

State of Enterprise
Collaboration at

TECHNOLOGICAL UNIVERSITY DUBLIN

Status quo study on the collaboration between
the Technological University Dublin and
enterprise



2010-11



The State of University-Business cooperation in Europe - The largest international study completed on the topic of University-Business Cooperation includes: 30 good practice case studies, Major survey (over 6,800 responses). 13 national reports, 13 national partners



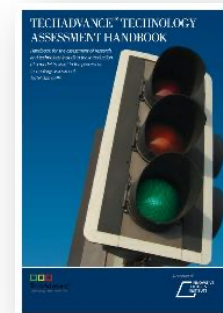
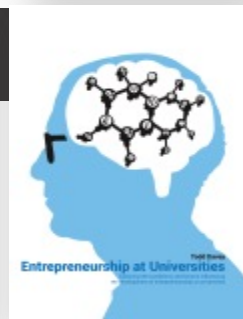
2017-18



The State of University-Business cooperation in Europe - the largest international study completed on the topic of University-Business Cooperation includes: 51 good practice case studies, Major survey (over 17,400 responses), 25 national reports. 35 national partners, major policy review



Other



Global University-Engagement Monitor – 41 national partners, major policy review



Innovative Futures Institute
Our work

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Australia

- University perspective
- Business perspective



Austria

- University perspective
- Business perspective



Belgium

- University perspective
- Business perspective



Bulgaria

- University perspective
- Business perspective



Croatia

- University perspective
- Business perspective



Cyprus

- University perspective



Czech Republic

- University perspective
- Business perspective



Denmark

- University perspective
- Business perspective



Estonia

- University perspective
- Business perspective



Finland

- University perspective
- Business perspective



France

- University perspective
- Business perspective



Germany

- University perspective
- Business perspective



Greece

- University perspective
- Business perspective



Hungary

- University perspective
- Business perspective



Iceland

- University perspective



Ireland

- University perspective
- Business perspective



Italy

- University perspective
- Business perspective



Latvia

- University perspective



Lithuania

- University perspective
- Business perspective



Macedonia

- University perspective
- Business perspective



Malta

- University perspective
- Business perspective



Netherlands

- University perspective
- Business perspective



Norway

- University perspective
- Business perspective



Poland

- University perspective
- Business perspective



Portugal

- University perspective
- Business perspective



Romania

- University perspective
- Business perspective



Slovakia

- University perspective
- Business perspective



Slovenia

- University perspective
- Business perspective



Spain

- University perspective
- Business perspective



Sweden

- University perspective
- Business perspective



Turkey

- University perspective
- Business perspective



United Kingdom

- University perspective
- Business perspective



GLOBAL UNIVERSITY ENGAGEMENT MONITOR



www.ub-cooperation.eu

Innovative Futures Institute
Our work

Macro perspective

Background to UEC

FUTURE UNIVERSITIES THOUGHTBOOK INSIGHTS

- The higher education space is being challenged
- Universities globally are trying to find their place in global human resource and innovation supply chains
- There is a need for more innovation and diversification in HE
- At the same time, driven by ranking and accreditations, universities are converging in terms of their mission and focus
- (Anglo-saxon countries) tendency to move towards a 'one-university' model: similar purpose, focus, activities & subjects
- (European-mainland) Generally maintaining a diversified HE sector: Traditional Universities, Universities of Applied Sciences, Technological University
- In Ireland, there has been a consolidation of institutes of technology, and technological universities into Technological Universities
- There is a historic funding issue in Ireland in the HE sector
- For all, engagement and UEC has become increasingly essential to improve pathways to work and societal impact

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T _

6 future roles identified:

1. Talent engine
2. Life partner
3. Discovery
4. Home-base
5. Launch-pad
6. Equity and diversity

Summary of activities

ABOUT THE STUDY

ACADEMICS

180 – Survey
5 - Interviews

PROFESSIONAL SERVICES

34 - Survey

INDUSTRY

81 – Survey (Irish)
2 Interviews

DATA was collected in
2021-22

Comparisons with
(1) Irish universities
(2) European Technological Universities

Based upon the **UBC Ecosystem** published in the Journal of Technology Transfer

PERCEPTIONS of:

- Extent of UEC activities,
- Barriers,
- Drivers,
- Supporting mechanisms
- Perceived capabilities and context

NOTE: This report provides a university perspective on University-Enterprise Collaboration, drawing on a survey of TU Dublin academics and professional staff as well as interviews with TU Dublin academics and associated businesses.

