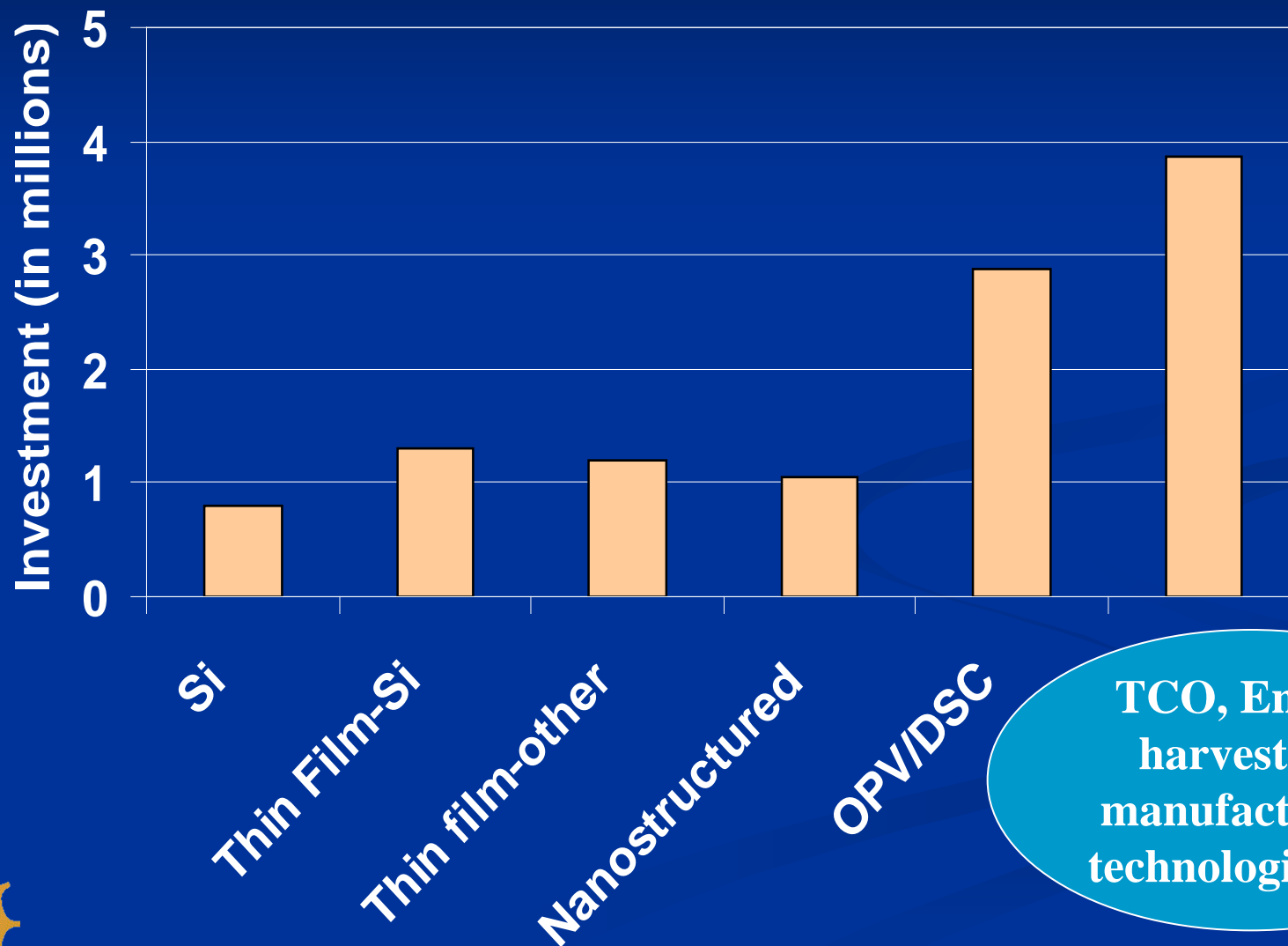


NSF SBIR/STTR Investments in PV Technologies

Total \$11 million
69 projects



Photovoltaics Thrusts of NSF SBIR/STTR Program (FY 2006-2010)



TCO, Energy harvesting, manufacturing technologies etc.

Some of Our Grantees...



