

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

Romania

TRAINING WORKSHOPS
17-20 November 2020



*Joint
Research
Centre*

WELCOME



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WELCOME TO THE WORKSHOP

This training workshop **aims** to help the Romanian partners broaden their **theoretical and practical knowledge** on UIG cooperation and develop concrete skills for strengthening this cooperation by:

- Providing a **more detailed view** of the UIG roles in innovation
- Explaining UIG cooperation **barriers, motivators, facilitators** and **supporting mechanisms**
- Supporting the development of **practical skills** to **identify, initiate and consolidate sustainable UIG relationships**
- Sharing examples and **international good practices**



TARGET GROUPS

The training workshop is targeted at a broad **range of innovation stakeholders in Romania**, including:

- researchers at universities and PROs
- university and PROs leaders,
- technology transfer professionals,
- business managers,
- government policy-makers,
- etc.



WORKSHOP APPROACH



Presentations of:

- international good practices
- national results
- advice & *food for thought*

We will hear from you through:

- questions
- polls
- debates
- group work

Serious Play!

EXPERTS



Dr. Victoria Galán-Muros



Dr. Todd Davey



Dr. Marina Ranga

Guest Speakers: Lucia Seel and Adina Fodor

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

KICK-OFF SESSION

AIM

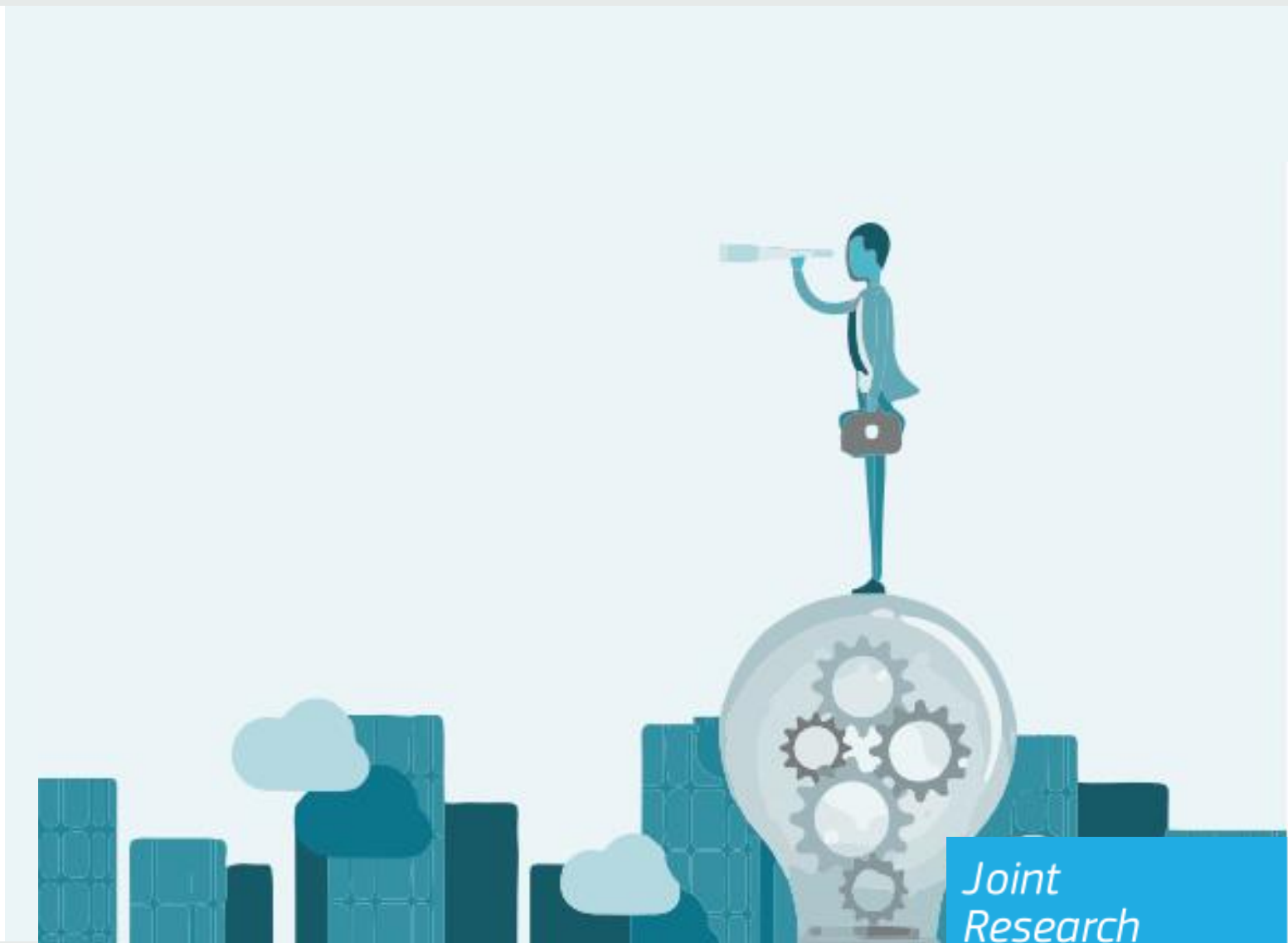
- Provide an overview of S3 implementation in Romania
- Discuss the role of UIG cooperation in S3
- Increase awareness of UIG relations, diversity, influencing factors and mechanisms