While acknowledging limitations relating to the generalisability of the results, due to the non-random nature of the sample, the results provide positive signs both of the present and for the future, while also providing an indication about the areas that require future development.

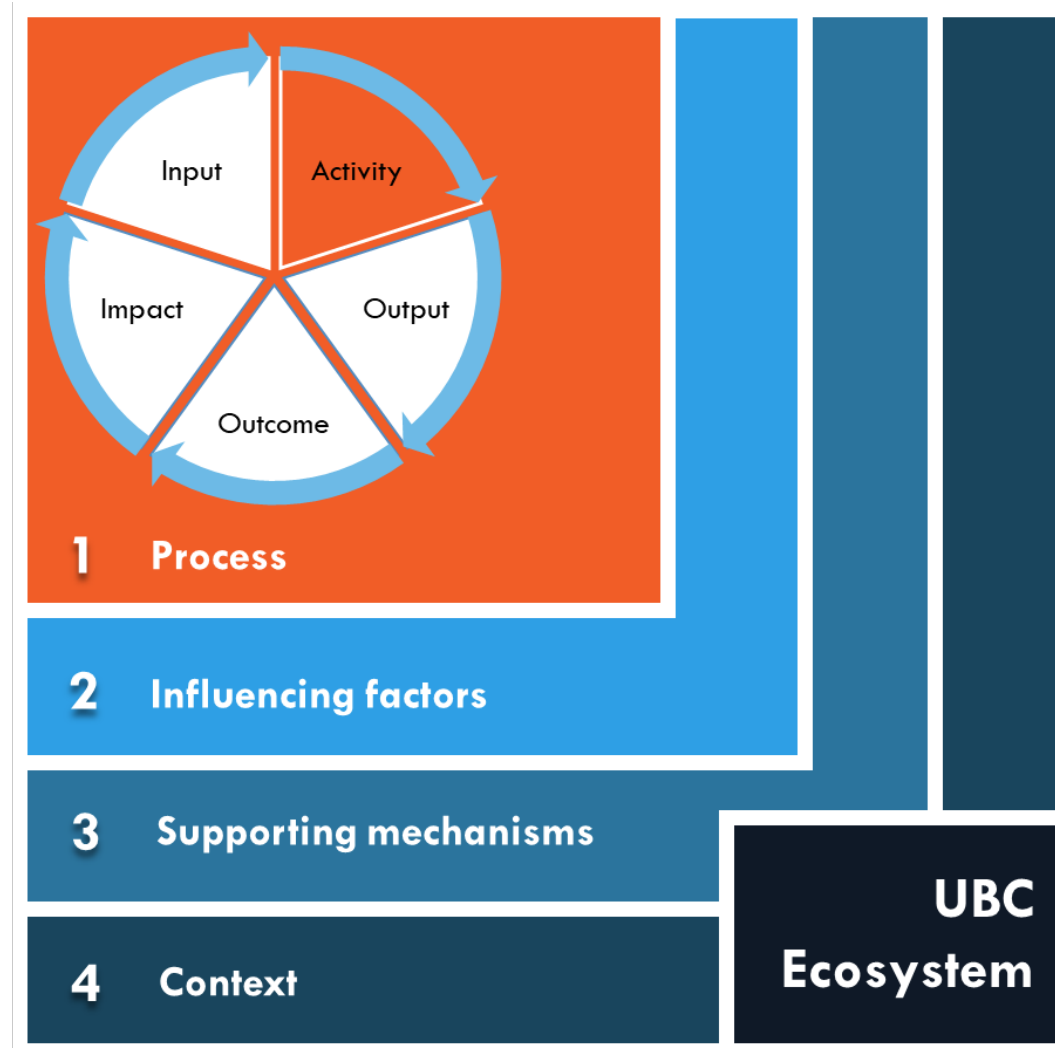
UEC activities

The UEC Ecosystem Framework™

In order to best organise the project results, a project conceptual framework was chosen.

The UEC Ecosystem Framework has a number of interrelated elements including the process of undertaking UEC, factors that are influencing UEC, mechanisms supporting UEC and finally the context in which UEC occurs.

The framework ties together the respective project activities, providing a common thread for reporting results and making recommendations.