Soltaix



MV Systems



LakeShore



SUN INNOVATIONS



Current Focus of NSF SBIR/STTR Program in PV Technologies

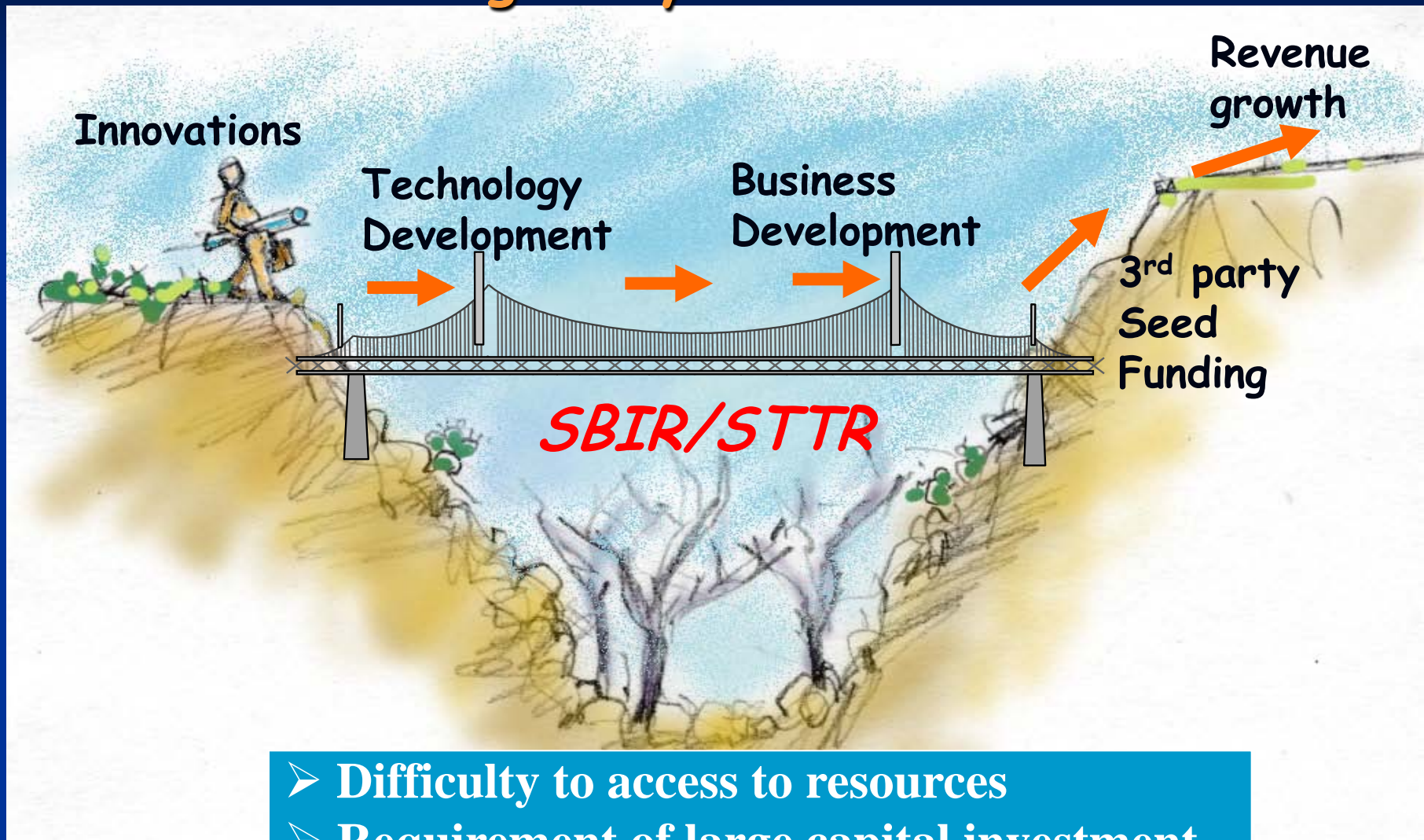
➤ Manufacturing

- ✓ Reduce cost/Watt
- ✓ Improve manufacturability
- ✓ Develop sustainable PV materials & processes