AGENDA

09.00 - 09.15	Welcome and introduction
09.15 - 09.45	S3 in Romania and the role of UIG cooperation - <i>Marina Ranga</i>
09.45 - 10.00	UIG cooperation and the Triple/Quadruple/Quintuple Helix - <i>Marina Ranga</i>
10.00 - 10.30	An overview of UIG cooperation activities (in education, research, valorisation and management) and their expected results - <i>Victoria Galan-Muros</i>
10.30 - 10.50	The UIG cooperation process: main barriers, motivators and facilitators - <i>Todd Davey</i>
10.50 - 11.00	How to support UIG cooperation: key supporting mechanisms - <i>Todd Davey</i>

An overview of UIG cooperation activities and their expected results

Victoria Galán-Muros



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UIG COOPERATION ACTIVITIES

Areas in which these activities can take place:

EDUCATION

RESEARCH

VALORISATION

MANAGEMENT

UIG ACTIVITIES - EDUCATION

EDUCATION



Curriculum Design

Incorporating into the curriculum the knowledge and experience of professionals currently working outside the university

- **Expected results:** To provide real-time information for lecturers on what is happening in industry / government / society, which generates a more relevant curriculum.

Curriculum Delivery

Bringing knowledge and practical experience of professionals external to the university directly into the classroom.

- **Expected results:** To make teaching more relevant to the labour market.

UIG ACTIVITIES - EDUCATION

EDUCATION



Lifelong learning

It provides people with the training they need at the right time (upskilling or reskilling) so that they can move forward to adapt to the changing labour market.

- **Expected results:** Facilitates professionals their advancement or adaptation to the changing labour market
 - Potential source of funding for universities

Student Mobility

Temporary mobility of students to external organisations as part of their studies.

- **Expected results :** Acquisition of practical experience and contacts that increase the future employability of students

UIG ACTIVITIES - RESEARCH

RESEARCH



Consulting

Supporting external organisations by using academics' / researchers' knowledge and expertise.

- **Expected results:** Support external organisations to improve their positioning or meet challenges more successfully by putting the knowledge of academics into practice.
 - Potential source of funding for HEIs/RIs

Staff Mobility

Temporary mobility of researchers to external organisations and vice versa. Varies in duration and conditions. It can be an exchange or not.

- **Expected results:** Total immersion in the work environment of another organisation, which breaks down many of the barriers and facilitates current and future cooperation

UIG ACTIVITIES - RESEARCH

RESEARCH



Joint R&D

Collaboration in research between HEIs/RIs and external organisations. This collaboration can be very diverse in terms of the funding, the subject matter, the staff involved, the processes, the IP of the results, etc.

- **Expected results:** Achieve research results that cannot be achieved independently and that result in a win-win situation for all parties involved
 - For HEIs/RIs, the possibility to put research into practice and get new ideas for future research.
 - For business, the possibility to increase their innovation levels and thus competitiveness
 - For governments, the possibility to solve social / economic problems

UIG ACTIVITIES - VALORISATION

VALORISATION



Academic Entrepreneurship

The creation companies (spin-offs) in which researchers participate in order to commercialise the results of their own research with active support of the HEI

- **Expected results:** Bringing research results to the market through the creation of companies by directly involving those responsible for the research

Student Entrepreneurship

The business creation (start-ups) by HEI students with active support from the HEI staff and resources

- **Expected results:** Students' innovative ideas into successful businesses so that they can employ themselves and others

UIG ACTIVITIES - VALORISATION

VALORISATION



Commercialisation of R&D results

Process by which knowledge and technology generated at the HEI/RIs reach the market. This can involve the participation of businesses and government agencies.

