

Factors facilitating and hindering the implementation of synergies

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- ✓ Some background: innovation as a tool of change management
- ✓ Production of the Hungarian RIO country report
- ✓ Trends and challenges of the Hungarian R&I system



Characteristics of inventors vs. innovators

Characteristic	Inventor	Innovator
Life goal	Create something new	Create a sustainable business
Preferred work mode	Individual	Group oriented
Research	Enjoyable avocation	Necessary evil
Recognition	Personal	Team
Financial goals	Fund future inventions	Fund future retirement
Core competency	Discontinuous inventions	Incremental improvements
Preference	Complex problems	Customer problems
Social skills	Limited	Moderate to extensive



Famous Hungarian inventions

Rubik's Cube



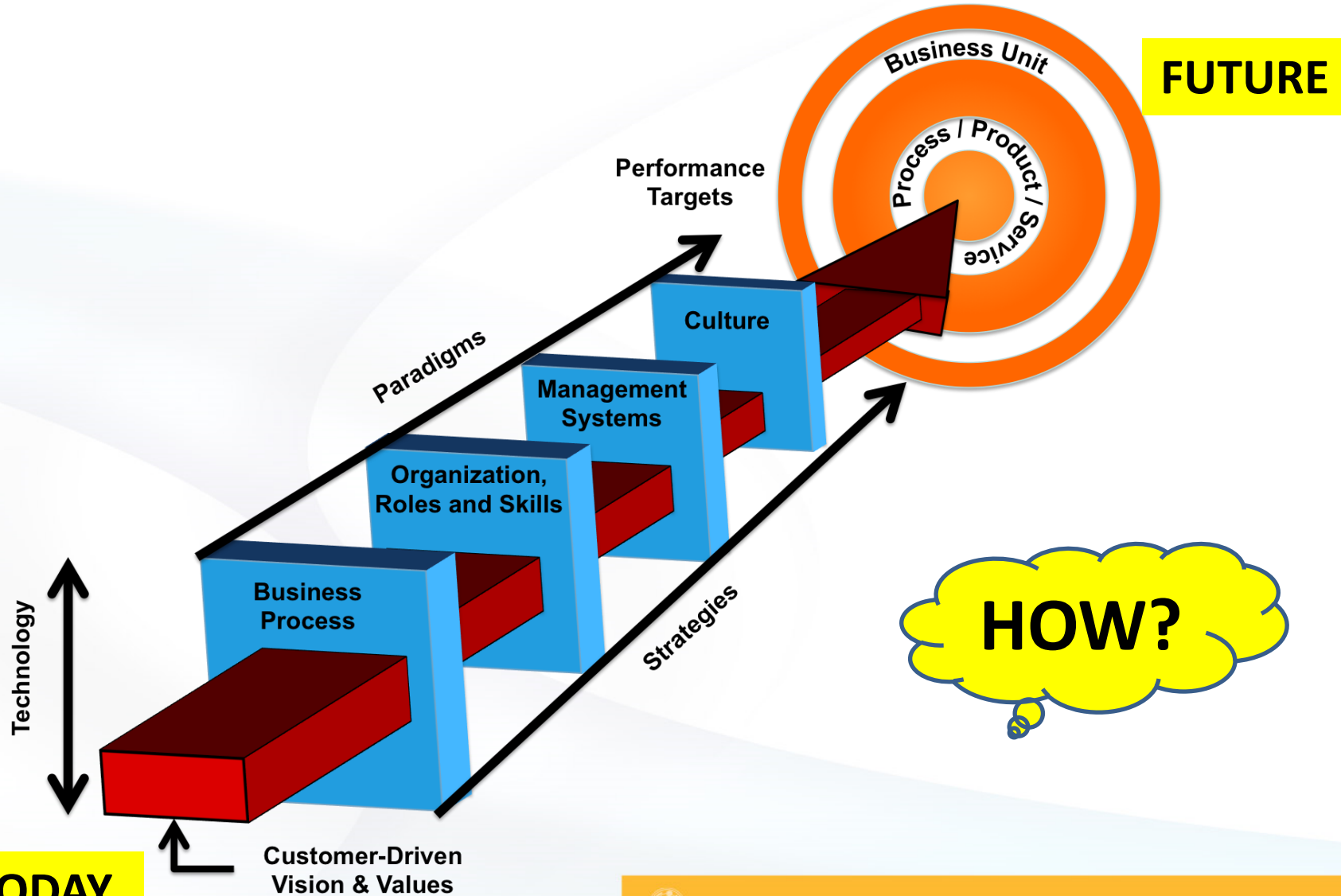
Model T Ford



Ballpoint Pen



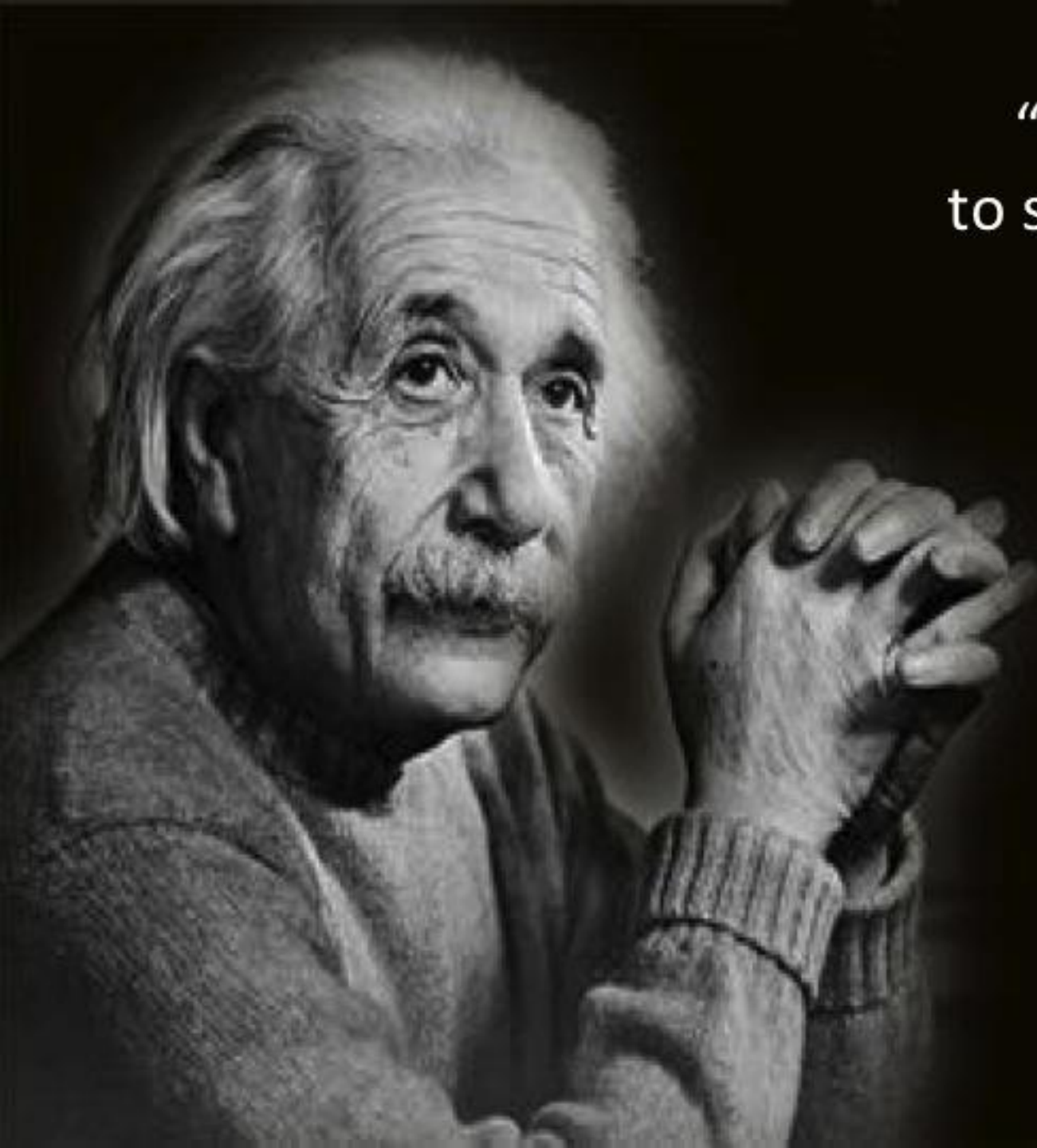
Innovation = bring about change



How to increase the ROI of innovation?