Source: Galán-Muros, V.; Davey, T. (2019) *The UEC Ecosystem: Putting together a comprehensive framework for University-Enterprise Collaboration*. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-017-9562-3>

Development of UEC activities at TU Dublin

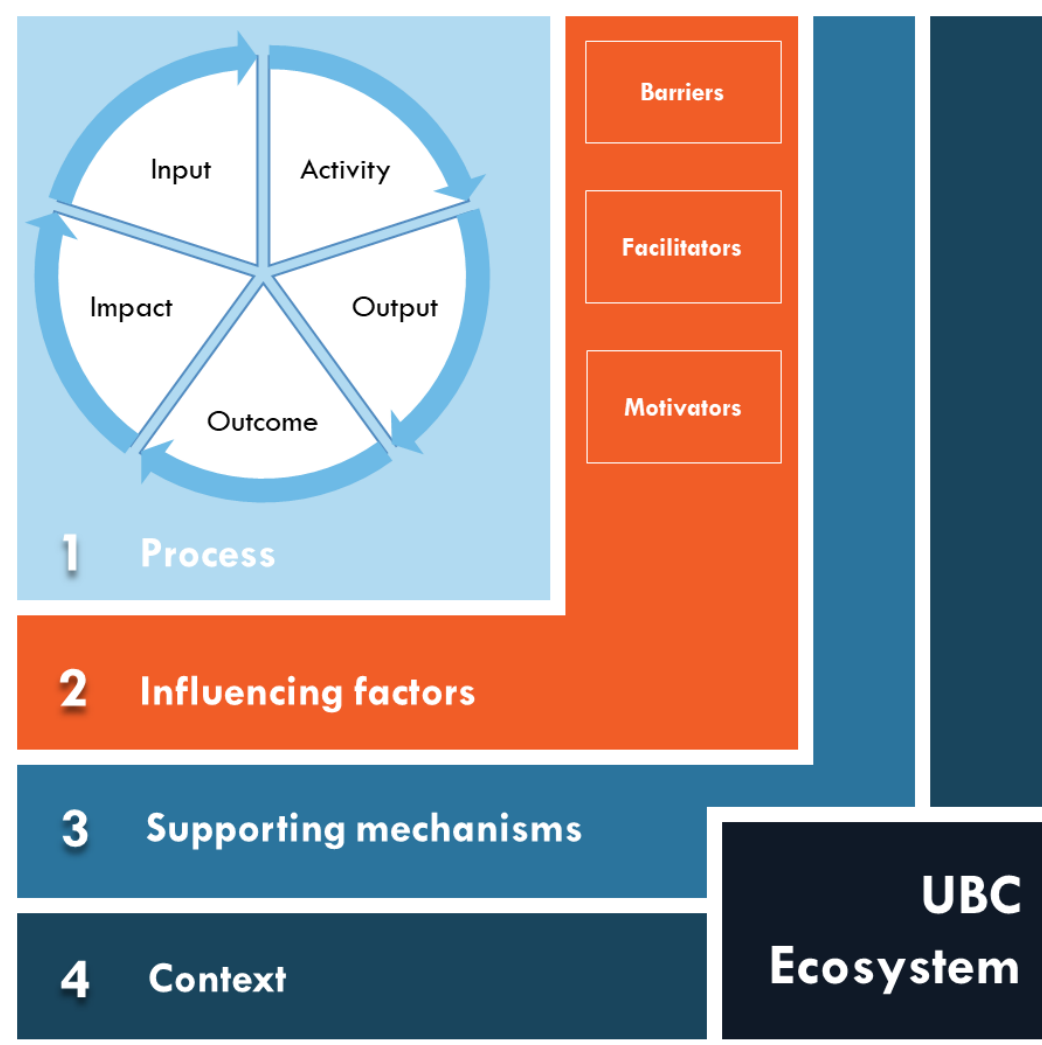
'Which UEC activities do you collaborate with businesses in?' – as answered by **ACADEMICS**

	ACTIVITIES	UEC PARTNERS	INITIATING UEC
SURVEY	High comparative UEC in <u>education-related</u> activities	Academics at TU Dublin focus on collaboration with <u>regional</u> and <u>national</u> businesses.	Half of TU Dublin academics state that <u>they (or their colleagues)</u> always or usually initiate UEC.
	Opportunities for improvement <u>Research-related</u> UEC activities esp. joint R&D	<u>More international</u> collaboration	Better utilising <u>alumni</u> , <u>internal</u> and <u>external intermediaries</u>

'Which UEC activities do you collaborate with universities in?' – as answered by **ENTERPRISE**

	ACTIVITIES	UEC PARTNERS	INITIATING UEC
SURVEY & INTERVIEWS	Irish businesses engage mostly in <u>research UEC</u> activities. Only 20% of Irish businesses <u>do not</u> undertake these activities	<u>All types of universities</u> in regional, national and international context	Irish enterprise perceive <u>themselves</u> as the main initiators of UEC with universities
	Opportunities for improvement <u>Research-related</u> UEC activities	More collaboration with TU DUBLIN with <u>established collaborators</u>	Having multiple points of contact in HEIs is confusing." - MD from a collaborating company

Factors influencing UEC



Galán-Muros, V.; Davey, T. (2019) *The UEC ecosystem: assembling a comprehensive framework for University-Business Collaboration*. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-017-9562-3>

Barriers hindering UEC

ACADEMICS - What is inhibiting cooperation with business?