- **Expected results:** Greater social and economic impact via innovation and progress towards the knowledge society

UIG ACTIVITIES - MANAGEMENT

MANAGEMENT



Shared Resources

The situation in which people from different actors of the triple/quadruple helix share common resources. These can be infrastructures through collocation, staff, equipment, data, software, etc.

Expected results: Either acquire resources they could acquire get separately, save costs or create economies of scale. However, eventually this will bring people closer.

Governance

The participation of representatives of one of the three actors in the board or other governance bodies (maybe advisory) of one of the other actors.

- **Expected results:** To increase the cross-pollination of information and the exchange of ideas between representatives of the triple/quadruple helix to improve the organization.

UIG COOPERATION ACTIVITIES

Areas in which these activities can take place:

EDUCATION

RESEARCH

VALORISATION

MANAGEMENT

UIC ACTIVITIES IN ROMANIA

		Academics	Business
<u>Education</u>	Mobility of students	3.2	5.3
	Dual education programmes	2.4	4.4
	Curriculum co-design	2.6	2.5
	Curriculum co-delivery	2.5	3.0
	Lifelong learning	2.3	3.7
<u>Research</u>	Collaboration in R&D	2.8	5.2
	Consulting	2.6	4.5
	Mobility of staff	2.3	3.4
<u>Valorisation</u>	Commercialisation of R&D	2.0	3.6
	Academic entrepreneurship	2.2	2.8
	Student entrepreneurship	2.2	2.6
<u>Management</u>	Governance	2.1	3.4
	Shared resources	2.4	3.8
	Industry support	2.4	3.8

Legend

		Most developed
		2nd most
		3rd most
		Least

The UIG cooperation process: main barriers, motivators and facilitators

Todd Davey



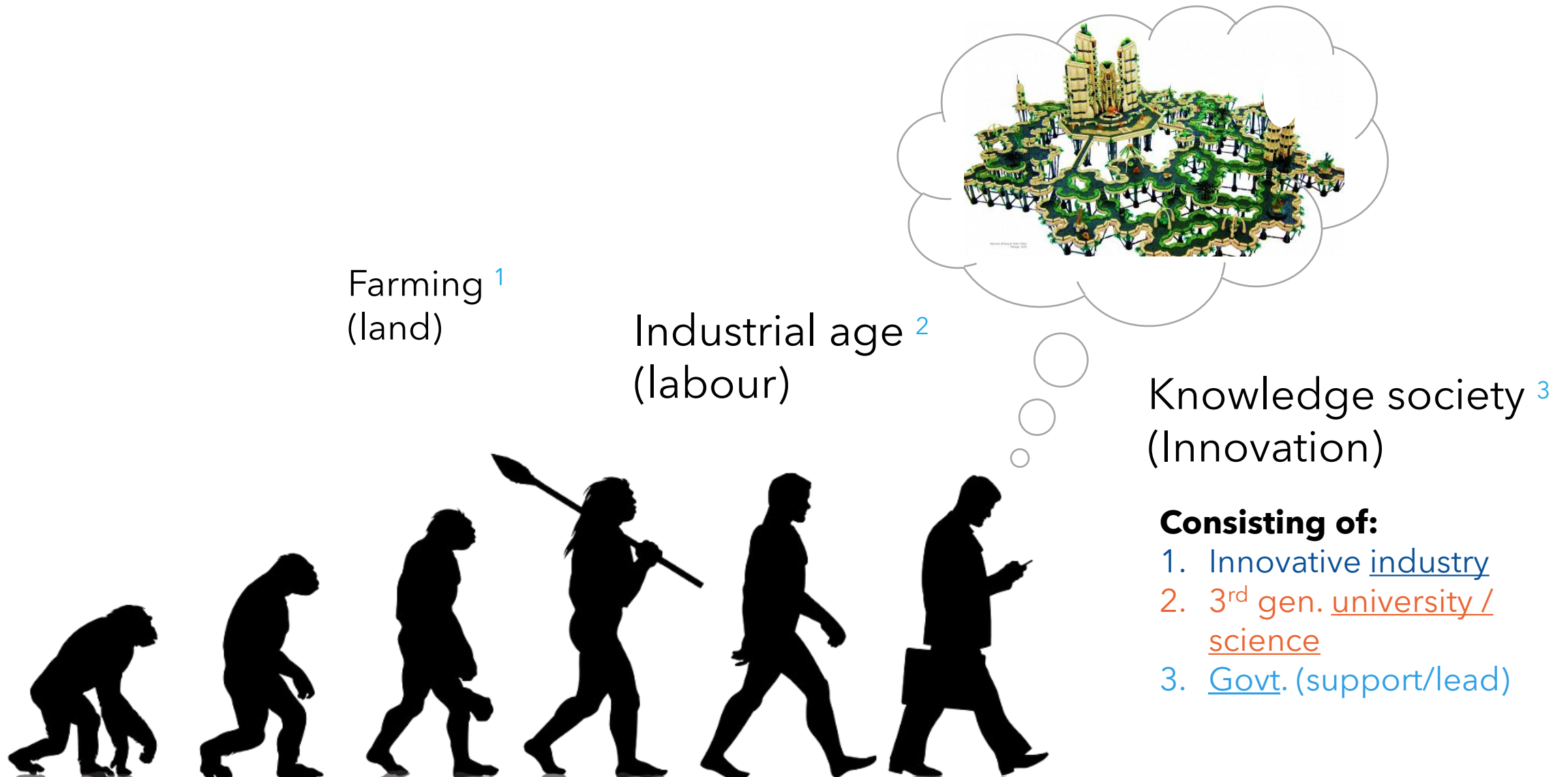
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“