- 1. Differentiation:** determine what makes your organisation unique, and focus your energies there, i.e. innovate where you differentiate
- 2. Framing:** asking better questions in order not to solve problems that don't matter, i.e. before looking outside the box for solution, consider whether or not you actually need a completely different box – too many creativity dangerous
- 3. Breakthroughs:** expertise is the enemy of innovation. Solutions developed by experts are typically incremental and build on the past. Breakthroughs require a fundamentally different perspective and mixed teams, i.e. people with different points of view and levels of expertise





“If I had an hour
to solve a problem
I'd spend
55 minutes
thinking about
the problem
and 5 minutes
thinking about
solutions.”

– Albert Einstein

- Professional background:
 - 8 years socio-economic research at MTA
 - 6 years at DG JRC IPTS and being part of the ERAWATCH team – forerunner of RIO
 - 6 years experience in knowledge transfer and start-up support at SZE
- Collection and analysis of secondary data, including policy documents, statistics, evaluation reports, websites, etc.
- Exchange information, views with other country experts, EC country desks

Trends and key developments of the Hungarian R&I system

1. Stable macroeconomic environment
2. Increasing GERD, especially BERD
3. New strategies (RDI, S3) in place
4. Integrated RDI funding system and governance (NKFIH) from January 2015
5. Launch of new RDI measures co-funded by the Structural Funds (i.e. GINOP, VEKOP)



Identified challenges of the Hungarian R&I system

1. Stabilising the R&I governance
2. Fostering innovation in domestic enterprises
3. Enhancing the cooperation between science, higher education and business
4. Sustaining the supply of human resources for the R&I system



Challenge #1: Stabilising the R&I governance

- Frequent structural changes and new administration staff - > limits of knowledge transfer
- Integration of RDI funding in order to reduce parallel financing and provide stable institutional background of predictable RDI funding
- Clear overview of measures and publication of annual funding plans
- Promise of use of ex-post evaluations - > policy learning
- Weak systemic character of the „R&I system”, i.e. several innovation intermediaries without strong mission and appropriate funding (i.e. innovation agencies, TTOs)
- New advisory bodies established with internationally recognised researchers that support system



Challenge #2: Fostering innovation in domestic enterprises

- Highly concentrated R&D activities – dominance of large (multinational) firms, mainly pharma and automotive
- Growing number of R&D labs that enjoy tax breaks
- Majority of SMEs has limited ambitions and vision in investing in R&I
- Few successful technology start-ups, few Hungarian innovative products on global markets → lack of commercialisation knowledge and expertise
- Low R&I performance of SMEs and not much improvement in the past decade
- Duration of support measures is max. 24 months and calls limit the innovativeness of project proposals → low risk projects are supported



Challenge #3: Enhancing the cooperation between science, higher education and business

- High number of measures supporting academia-industry collaboration – joint proposals to get public funding but limited own resources invested
- Low patenting activity and low number of academia-industry co-publications – no significant change in the past decade
- Limited transversal skills, team work and expertise in project management especially at HEIs
- Exploitation of research results and knowledge transfer is not yet well explored – TTOs struggle for survival
- Changing of old habits and culture takes time – new model of TTOs required?



