

**Supporting
University-Industry-
Government
Cooperation in**

Romania

TRAINING WORKSHOPS
17-20 November 2020



*Joint
Research
Centre*

MODULE 1: FOCUS ON GOVERNMENT



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WORKSHOP CALENDAR

Day 1

17 Nov. 2020

KICK-OFF SESSION

09.00 - 11.00

MODULE 1

Focus on government
(national and regional
authorities)

11.30 - 14.00

Day 2

18 Nov. 2020

MODULE 2

Focus on universities
and public research
institutes

09.00 - 14.00

Day 3

19 Nov. 2020

MODULE 3

Focus on technology
transfer professionals

09.00 - 14.00

Day 4

20 Nov. 2020

MODULE 4

Focus on firms and
clusters

09.00 - 12.00

WRAP-UP SESSION

12.30 - 14.00

EXPERTS



Dr. Victoria Galán-Muros



Dr. Todd Davey



Dr. Marina Ranga

MODULE 1: FOCUS ON GOVERNMENT

AIM:

- Develop a deeper understanding of the government role in UIG relations and key success factors
- Examine government policies supporting UIG relations from an international perspective
- Reflect on the best government approaches in Romania based on data
- Map your own ecosystem to initiate action

AGENDA

11.30 - 11.35	Welcome and introduction
11.35 - 11.40	Exercise on the government role on UIC in Romania and the national status quo of UIG - <i>Victoria Galan-Muros</i>
11.40 - 11.45	More than a facilitator: The government as an entrepreneurial actor in University-Industry cooperation - <i>Victoria Galan-Muros</i>
11.45 - 12.30	Who are the front runners? Examples of policy approaches for UIG cooperation across Europe - <i>Victoria Galan-Muros</i>
12.30 - 12.45	BREAK
12.45 - 13.30	How can government support UIG cooperation in Romania? Insights based on data from the Romanian UBC study - <i>Todd Davey</i>
13.30 - 13.50	Understanding your ecosystem: a mapping exercise - <i>Todd Davey</i>
13.50 - 14.00	Conclusions and key success factors

Thoughts on the government role on UIG in Romania and the national status quo of UIG

Victoria Galan-Muros

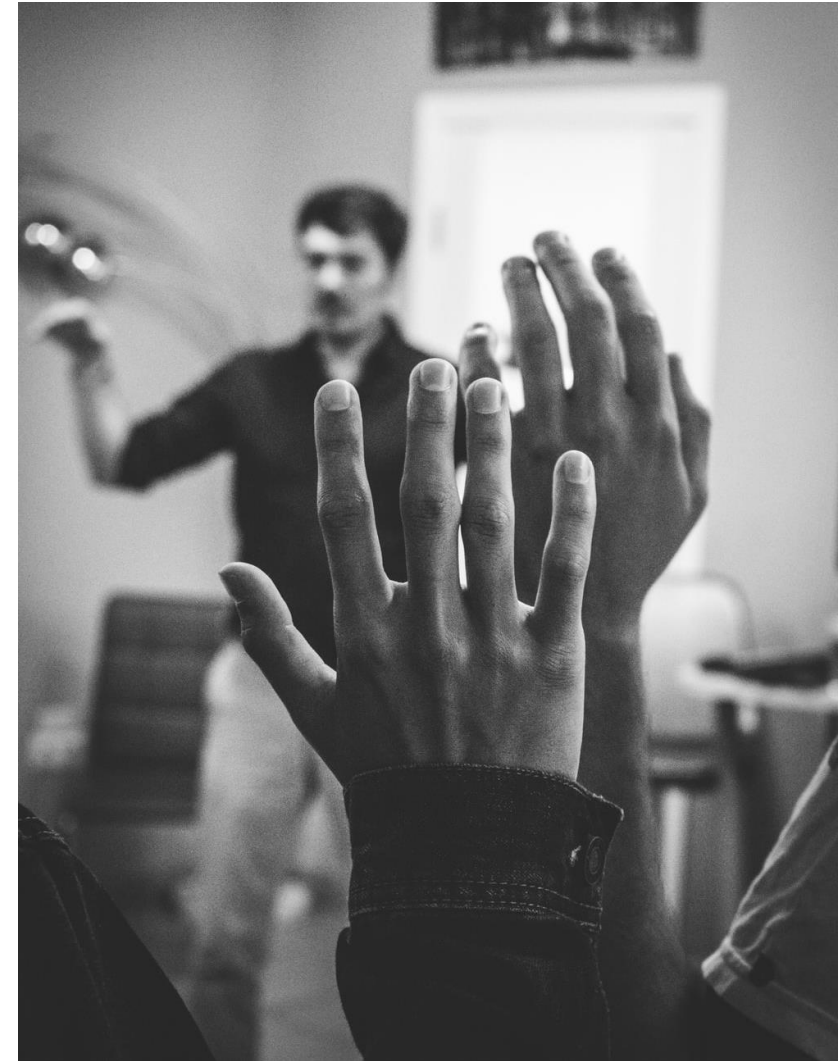


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THE STATUS QUO OF UIG AND THE ROLE OF GOVERNMENT

Q What do you perceive is the current situation of university-industry-government cooperation in Romania / your region?

- What is the role of the government on this?
- How much has it changed in the last decade?
- Can you share any good or promising practices?