**How does a Swedish university
create longstanding
university-industry
relationship at no cost?**

”

University-Industry-Government (UIG) cooperation is the engine of a (knowledge) society



University-Industry-Government cooperation is crucial for creating an (innovative) society

(1) Innovative industry (SME focus)

Possessing:

- a) Innovation
 - R&D
 - ICT
 - Technology
- b) Skilled people
(Human capital)

(2) Third-generation university

1. Teaching
2. Research
3. Engagement

(3) Govt. (support and leadership)

UIC
cooperation



**So society needs effective
collaboration between
University and Industry**

**But...unfortunately, University-
Industry relationships
don't (naturally) work**

“

There are **barriers** and
inhibiting factors that are
reducing or preventing
university and industry to
cooperate

”

EUROPEAN BARRIERS | Top 3 most relevant



University Management

Limited resources of SMEs **7.4**

Lack of business funding for UIC **6.7**

Lack of government funding for UIC **6.6**

Academics

Limited resources of SMEs **6.9**

Bureaucracy related to UIC **6.7**

Insufficient work time allocated by the university for academic UIC activities **6.7**

Business

Lack of people with business knowledge within universities **6.0**

Differing motivations between universities and our business **6.0**

Differing time horizons between universities and business **5.9**

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

“

Drivers incorporate both the reason (**motivators**) for cooperating and the factors that underpin or support (**facilitators**) university and industry to cooperate successfully

”

EUROPEAN MOTIVATORS | Top 3 most relevant



University Management

To obtain funding / financial resources **8.1**

To improve graduate employability **8.1**

To use the university's research in practice **8.0**

Academics

Gain new insights for research **7.8**

Use my research in practice **7.7**

Address societal challenges and issues **7.1**

Business

Get access to new technologies and knowledge **7.6**

Improve our innovation capacity **7.6**

Access new discoveries at an early stage **7.1**

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

EUROPEAN FACILITATORS | Top 3 most relevant



University Management

Existence of mutual trust **8.3**

Existence of a shared goal **8.2**

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

Academics

Existence of mutual trust **8.0**

Existence of a shared goal **7.9**

Existence of funding to undertake the cooperation **7.8**

Business

Existence of mutual trust **8.0**

Existence of a shared goal **7.9**

Existence of mutual commitment **7.8**

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



AIMday

A simple concept of getting scientists and professionals from industry to get to build trust through collaboration

●
Uppsala, Sweden

“One question, one hour, one group of experts”

An event where **businesses and public organisations** get to **discuss actual problems**. It is organized since 2008 by Ångström Academy, a part of Uppsala University Innovation (UUI). Between 2008 and 2019 **more than 50 AIMday events** were organised.