INTERVIEWS & SURVEY

PRIMARY BARRIERS IDENTIFIED BY THOSE WITHIN TU DUBLIN

1. Bureaucracy and administrative processes
2. Insufficient work time
3. Lack of support and resources for UEC
4. Lack of awareness of UEC benefits

ACADEMIC NOT COOPERATING (YET)

1. Insufficient work time
2. Finding the appropriate partner
3. Difference in motivation and values
4. Finding the right contact person internally

SURVEY

PROFESSIONAL SERVICES COMPARISON

Also identify... as major barriers:

- Work time dedicated to UEC
- Bureaucracy

IRISH / ETU COMPARISON

TU Dublin academics generally perceive **less barriers to UEC** than colleagues, except:

- Work time dedicated to UEC
- Conflicts with teaching and research responsibilities

ENTERPRISE - What is inhibiting cooperation with universities?

INTERVIEWS

PRIMARY BARRIERS IDENTIFIED BY TU DUBLIN ENTERPRISE COLLABORATORS

1. **Bureaucracy** and administrative processes.
2. **Lack of awareness** of universities about industry needs.
3. **Differing motivation/values** between university-business.

SURVEY

BARRIERS TO IRISH UEC

The main barriers perceived by Irish enterprise are:

- **bureaucracy** and administrative processes related to UEC,
- **differing motivation/values** between university-business and
- **lack of awareness** of universities about industry needs.

Drivers stimulating UEC

ACADEMICS - What is facilitating your cooperation with business?

SURVEY

IRISH / ETU COMPARISON

TU Dublin academics generally **perceive the facilitators notably weaker** than Irish and European academics.

OPPORTUNITIES

Greater focus on developing **meaningful relationships** based upon a shared goal, trust and commitment between TU Dublin academics and business.

INTERVIEWS

QUOTES FROM THE INTERVIEWS

“The challenge for TU Dublin specifically, is to bring together all organisations and **manage their respective collaborations**. How to integrate and work with the faculty will be a further challenge.”

- Vice President, TU Dublin

QUOTES FROM THE INTERVIEWS

“The **incentives to organise needed skills programs are not there** because the likely income that can be earned is inhibited by the overheads charged and the slow channels to make it happen.”

– Senior Management, TU Dublin

ENTERPRISE - What is inhibiting cooperation with universities?

INTERVIEWS

QUOTES FROM THE INTERVIEWS

“The collaboration provides a **huge reputational benefit**, which then open doors for other collaborations. This also allows us to develop relationships with other pharma companies. **Trust** underpins our collaboration with the university.”

- Managing director from a national pharma company

SURVEY

MOTIVATORS FOR IRISH UEC

- Existence of **funding**
- Personal and prior **relationships** relationships
- The existence of **trust, commitment** and **shared goals**

Drivers stimulating UEC

ACADEMICS - What is motivating your cooperation with business?

INTERVIEWS & SURVEY

PRIMARY TU DUBLIN MOTIVATIONS FOR COLLABORATION WITH BUSINESS:

1. Providing the skills that graduates need for employment
2. Improve teaching
3. Obtain funding/financial resources
4. Societal impact

QUOTES FROM THE INTERVIEWS

“One of the fundamental roles of what a Technological University should do, is to engage with employers. It is part of the DNA of the institution”

– Vice President, TU Dublin

SURVEY

IRISH / ETU COMPARISON

TU Dublin academics generally **perceive the motivators notably stronger** than Irish and European academics, academics

IRISH COMPARISON

Fewer research drivers nominated by TU Dublin academics

OPPORTUNITIES

Promote the benefits of UEC in RESEARCH to TU Dublin academics because they don't see them as clearly

ENTERPRISE - What is motivating your cooperation with universities?

