Triple Helix Innovation Model: Inspiration from Germany

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I. Innovation and the Triple Helix Model

What is Innovation?

What is Triple Helix Innovation Model?

Model 1

Model 2

Model 3

(Etzkowitz & Leydesdorff 2000)

II. Triple Helix Implementation in Germany

Triple Helix Implementation in Germany

1: University Spin-Off

EXIST
Existenzgründungen
aus der Wissenschaft

- Startup founder scholarship
- Grants for transfer from research to start-up
- Support of start-up culture in university

Example of
successful startups

OPENEXPERIENCE

SHAREMAC

vilisto
einfach Wohlfühlklima

NosoEx[®]
powered by GWA Hygiene

Transformation of University Program

Image: HS Karlsruhe

- Integration of startup programs in university's curricula
- Startup activities substitutes courses credits

Open Innovation Model

(Tidd & Bessant, 2009)

2: Open Research and Innovation Projects

Project Examples

3: Strategic Alliances and Innovation Clusters

Source: BMWi

4: Collaborative innovation labs: Industry 4.0 implementations

- Small and Medium Enterprises
- University Research
- Research Outside University
- Large Companies

Testbeds

Source: Plattform Industrie 4.0

III.

Implications

Triple Helix Model 3 Requires Transformation of All Parties

From teaching to **research and innovation** university

From closed to **open innovation**, from one-man show to **ecosystem of global village**

From top-down to **bottom-up** policy making

Indonesia: Quintuple Helix?

(based on Carayannis et al 2012)

Thank You

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