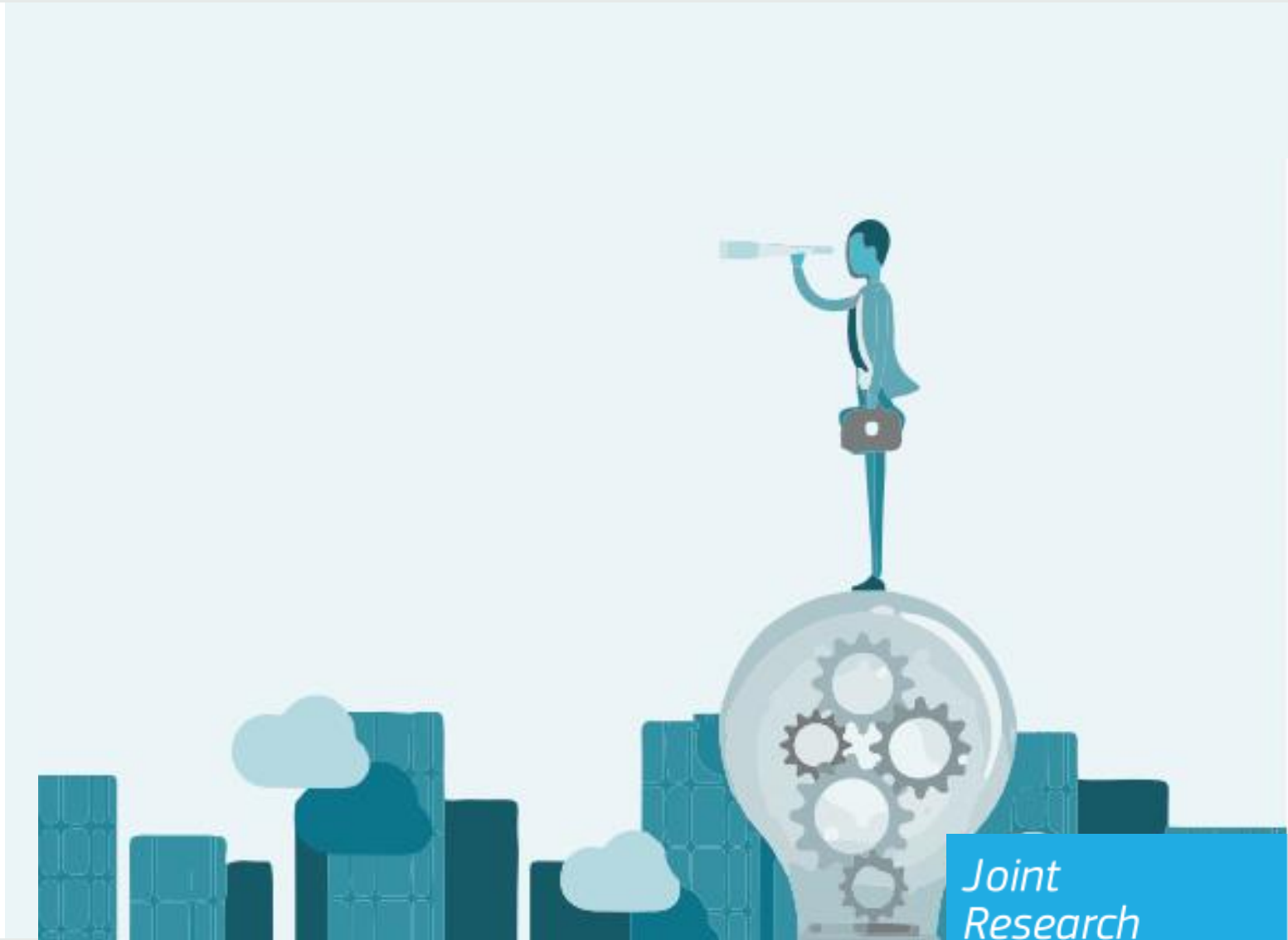
Outcomes:

- Creation of new contacts and trust building
- Knowledge transfer between researchers and businesses/organisations
- New approaches to solving problems
- Collaborative projects