INTERVIEWS

PRIMARY ENTERPRISE MOTIVATION FOR COLLABORATION WITH TU DUBLIN:

1. To get **access to talent**
2. Producing a more **open, inclusive, and structured sector**
3. **Align certifications** around professional development pathways

SURVEY


MOTIVATORS FOR IRISH UEC

- Irish Enterprise suggest factors related to **innovation** (research), **funding**, to **impact society** and **improve reputation**
- Positively, Ireland have **higher UEC drivers** (motivators and facilitators) than **barriers**

Benefits of UEC

Benefits

'Who receives the benefits of UEC?' - as answered by academics and Professional Services



	Academics	Professional Services
1.	Universities	Academics
2.	Students	Alumni
3.	Enterprises	Universities
4.	Academics	Students
5.	Society	Enterprises
6.	Government / public authorities	Government / public authorities

TU Dublin academics and HEI professional services have **different perceptions** of who benefits from UEC and this disconnect can be inhibiting UEC at TU Dublin.

Recommendations 1/2

ACTIONS ALREADY TAKEN

- Included in strategic plan of the university
- 5 Faculty Vice Deans of Partnership
- Aligns with TU Dublin Brand Campaign
- Profit sharing agreement in place at University/Faculty level

RECOMMENDATIONS

A number of recommended interventions, in the form of strategic, structural and activity mechanisms, have been made for TU Dublin based upon the results of the entire study.

Strategic mechanisms



1. Develop a UEC vision for TU Dublin – Design and implement a university-wide approach and strategy for UEC. This includes having a broader vision about the university role in the societal and economic development of Dublin and Ireland. This approach should embrace the positive UEC in education and training, and elevate UEC in research.



2. Make a greater commitment to UEC – commit to UEC through a dedicated VP position for UEC, one senior person per faculty as UEC lead and a central committee managing UEC.

3. Create collaboration roadmaps and a central system for managing relationships – define the key steps of action, and administration, to establish UEC activity, and professionalise the support offered to academics to manage relationships.

4. Create visibility for UEC – improve promotion of UEC internally and externally, including visibility of UEC role models and achievements, as well as transparency about who is responsible for what for both industry and academics.

5. Ensure appropriate incentives are in place – Create appropriate incentives e.g. time for collaboration, access to funding, awards. Re-defining or creating workload models to better favour and allow time for UEC might be necessary.

6. Provide a promotion path for those undertaking UEC – Provide a promotional path for collaborative academics. In addition to research outputs, integrate UEC indicators in the assessment of academics to help them promote to higher positions in the university based on their collaborative work.



Recommendations 2/2

Structural mechanisms

- 1. Primary contact point** - Create a primary contact point for UEC at TU Dublin and promote the position to both academics and enterprises. This role should connect people from inside and outside the university and support UEC processes.
- 2. Mechanisms and support for building relationships with industry** – Create better support for UEC (e.g. support staff, infrastructure, staff with industry experience). Presently, there are few mechanisms for commencing relationships with industry, such as a small budget for having a coffee or organising small events.
- 3. Simplification and clarification of rules and processes** – Create a streamlined bureaucratic process and simplified “rules of engagement” for industry (universal across all of TU Dublin). Develop a central system for managing relationships and find ways to make the contracting process more efficient.
- 4. Reduce the overhead for UEC** – Reduce the (up to) 40% current overhead that can be taken from the funds earned by the academic. This situation makes it difficult to be competitive and reduces the incentives for TU Dublin academics to undertake UEC activities.
- 5. Create a business club for enterprises** – Offer a ‘soft-landing’ into TU Dublin by creating a business club where collaborators can build relations and host

activities and events that bring collaborators together. This function would provide a front door for establishing relations with academics.

- 6. Utilise Enterprise Ireland** – Utilise EI’s measures to support UEC, including the use of their Innovation Vouchers initiative. It makes available €5000 to assist a company to explore a business opportunity or problem with a knowledge provider such as TU Dublin.

Operational mechanisms

- 1. Upskilling academics and professional services staff** – As the executors and supporters of UEC, training academics and professional services staff at TU Dublin in industry-relations and transversal skills for UEC is critical to increase the impact of the university UEC activities.
- 2. Highlight UEC and its role models** - Create a Community of practice for UEC at TU Dublin to promote role models and share experiences.
- 3. Promote UEC cases and outcomes** - Promote UEC stories and activities within the university, especially emphasising the outcomes from collaboration in research.
- 4. Create activities that promote and unite the UEC community** – Create a set of networking events, hackathons, and awards as additional mechanisms for fostering UEC and creating a positive image around it.

State of Enterprise
Collaboration at

TECHNOLOGICAL UNIVERSITY DUBLIN

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