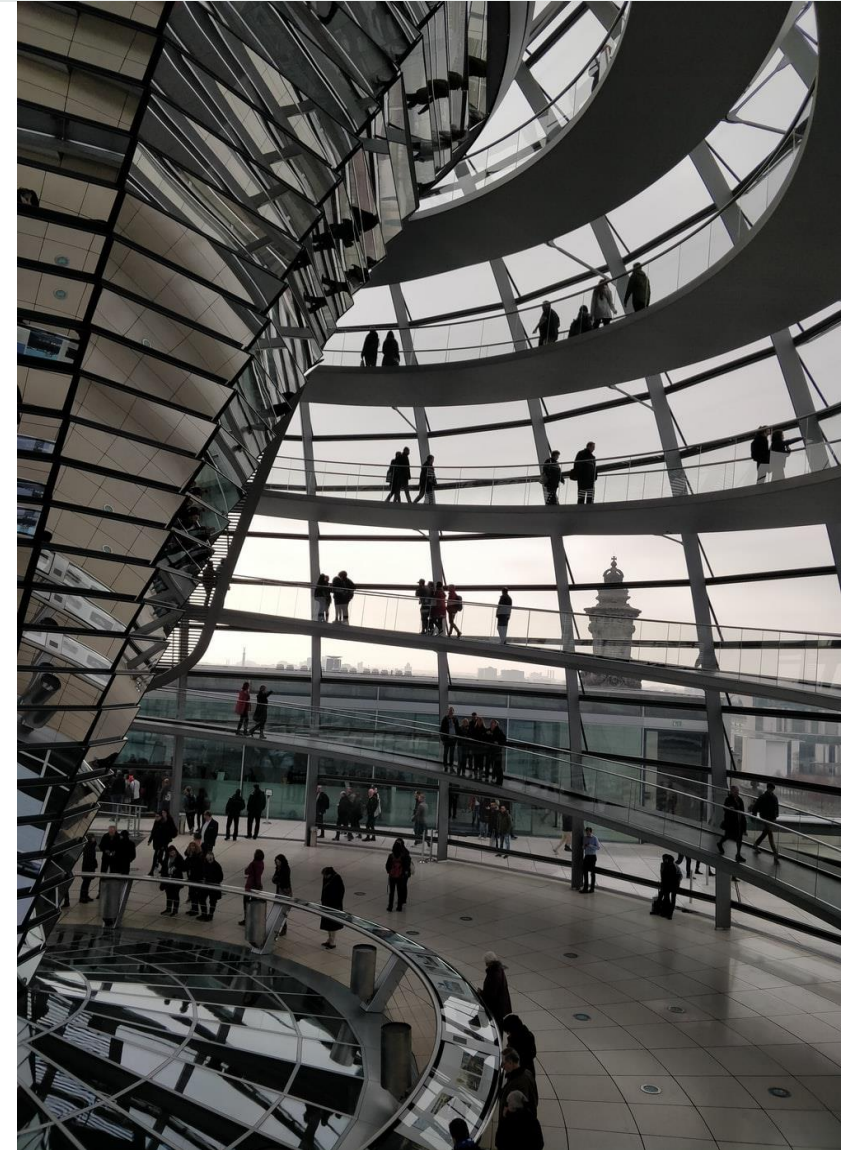
More than a facilitator: The government as an entrepreneurial actor in UIG cooperation

Victoria Galan-Muros

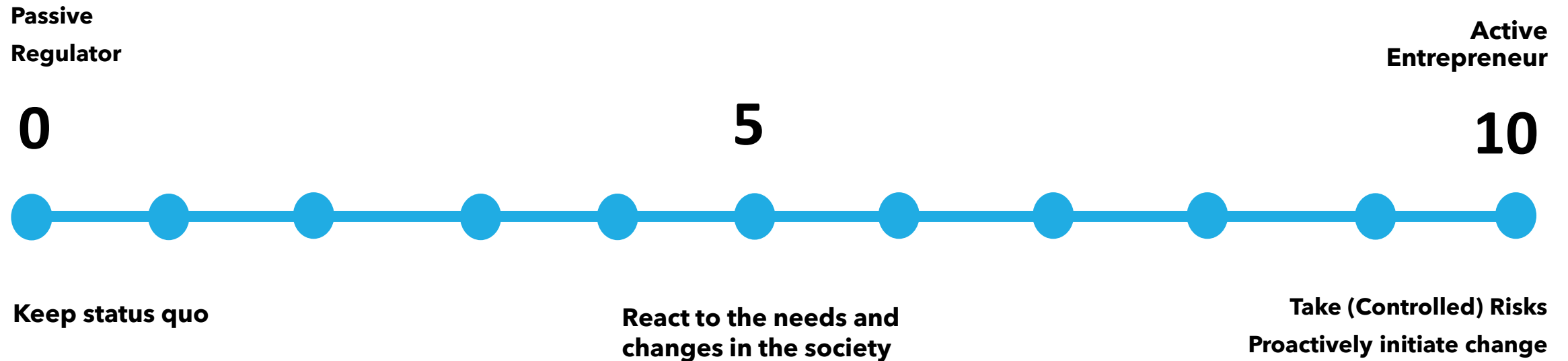


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THE ROLE OF THE STATE



WHAT IS AND SHOULD BE THE ROLE OF THE STATE



THE ENTREPRENEURIAL STATE

What makes the iPhone so Smart?