How to support UIG cooperation: key supporting mechanisms

Todd Davey







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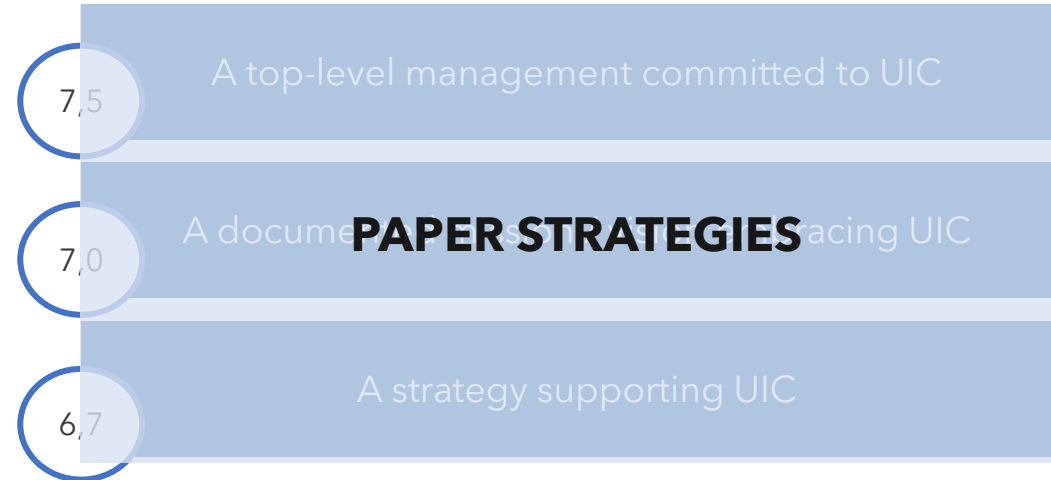
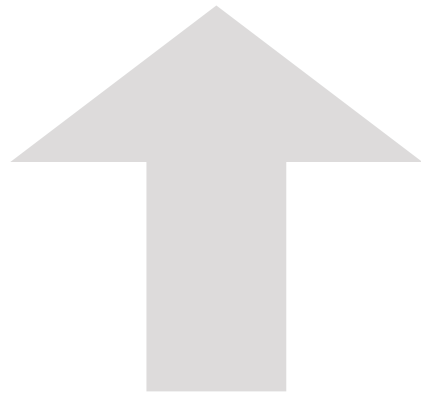
” Supporting mechanisms are those (1) policies, (2) strategies, (3) structures and (4) activities you can implement to facilitate and support cooperation

“

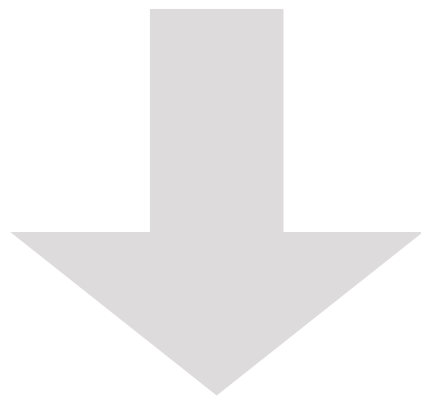
Key supporting mechanisms

Policies		Regional innovation policies	IP rights legislation for academic research discovery
		Tax incentives for business positively supporting collaboration between university and business	Public seed capital supporting UIC initiatives
Strategies		<u>Finances</u> to support UIC	<u>Personnel</u> to support UIC
		The reduction of <u>teaching time</u> for undertaking collaboration with business	The provision of <u>incentives</u> and recognition for academics to engage in UIC
Structures		Board member or vice rector <u>positions</u> for UIC	<u>Adjunct positions</u> for business people
		Knowledge transfer and cooperation <u>agencies</u> dedicated to UIC	Science / Technology Park <u>precincts</u> <u>Co-working spaces</u> accessible by business
Activities		Networks dedicated to UIC (e.g. entrepreneurship network)	<u>Information sessions</u> and forums about UIC
		<u>Entrepreneurship and commercialisation courses</u> offered to academics	<u>UIC activities</u> facilitating student interaction with business (e.g. student projects with business)

