How to manage the “cultural clash” between science and business in knowledge transfer

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Mission

Education: Create and deliver top curricula for informatics and cybernetics. Encourage and motivate to research and entrepreneurship education.

Research: Drive a National Education and Research Center committed to discovery and the application of science and technology.

Entrepreneurship: Make a difference through, education, research services, technology development, and dissemination of the results to industry. Create and cultivate entrepreneurial environment to help new high tech startups.

Research areas

- Artificial intelligence
- Machine learning & robotics
- Image processing
- Biomedical research
Long term industry cooperation

- Rockwell Automation
- BAE Systems
- Boeing Company
- Medtronic
- Honeywell
- TOYOTA Motor Corporation
- Volkswagen
- DENSO Automotive
- CADENCE Design Systems
- Samsung
- Google
- Texas Instruments
- Hitachi
- Siemens, Transportation Systems
- Foxcon
- TDE Durmersheim
- Automation of Railways, CZ
Governmental institutions

- U.S. Air Force Research Laboratory
- Office for Naval Research (ONR)
- CERDEC, U.S. Army
- Missile Defence Agency (MDA)
- MO ČR
- NASA, USA
- FAA, USA
Spin-offs and start-ups

- CERTICON, a.s.: (100+ employee)
- ProTyS, a.s.: (40+ employee)
- NeoVision s.r.o.: (20+ employee)
- Eyedea, s.r.o.
- Agentfly Technologies, s.r.o.
Dept. Cybernetics - some numbers

- 120 university staff and researchers
- Export, R&D $2M/year
- Export including spin-offs - $10M
- 250 new jobs
Situation today

Positives
- CzechEcoSystem and other governmental programs
- interest in startups, specially in IT
- real startup incubators and accelerators are emerging

Negatives
- low risk tolerance
- missing business developers

Universities
- low interest in local industry university cooperation
- universities measured by number of scientific articles
- EU and governmental grants
- TTO offices are starting, low IPR awareness
CTU eClub - first step

- eClub brings together students enthusiastic about new technologies and innovation
- Weekly motivational and educational presentations
- Streamed to 9 universities in CZ Praha, Brno, Ostrava, Olomouc, Hradec Králové, Zlín
- Competition for the best start-up project
- International jury selects top 3 projects
- MediaLab scholarship + mentor to develop a project

www.eclub.cvutmedialab.cz
Next steps

- **Change the university climate**
  - Information exchange, cooperation
  - Cooperate internationally
  - Focus on excellence
  - Actively advertise the research results

- **Change the motivation models**
  - Bring in VCs to motivate entrepreneurial behavior
  - Do not rely entirely on grants only
  - Find how to motivate industry to cooperate
  - Privatize the technology transfer

- **New educational programs**
  - Educate experts in technology transfer
  - Entrepreneurship, startups
  - Education to innovation, business development