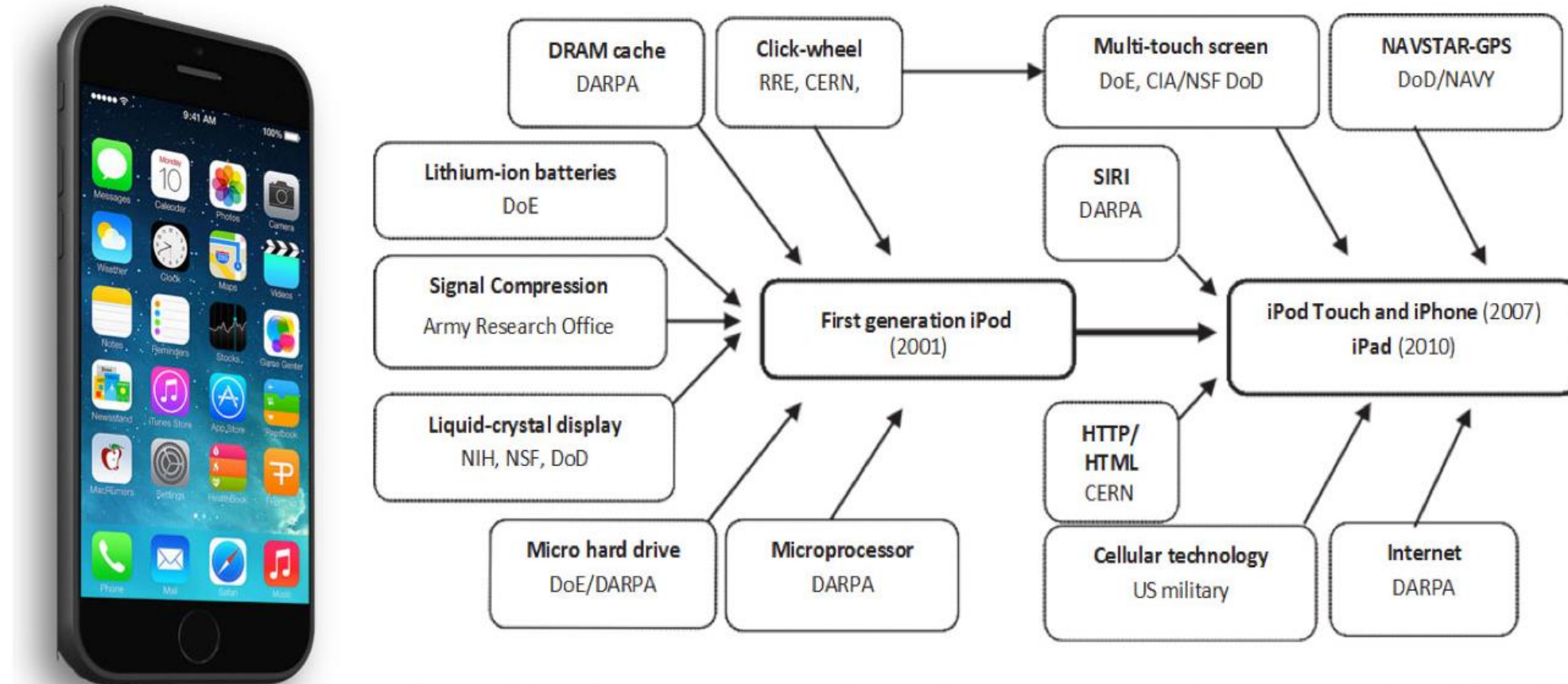
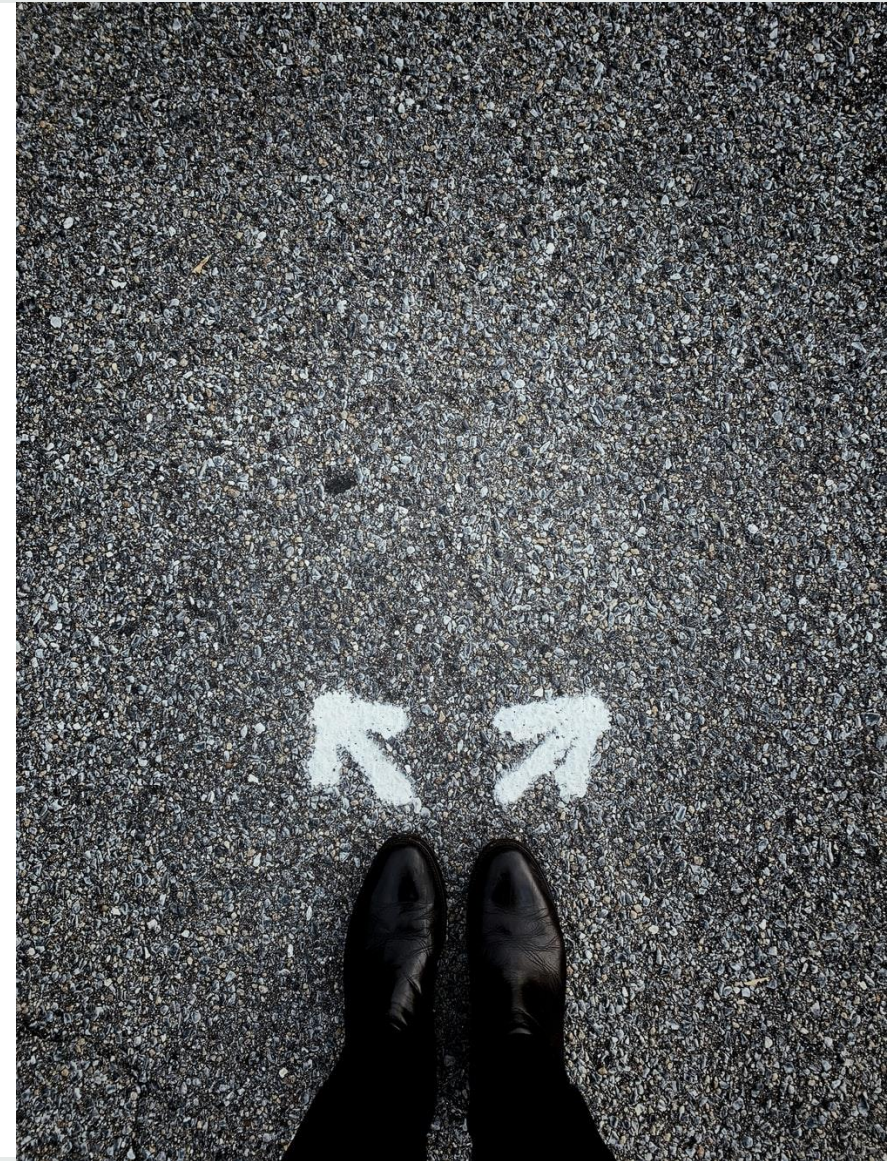


Figure 13 from *The Entrepreneurial State: debunking public vs. private sector myths* (2015, p. 116)

FOOD FOR THOUGHT

Q. How can governments take calculated risks to support innovation and still take sufficient return from the potential benefits of the infrastructure, knowledge or technology funded?



Who are the front runners? Examples of policy approaches for UIG cooperation across Europe

Victoria Galan Muros



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AREAS AND LEVELS OF POLICIES FOR UIC

Economic

Fiscal policies – funding, grants and subsidies, stimulus packages, infrastructure, taxation concessions, public seed capital, etc.

Education

Education and training programmes
Hiring policies
Industrial PhDs
Governance of universities/ RIs

Industrial

HR policies: hiring, evaluation, promotion
Sector prioritization
Technological upgrade
Import/export focus

STI

Joint initiatives: hiring, evaluation, promotion
Knowledge/Tech transfer regulation
Public promotion programmes

Supply-side

Demand-side

International

National

Regional

Local

INNOVATION AGENCIES



SWEDEN

Vinnova is the Swedish government agency for innovation policy.

- It **aims** to build Sweden's innovation capacity, contributing to sustainable growth.
- Its projects provide and promote a wide array of **collaboration** between HEIs and business sector.
- Yearly, it **invest** SEK 3 billion in research and innovation.
- According to Vinnova's model, **HEIs** are **rated** by their role and context. Depending on the ratings they received different proportions of funding



COMPETITIVENESS CLUSTERS



FRANCE

The French **Poles de Compétitivité** promote the development of collaborative projects in research and development (R&D) bringing together large and small firms, research labs, specialised suppliers, educational and training providers, working in partnership in a particular field and in a specific region or territory.

To promote the development of poles, federal and regional governments offer:

- Funds to strengthen their structures and develop projects
- Tax exemptions

2019:

- 56 clusters: 11,000 companies + 1300 research and training organisations
- 200 members on average by pole
- 73% SMEs, 15% medium size, 12% large companies
- Budget amount €1.5 million



NATIONAL ENTREPRENEURIAL ECOSYSTEMS



CHILE

It aims to transform the Chilean entrepreneurial ecosystem
Running since 2010.

Start-ups that join the programme have the chance to get additional funding and avoid the valley of death.

- USD40,000 funding for each new company
- 6 months programme
- Presence of entrepreneurs in Chile
- Facilities / locations sponsored by companies
- Connection with potential partners and investors



STARTUPCHILE

www.startupchile.org

INTERSECTORAL MOBILITY



Staff mobility is regulated by the "2004/2011" law. This law stipulates that a Greek researcher may take a sabbatical leave of up to three years to participate in research projects abroad. Statistics show that 10% of Greek researchers capitalise on this opportunity.



The regulation for the mobility of researchers in France gives a possibility to researchers to undertake a mobility of at least two years with another research organisation, abroad, in the public administration or in a business company.



The Concordat to Support the Career Development of Researchers, is an agreement between the Funders and Employers of Researchers in the UK aiming at promotion of inter-sectoral mobility of researchers, including business placements.



