Sustainable Technology Transfer: The German Way

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Five Key Points and Take-Home Messages

1. Successful technology transfer in Europe should not necessarily follow the US model due to major cultural, political and economical differences.

2. Technology transfer policies should help the successful European industries like automotive and manufacturing to secure their role as global leaders (example Industry 4.0 in Germany).

3. Public Private Partnerships (PPPs) are a key element of European technology transfer with a tight coordination of public research, private companies and political regulatory frameworks (examples FI PPP, BIG DATA PPP Forum, DFKI).

4. Liberal IPR policies make European research centers attractive for investments of global high-tech companies.

5. The funding of mission-based consortia projects as planned in Horizon 2020 by the EC and European Governments between the best Research Centers, SMEs and large companies enable successful technology transfer networks.
President Obama has introduced the “re-industrialization” strategy for the US

In the US, the great spike in unemployment over the past five years was disproportionately due to loss of manufacturing jobs. Across the entire industrial landscape there are now gaping holes and missing pieces. It’s not just that factories stand empty and crumbling; it’s that critical strengths and capabilities have disappeared that once served to bring new enterprises to life.

Innovation in Germany builds on legacies: in industrial specializations, longstanding relationships with customers, workforce skills, and proximity to suppliers with diverse capabilities.

The potential of German patterns extends well beyond defending niches against lowcost competition with incremental advances.

They create new businesses, not usually through start-ups - the U.S. model - but through the transformation of old capabilities and their reapplication, repurposing, and commercialization.

The Germans had not only their own legacy resources, but also access to a rich and diverse set of complementary capabilities in the industrial ecosystem: suppliers, trade associations, industrial collective research consortia, industrial research centers, Fraunhofer Institutes, University-industry collaboratives (like DFKI), technical advisory committees (like the Research Union)
Aligning Major National and European Initiatives for Technology Transfer

German Future Project 1
400 M€

German Future Project 2
300 M€

Service@Digital
Trusted Cloud

PPPs

FUTURE INTERNET PPP

BIG DATA PPP Forum

Industry 4.0

E-Learning and Jobs for Young Professionals from Southern Europe

Training and Coaching for CTOs of the Future

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Boosting Successful Classical Key Industries by Future Internet Technologies

Examples in Germany: Automotive Industry and Factory Automation

Two Revolutions: The Internet of Things and Services for the IP Car and the IP Factory

Special Bus Systems
(eg. CAN, MOST, LIN, FleyRay)
in the Car

Special Field Buses
in factories (eg. Profibus, Interbus, CANopen, ControlNet, CC-Link, DeviceNet)

SEIS & SimTD:
Internet in and between Cars

Industry 4.0:
Internet and Cyber-Physical Production Systems in Smart Factories

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Transforming FP 7 PPPs into Sustainable PPPs with Economic Impact

Lifting the Successful German PPP Models to a European Level

PPP contract with real shareholders and PPP as a non-profit legal entity (gGmbH)
Run by CEO and CFO as a Company with a Supervisory Board

Shareholders
- Key Companies in an Industrial Sector and their SME Ecosystem (Private)
- Top-Notch Research & Innovation Institutions (Public)
- Funding Agencies (States and/or Federal Government)

Joint Innovation Hubs, Co-Location Centers, Living Lab owned and managed by PPP

Economic & Business Impact:
Jobs, Workforce, Spin-Off Companies, Products, Patents, Standards

Successful Examples in Germany:

Intel Visual Computing Institute
(since 2009)

DFKI GmbH
(since 1988)

Telekom Innovation Laboratories
(since 2004)

EIT ICT Labs Germany GmbH
(since 2011)
Thank you very much for your attention.