➤ Commercialization



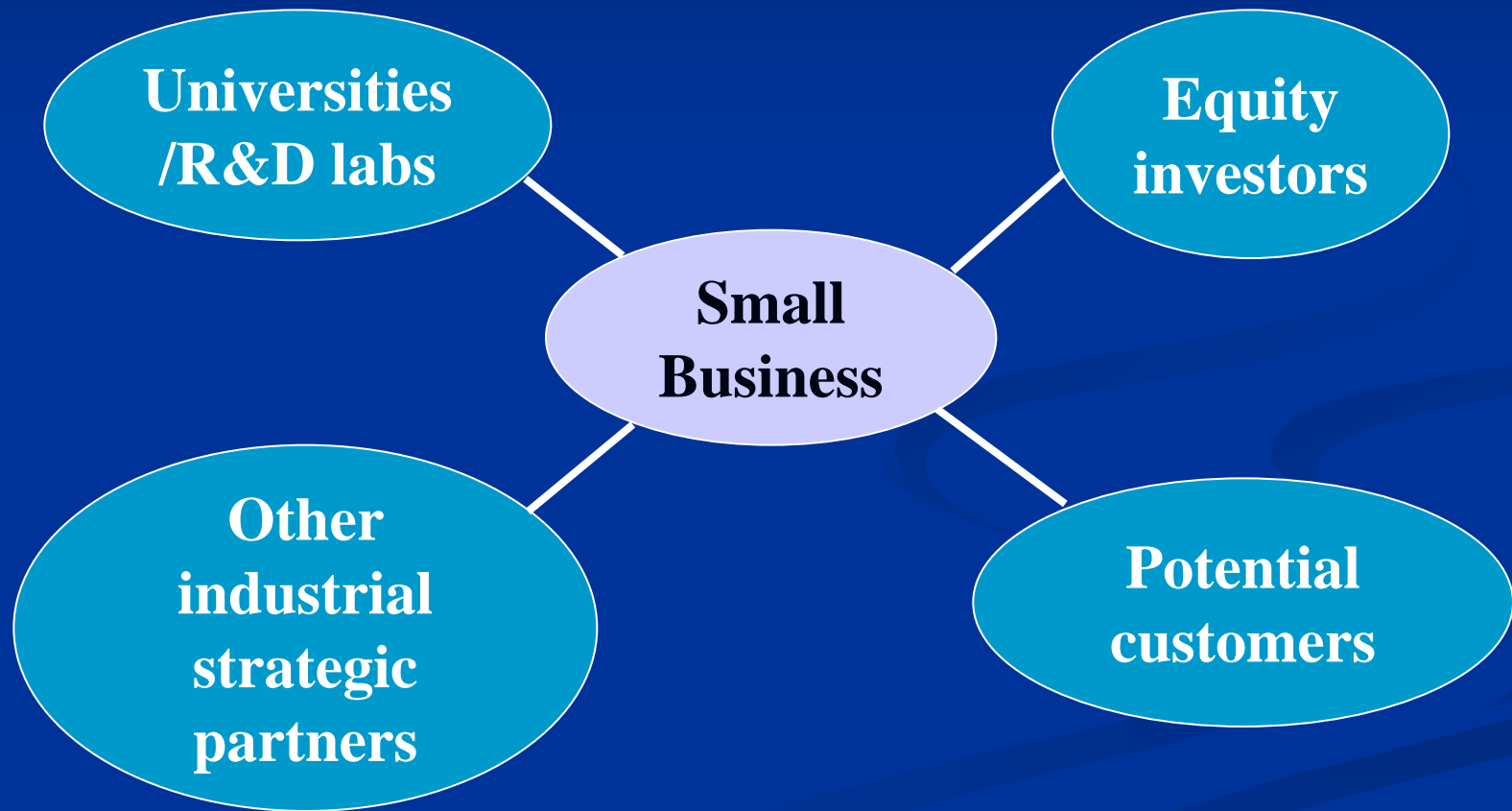
Challenges in Commercialization of PV Technologies by Small Businesses



- Difficulty to access to resources
- Requirement of large capital investment
- Lack of business expertise



Effective Partnerships are Essential to the Commercialization Success of Small Businesses