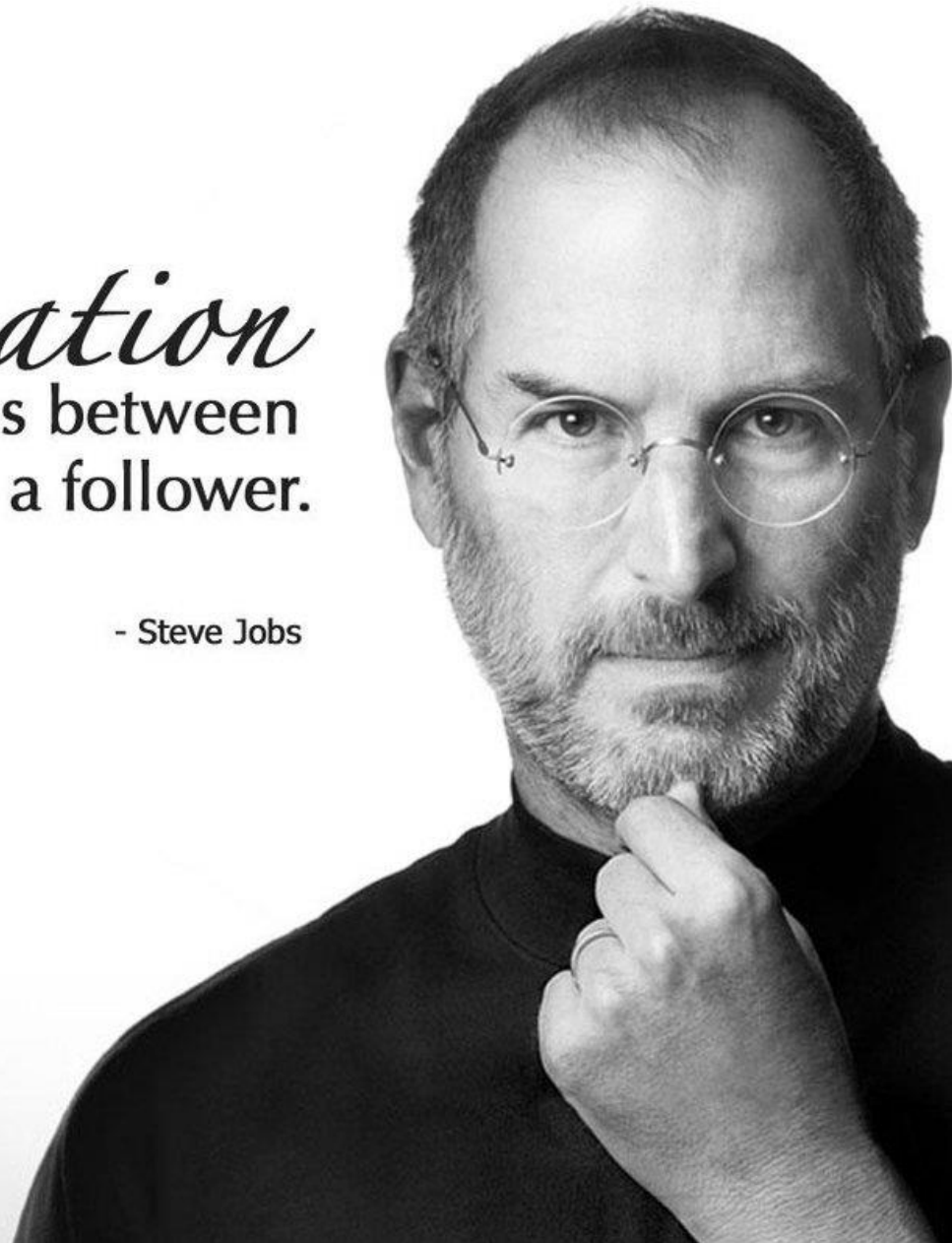
Challenge #4: Sustaining the supply of human resources for the R&I system

- Ambitious plans to increase the number of researchers, limited results so far – RDI strategy target: 50.000 by 2020
- Growing number of graduates / share of population with tertiary education
- Limited supply of researchers – > increased stipend to Phd students from 2016
- Researchers careers are not attractive for younger generations – higher salaries in business
- Positive example of reverse brain-drain: „Momentum programme” of MTA



Innovation
distinguishes between
a leader and a follower.

- Steve Jobs



Thank you for your attention!
Questions?

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