FOCUSED INNOVATION EXCELLENCE



UNITED KINGDOM

CATAPULT

The **Catapult centres** are a network of independent, world-leading centres designed to transform the UK's capability for innovation in specific areas and help drive future economic growth.

There are **nine** Catapults in the network with a national presence covering **over 30 locations**. They work in:

- Cell and gene therapy
- Compound semiconductor applications
- Smart living and traveling
- Digital Technologies
- Energy Systems
- High Value Manufacturing
- Medicines discovery
- Offshore Renewable Energy
- Satellite Applications (exploitation of the space)

OVER £1BN

4,389

SMES
SUPPORTED



4,100

EMPLOYEES
IN 2019



COL

INTERNATIONAL
PROJECTS



TAX INCENTIVES FOR JOINT R&D



ICELAND

The **Icelandic tax incentive system** provides companies with a tax deduction on corporate income tax equating to 20% of the R&D expenses incurred on projects if certain conditions are met.



GREECE

The tax law “4110/2013” allows for an annual deduction in R&D expenses from the net profits of the firm, increased by 30% in the fiscal year when they occur.

FUNDING KNOWLEDGE-BASED BUSINESS DEVELOPMENT



IRELAND

The **Innovation Voucher Initiative** aims developed to build links between Ireland's public **knowledge providers** (i.e. HEIs, public research bodies) and **small businesses**. 559 vouchers were awarded in 2019.

- *Innovation Vouchers* are worth €5,000
- Available to assist a company or companies to explore a business opportunity or problem with a registered knowledge provider.
- Innovation vouchers are exempt of VAT

INTERMEDIARIES TRAINING



Some governments have invested in the training of those people who **work on the interface** between universities, business and government (knowledge and technology transfer professionals, engagement leaders, responsible for incubators/ accelerators), as they are **critical for the success** of the innovation ecosystems and there is no formal education for these positions. All programmes:

- Address both technical and soft skills
- Include good-practise site / country visits
- Include a personal application project



DAAD - UniTransfer



CONACY - GeT-In



DGEAC - Boundary Spanning

INDUSTRIAL PHD PROGRAMMES



DENMARK

In 1970, Denmark established **Industrial PhD Program**, today managed by Innovation Fund Demark, main research funding body in the country, as part of the Industrial Researcher Programme.

The **aim** is fostering UBC through joint curriculum design and delivery.

- Students supported are enrolled in a PhD programme at a university whilst also working for a private enterprise.
- The competitive grants provide funding for three years and the model became an international good practice example adopted in many European countries.



Innovation Fund Denmark

EVALUATION AND PROMOTION OF RESEARCHERS



SPAIN

Traditionally, the Spanish Government only considered teaching and research indicators for the evaluation and promotion of academics every six years. A new category was added in 2018 - **Transfer Sexenies**.

The **aim** was to recognise the valorisation of the research activity developed by universities and public research organisations, and encourage their development and quality. The evaluation considers KPIs on:

- Joint basic and applied research
- Knowledge and Technology transfer
- Patents
- Licensing

The last call registered 16,151 applications, 42.47% of them were evaluated positively.

PARTICIPATION IN UNIVERSITIES' GOVERNANCE



GREECE

The legislation governing Greek universities states that there must be a **council** of 15 people that sit above the university and provide input, direction and assessment, composed by: 7 internal professors, 7 representatives from outside the university and 1 student.



SPAIN

The legislation governing Spanish universities requires the constitution of a **Social Council** through which society participates in the university. It approves annual budgets and must be composed by: 3 representatives of the university management (rector, general secretary and provost), 3 representatives of the university (students, academics, admin), 7 representatives from outside the university.

LIFELONG LEARNING STRATEGIES



ESTONIA

Lifelong learning is regulated in **'The Estonian Lifelong Learning Strategy 2020'**.

This strategy provides essential support and reference points for the advancement of adult learning in the coming years and is viewed as a main strategic document influencing lifelong learning-related funding decisions as well.

The goals set by the lifelong learning strategy reinforce the country's main development objectives as described in the reform programme entitled 'Estonia 2020'.

ATTRACTING TALENT



CHILE

Inspired by the successful international model *New York Tech Talent Pipeline*, **Digital Talent** (Talento Digital) is the only country initiative that integrates companies, training institutions and government.

The **aim** is to develop new skills in people, in line with the demands of the digital economy, generating more opportunities to access quality jobs.

Goal to 2022: 16,000 people trained



SKILLS AT THE BASE OF DEVELOPMENT



CANADA



**Future Skills
Centre**

Consortium Partners



Public university



Non-profit research org.



Non-profit applied research org.

Funded by the
Government of Canada's
Future Skills Program



Partners



Activities

- Research
- Community of Practice
- Innovation projects
- Regional Sounding Tour

Advisory board

Representatives of government agencies, companies, chambers of commerce, unions, NGOs, research org., universities, institutes, etc.

Aim

“The Future Skills Centre is dedicated to helping Canadians gain the skills they need to thrive in a changing labor market”

10 GENERAL APPROACHES TO UIG POLICIES

BREAK



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How can government support UIG cooperation in Romania?

Todd Davey



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“

**How does a 30 year project
contribute €670 million back
into the economy?**

”

ROMANIAN BARRIERS | Top 3 most relevant



University Management

Lack of government funding for UIC **7.1**

Limited resources of SMEs **7.1**

Lack of business funding for UIC **7.1**

Academics

Lack of government funding UIC **7.2**

Limited resources of SMEs **7.1**

Lack of business funding for UIC **7.1**

Business

Bureaucracy related to UIC in universities **6.3**

Differing time horizons between universities and business **6.1**

Lack of government funding for UIC **6.0**

Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

“

**Study result:
University-industry
collaborators find a
way to overcome the
barriers**

”

UIC DRIVERS

Drivers are those factors that facilitate the academic or the HEI to engage in UIC.

Two groups of UIC drivers

Resulting from an analysis of the results, drivers can be categorised in the following groups:

- I. Facilitators
- II. Motivators



“

**Removed the biggest
barriers... now what?**

”

ROMANIAN MOTIVATORS | Top 3 most relevant



University Management

Improves graduate employability **8.7**

Gain new insights for research **8.6**

Obtain funding/financial resources **8.5**

Academics

Improves graduate employability **8.6**

Gain new insights for research **8.3**

Improves teaching **8.3**

Business

Positively impact society **8.3**

Provides access to better qualified graduates **8.1**

Improve our innovation capacity **8.1**

Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

ROMANIAN FACILITATORS | Top 3 most relevant



University Management

Interest of the university in accessing business-sector R&D facilities **8.0**

Existence of funding to undertake the cooperation **8.0**

Interest of business in accessing scientific knowledge **7.6**

Academics

Existence of funding to undertake the cooperation **8.1**

Existence of a shared goal **7.8**

Interest of the university in accessing business-sector R&D facilities **7.8**

Business

Prior relation with the university partner **7.8**

Existence of share goal **7.3**

Existence of funding to undertake the cooperation **7.3**

Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

“

LESSONS FROM INTERNATIONAL BEST PRACTICE

UIGC is a people's game?