HEI | TOP 3 MOST/ LEAST RELEVANT STRATEGIES



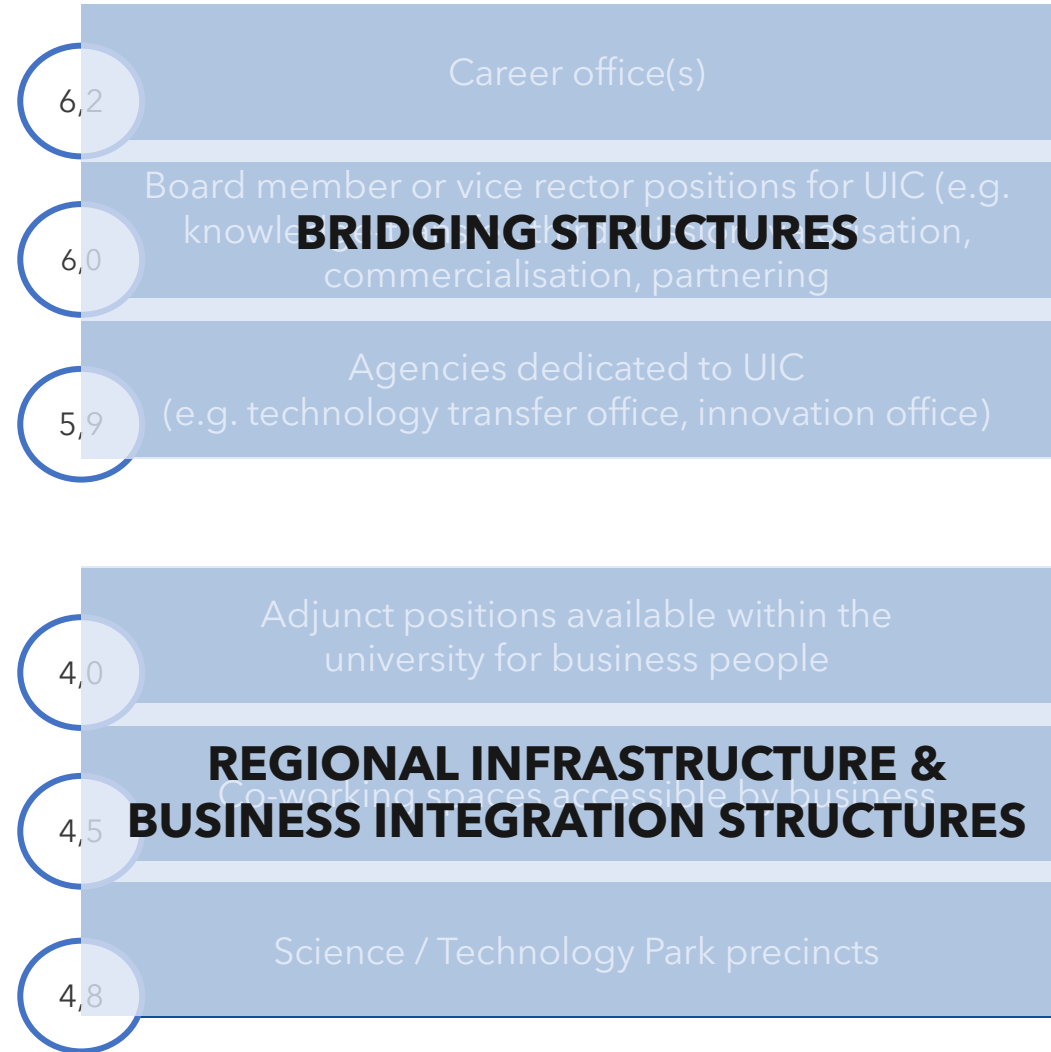
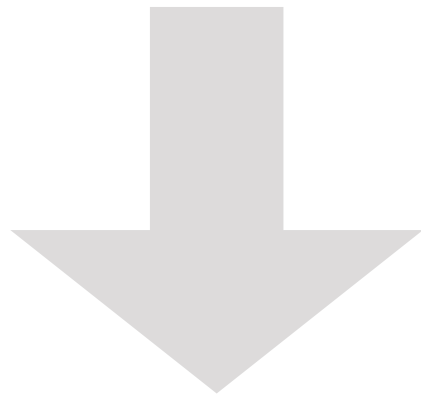
PAPER STRATEGIES



IMPLEMENTATION STRATEGIES

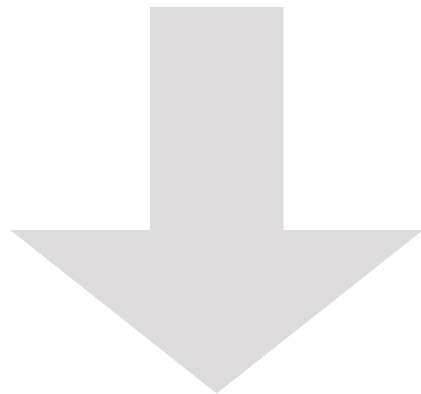
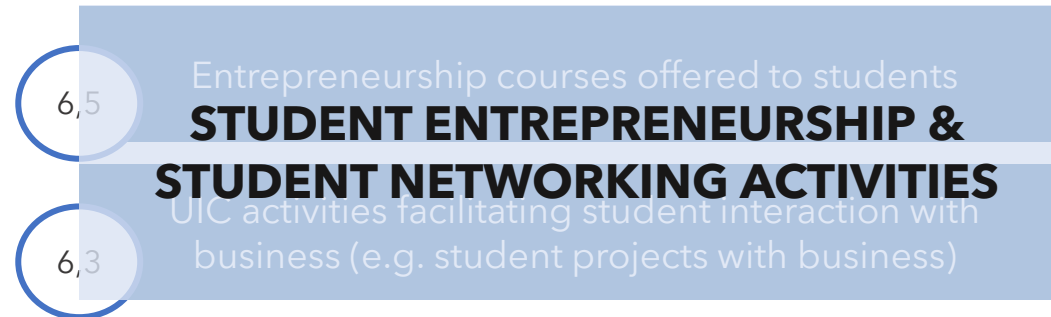
Scale: 1 = "Not at all relevant" to 10 = "Extremely relevant"