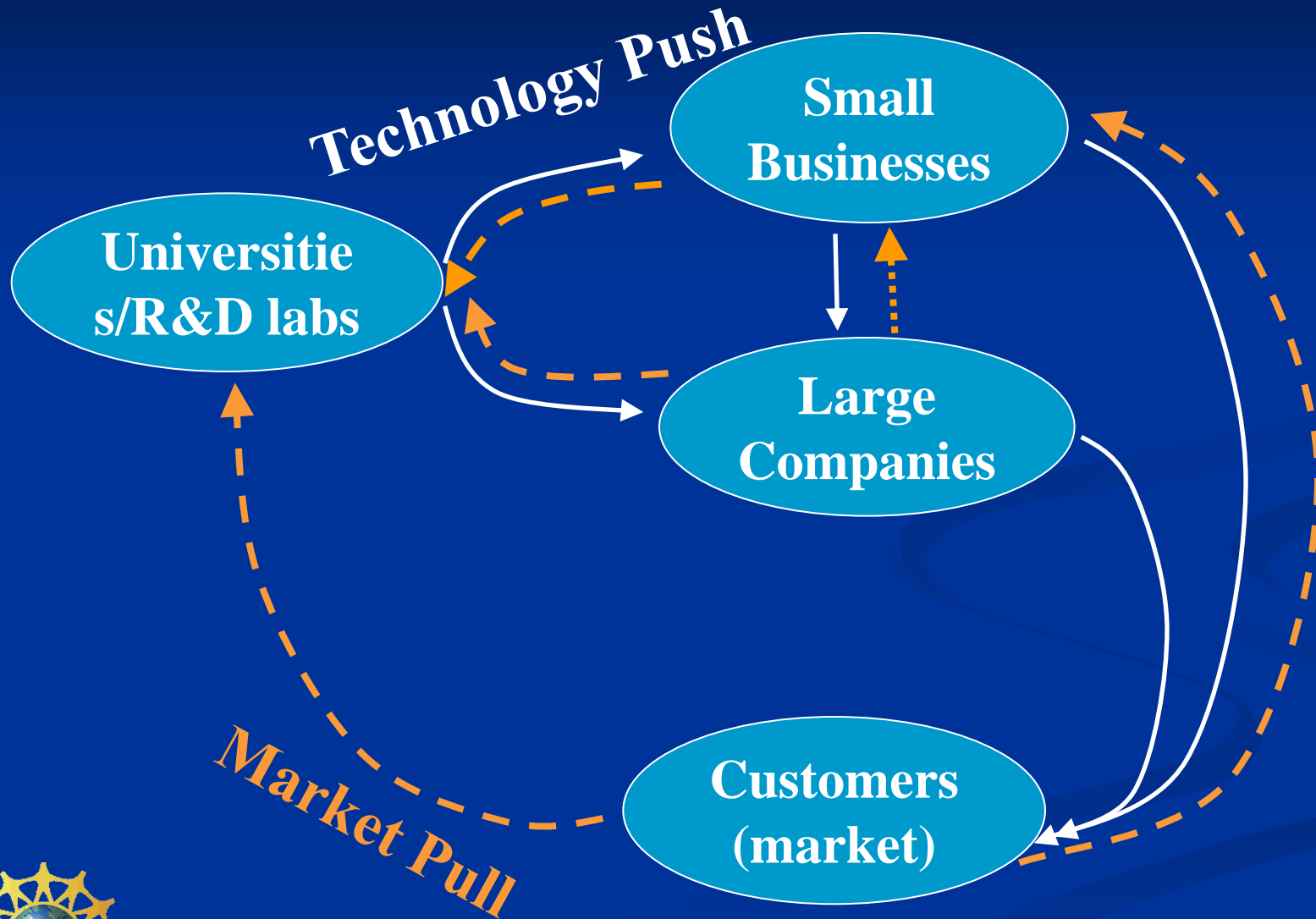


Commercialization Initiatives of NSF SBIR/STTR Program

- Phase IB and Phase IIB Supplemental programs
 - ✓ Motivate our grantees to initiate partnerships
 - ✓ Over 20% of SBIR/STTR funding
- Innovation Accelerator and Match-maker programs
 - ✓ Provide networking and mentoring opportunities



More Effective Partnerships are Required to Accelerate the PV Commercialization



Thank you

www.nsf.gov/eng/iip/sbir