PEOPLE! *Transactions*

Prioritise the development of
long-term relationships

”

BENEFITS OF UIC

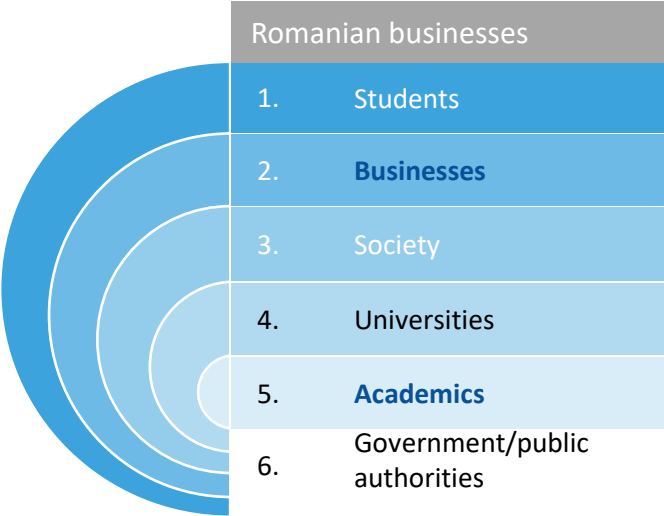


Benefits

'Who receives the benefits of UIC?'

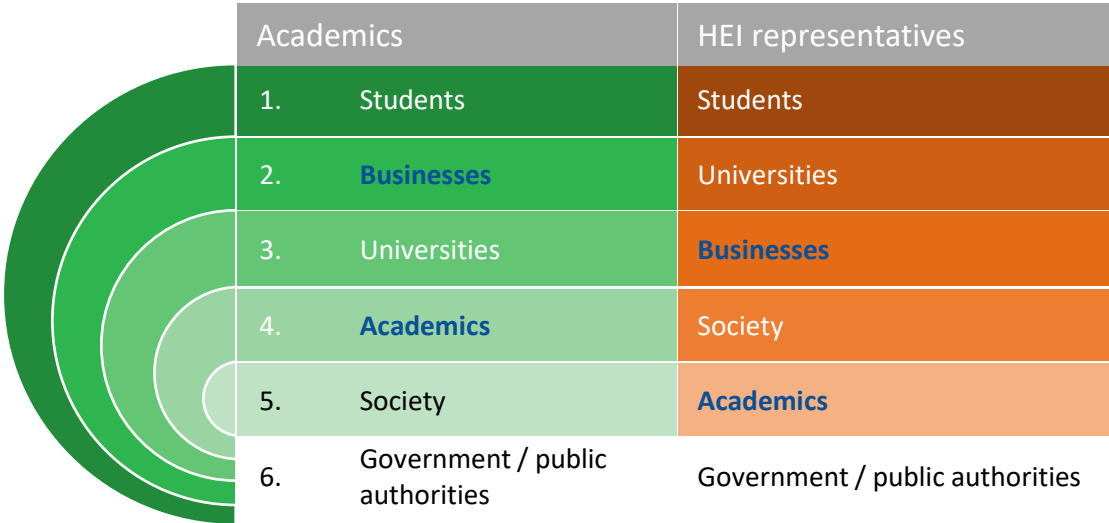
Business perspective

Both groups see students as the primary beneficiaries of UIC.



Academic perspective

Students are perceived by academics and HEI managers as the group who benefits the most from UIC.



”

**So can everyone really
benefit from UIGC?**

“

Yes.. an example

A light gray world map serves as the background for the slide. It shows the outlines of continents and countries. Overlaid on the map is the text and a URL.

P260

Research projects driving
future talent for the industry
involving the entire mining
and minerals supply chain

www.ub-cooperation.eu/index/casestudies

Adelaide,
Australia

Supporting mechanisms for UIG collaboration

UIC POLICIES



ECONOMIC POLICIES

Includes:

- Funding
- Grants
- Subsidies
- Stimulus packages
- Infrastructure
- Taxation concessions
- Public seed capital

REGULATIVE POLICIES

Includes:

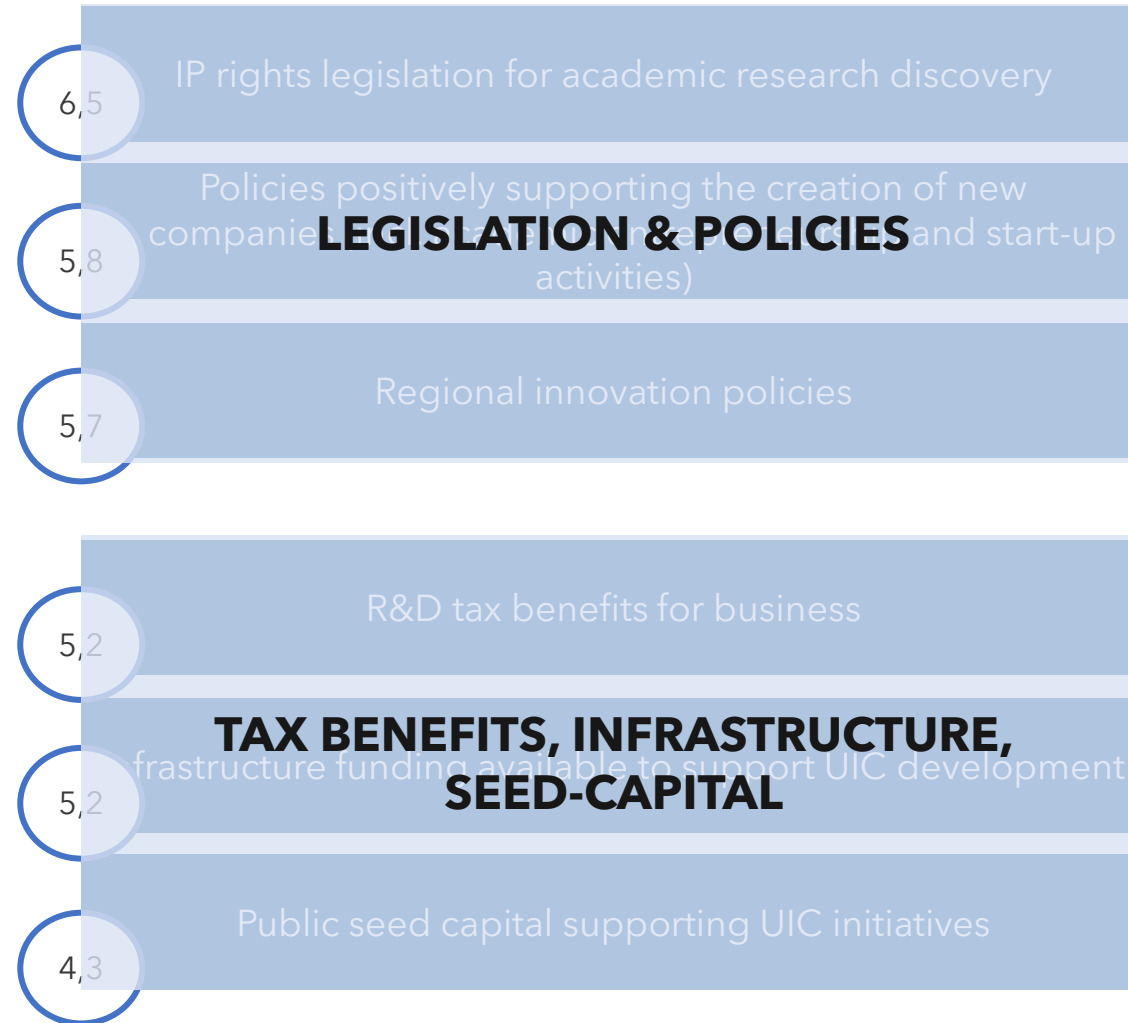
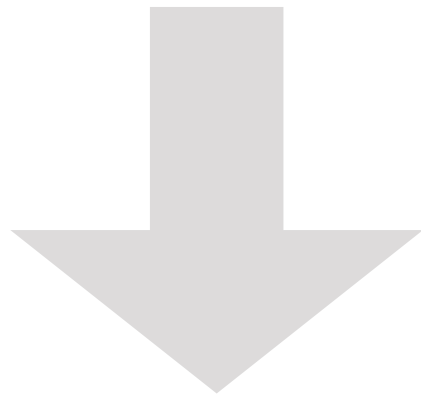
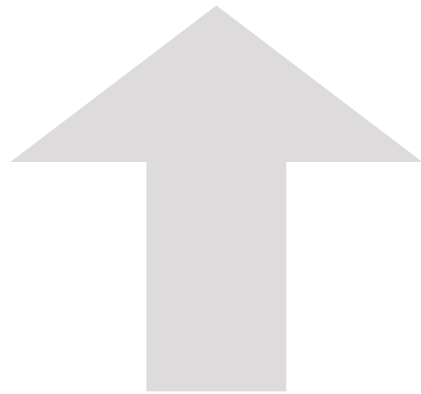
- Laws
- Regulations