HEI | TOP 3 MOST/ LEAST RELEVANT STRUCTURES



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

HEI | TOP 2 MOST/ LEAST RELEVANT ACTIVITIES



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

SUPPORTING MECHANISMS FOR UBC

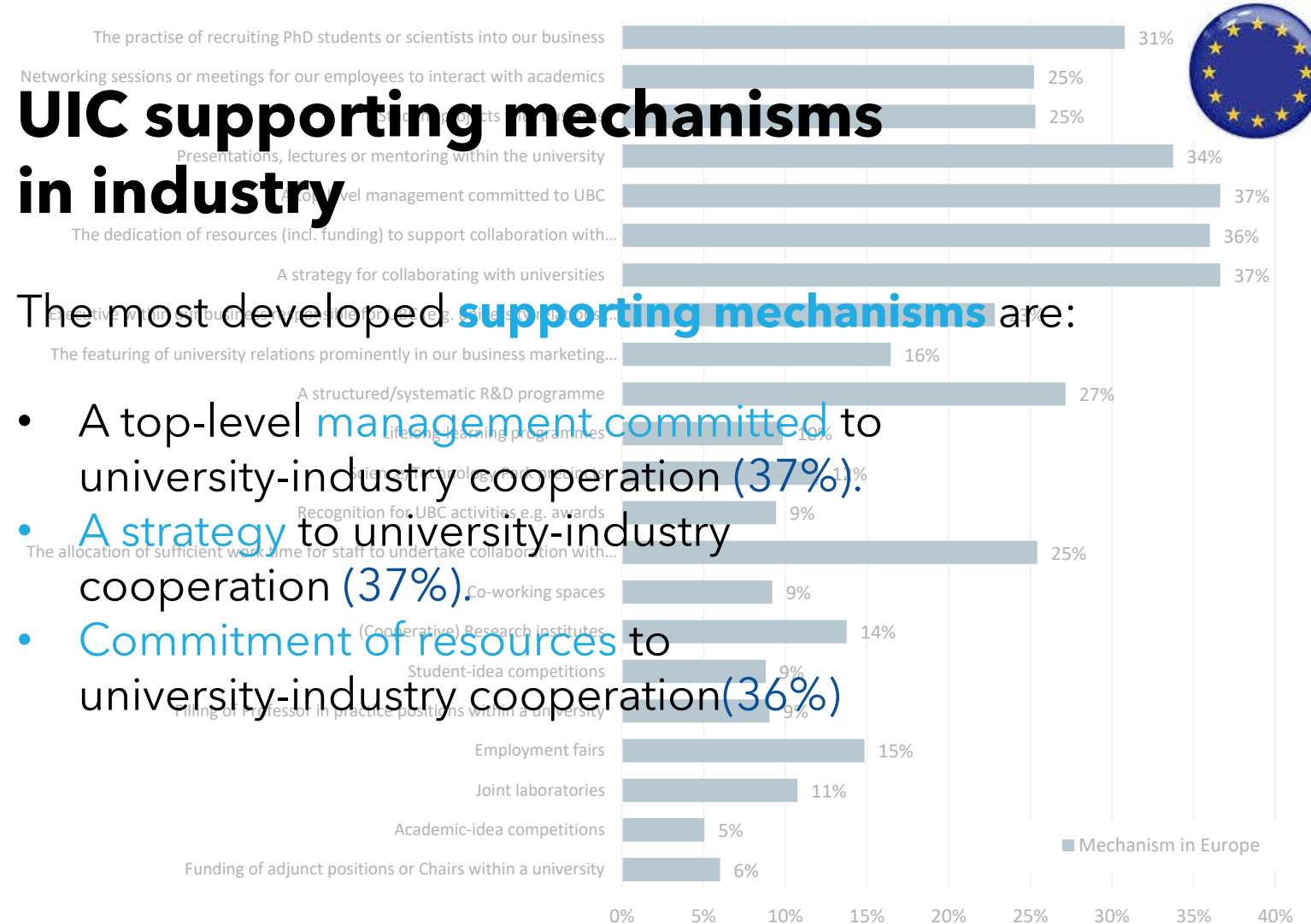
Mechanisms supporting UBC

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

UBC supporting mechanisms in industry

The most developed **supporting mechanisms** 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%).



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