OTHER POLICY MECHANISMS

Includes:

- Governance
- government programs
- education and training programs
- public promotion programmes
- hiring policies

SUPPORTING MECHANISMS FOR UIC - POLICY MECHANISMS



Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

UIC STRATEGIES



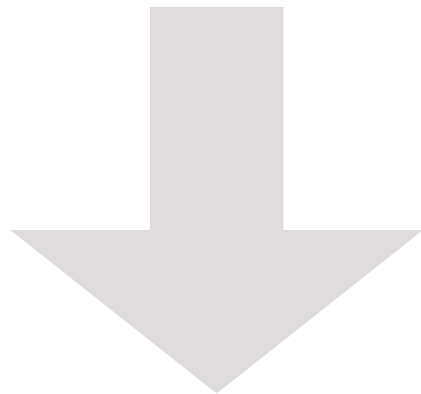
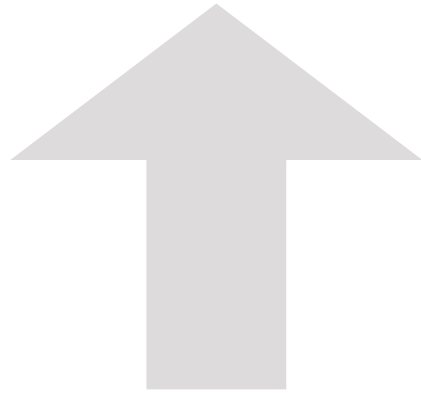
Documented (Paper) strategies

- A top-level management committed to University-Business cooperation,
- A documented mission / vision embracing University-Business cooperation,
- A strategy for University-Business cooperation,
- The internal promotion of University-Business cooperation.,
- The external promotion of University-Business cooperation.

Implementation and motivation strategies

- The dedication of resources (inc. funding) to support University-Business cooperation,
- The provision of incentives for academics to encourage University-Business cooperation,
- The inclusion of 'cooperation with business' as part of the assessment of work performance for academics.

SUPPORTING MECHANISMS FOR UIC - STRATEGIC MECHANISMS



Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

UIC STRUCTURES



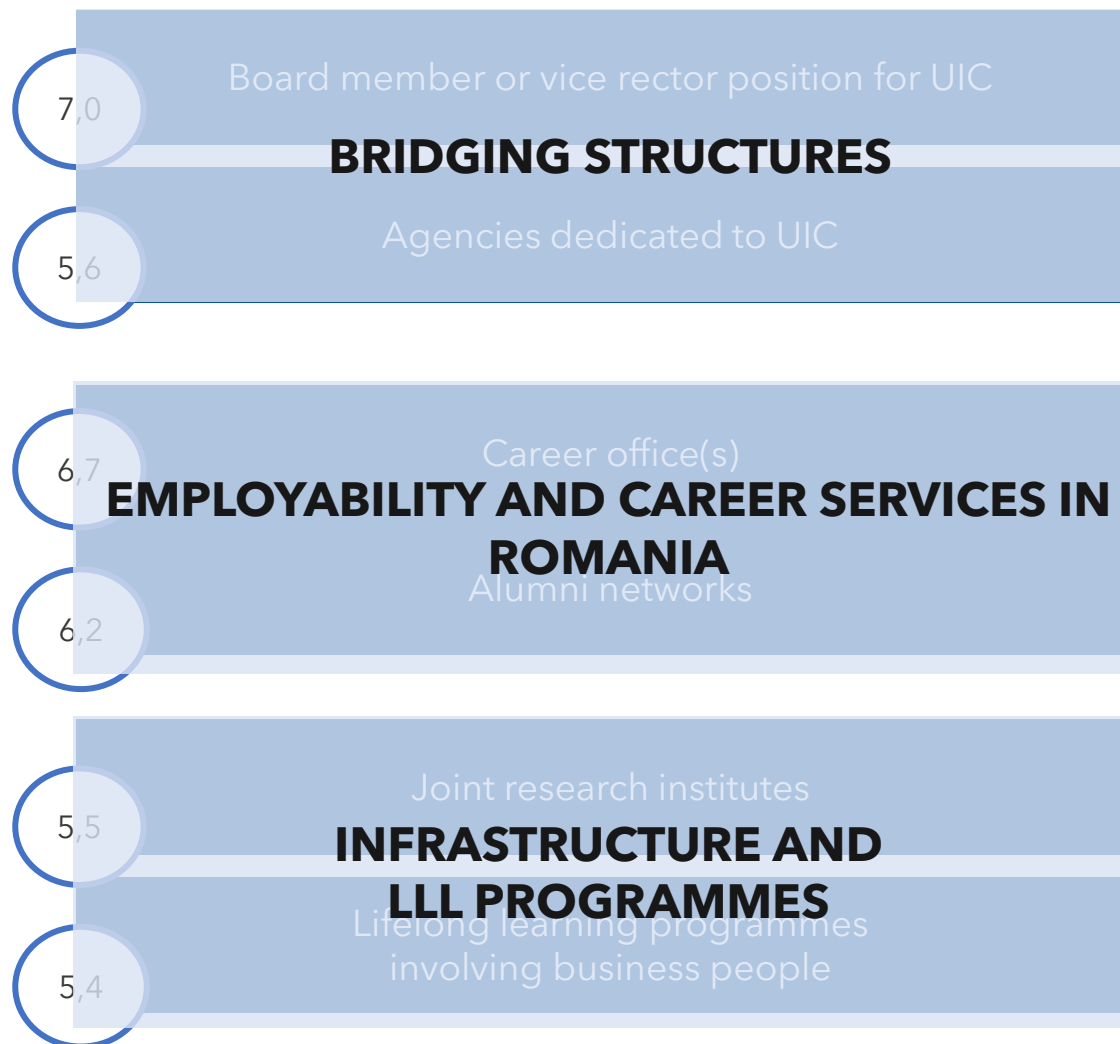
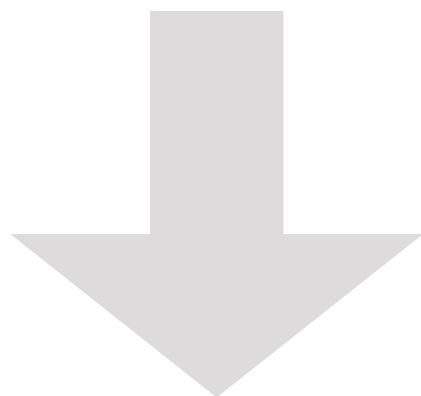
Roles-based approaches in UBC

- The presence of academics on company boards,
- The presence of business people on the HEI board,
- Board member or vice rector positions for UBC.
- The practise of recruiting industry professionals into the knowledge transfer area.,
- An alumni network.

Internal/External agencies focused on UBC

- Career offices within the HEI,
- Agencies external to the HEI dedicated to UBC
- Agencies (internal) within the HEI dedicated to UBC,
- Incubators for the development of new business.

SUPPORTING MECHANISMS FOR UIC - **STRUCTURAL MECHANISMS**



Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

UIC ACTIVITIES



Internally focused education and workshops focused on ACADEMICS

- Workshops, information sessions and forums for University – Business collaboration targeting academics,
- Entrepreneurship education offered to academics.

Internally focused education and workshops focused on STUDENTS

- Entrepreneurship education offered to students.

Externally focused networking, promotional and project activities

- Networking sessions or meetings for academics,
- The featuring of University – Business cooperation prominently on the HEI's website,
- Collaboration activities facilitating students interaction with business
- Collaboration activities facilitating academics interaction with business

HEI | TOP 2 MOST/ LEAST RELEVANT ACTIVITIES



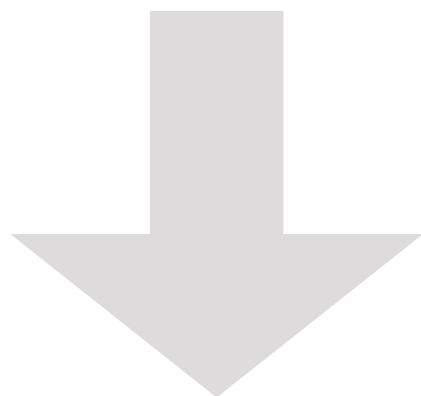
6,9

Entrepreneurship courses offered to students

STUDENT ENTREPRENEURSHIP & STUDENT NETWORKING ACTIVITIES

6,8

UIC activities facilitating student interaction with business (e.g. student projects with business)



5,3

Entrepreneurship courses offered to academics

ACADEMIC ENTREPRENEURSHIP & ACADEMIC NETWORKING ACTIVITIES

5,2

Academic networks dedicated to UIC (e.g. entrepreneurship network)

Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

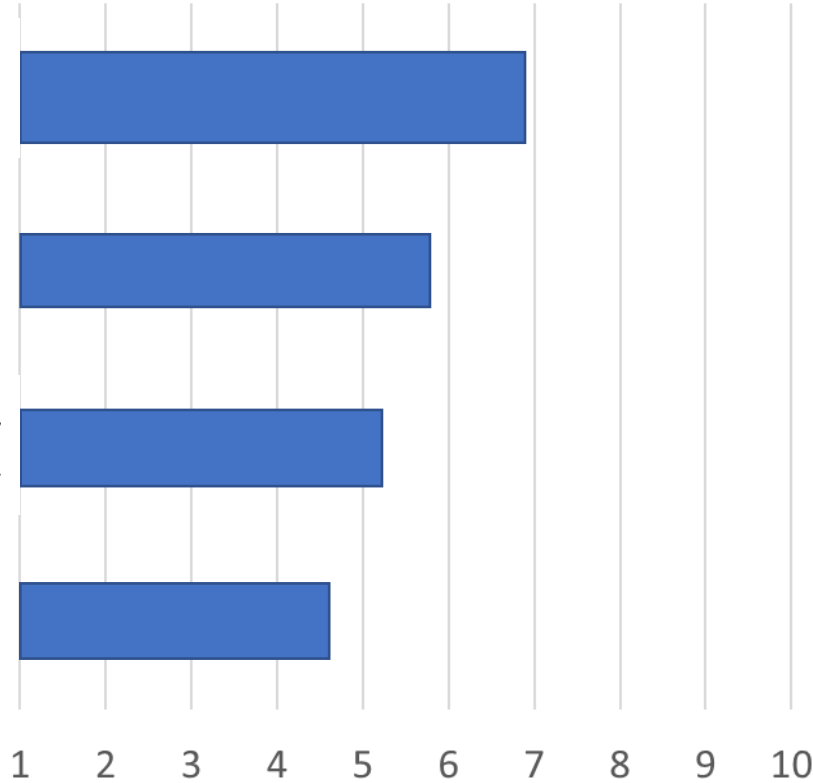
DEVELOPMENT OF *SUPPORTING MECHANISMS* IN HEIs

IMPACT

EXTENT OF UIC DEVELOPMENT

(8%)

Paper strategies for UIC (mission, vision, strategy for UIC)



(18%)

Dedication of resources

(16%)

Business experience in the university
Scientific experience in the company

(25%)

Internal incentives (for academics)

1 2 3 4 5 6 7 8 9 10

Not at all Low Medium High

n=1,929

SUPPORTING MECHANISMS FOR UIC

Business perspective

Mechanisms supporting UIC

'Do these supporting mechanisms for UIC exist in your environment?'

Takeaway

UIC supporting mechanisms in European industry are far more strategic than in Romanian industry.

How can we get Romanian to see UIC more strategically important?

UIC supporting mechanisms in industry

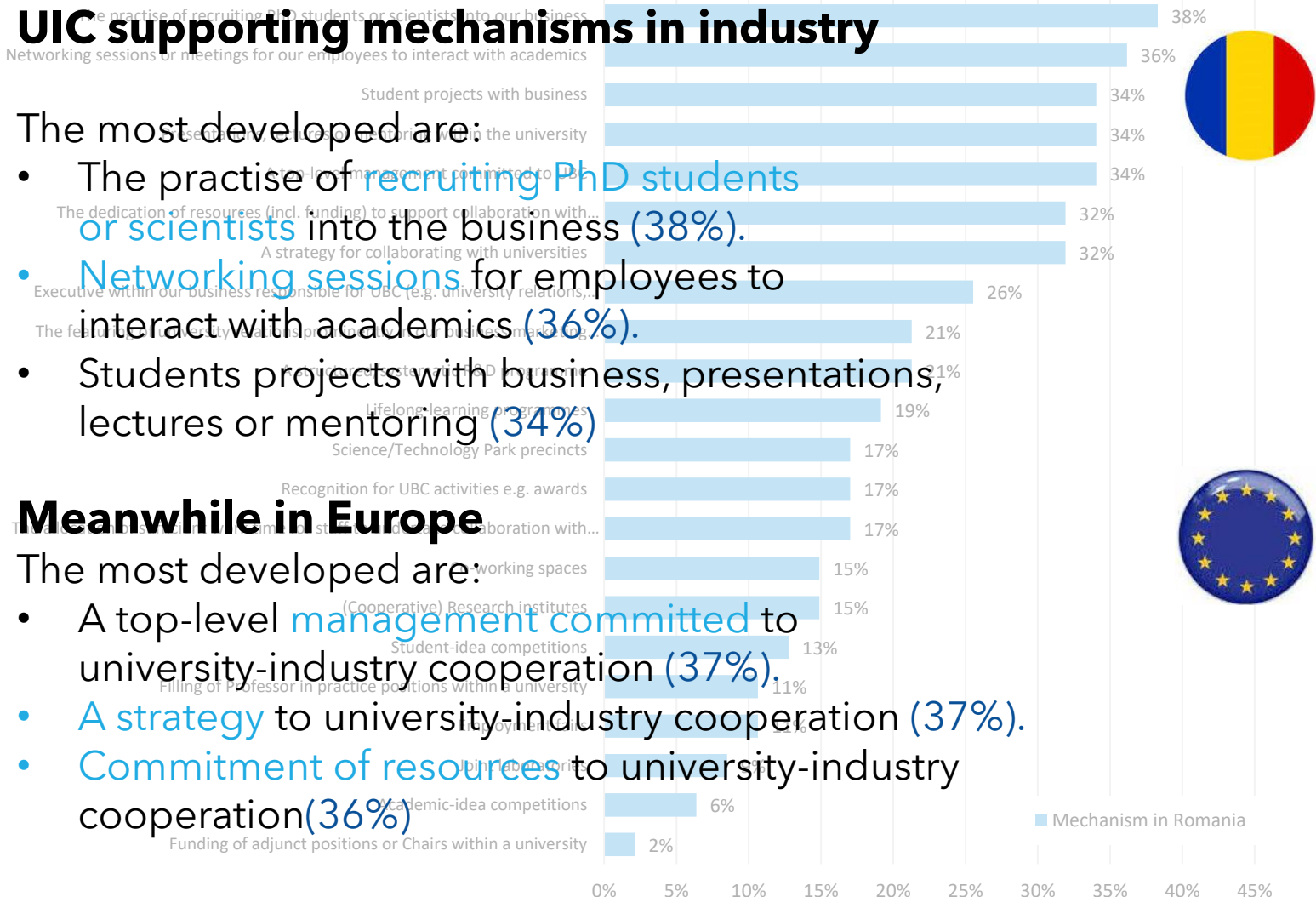
The most developed are:

- The practise of **recruiting PhD students or scientists** into the business (38%).
- **Networking sessions** for employees to interact with academics (36%).
- Students projects with business, presentations, lectures or mentoring (34%).

Meanwhile in Europe

The most developed are:

- A top-level **management committed** to university-industry cooperation (37%).
- **A strategy** to university-industry cooperation (37%).
- **Commitment of resources** to university-industry cooperation (36%).



Understanding your ecosystem: a mapping exercise

Todd Davey



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ASSET MAPPING

Key regional/university assets

Describe your region/university in terms of the key stakeholders and assets present in the region that you could draw upon for UIGC. This may range from universities, institutes, companies, and government stakeholders.

10 mins

REGIONAL ASSETS

REGION / NATION
IN FOCUS

WRITE HERE

INDUSTRY IN
FOCUS

WRITE HERE

Physical
resources



Describe the key regional assets e.g. Science / technology park, incubators, accelerators

WRITE HERE

Describe the key government departments responsible for this industry

WRITE HERE

Industrial
Resources



Describe the key companies within the region / nation

WRITE HERE

Intellectual
(Scientific) Resources



Describe the scientific / research assets in the region / nation e.g. Institutes, research centres

WRITE HERE

Human
resources



Describe the key sources of talent in the region / nation e.g. Universities, Colleges, Schools

WRITE HERE

Network Resources



Describe the key networks, consortiums, associations, key events, competitions

WRITE HERE

Financial Resources



Describe the sources of finance including VC funding

WRITE HERE

Conclusions and key success factors



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UIG Cooperation is a people's game



Trust research
for your decision
making



**Coordinate to ensure an
alignment of policies**



Workflow Strategy

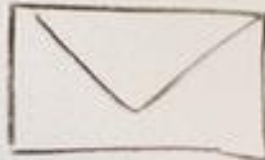
abandons cart

|
1 hr. delay



left cart

|
1 day delay



No purchase



/ add

Go beyond the paper:

**Design high level strategies,
but ensure dedication of
resources and successful
implementation**

Simplify



**Future
proof
people**





Focus on SMEs



**Sustainable
innovation and
growth**



Exchange good
practices, learn
from each other

A person is silhouetted against a sunset sky. A bright comet streaks across the upper left portion of the frame. The sky transitions from a deep blue at the top to a warm orange and yellow near the horizon. The person stands on a dark, flat surface, possibly a beach or a field, looking out over a body of water towards the horizon.

**Aim Big!
Shoot for the
starts**

**THANK YOU
MULTUMESC**

**Victoria Galan-Muros
& Todd Davey**

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