

The State of University-Business Cooperation in France

Part of the DG Education and Culture
Study on the Cooperation Between
Higher Education Institutions and
Public and Private Organisations in Europe

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Abbreviations

EC	European Commission
HEI	Higher Education Institution
LLL	Lifelong Learning
R&D	Research and Development
SME	Small- and medium-sized company
S2BMRC	Science-to-Business Marketing Research Centre
UBC	University-Business Cooperation

UBC Country Reports: logic and characteristics

The UBC country reports compare the continental results of the major *State of European UBC* study (Davey et al., 2011), with the results obtained in a specific country. The reports are designed to be complementary to the major study and highlight the diversity amongst European countries. Additionally, by offering more concrete results at national level, it is believed, the country specific report provides more appropriate decision-making material for most stakeholders, whose jurisdiction is restricted to the regional or country level.

The reports present mostly descriptive data and are not intended to be a comprehensive or detailed study of each of the countries or a ranking among EU countries. Instead, the reports are provided to all stakeholders simultaneously (academics, HEI managers, policy makers at different levels, business, etc.) and unlike the European report, are expected to provide some opportunity for individual stakeholder interpretation and resulting actions, according to their local understanding and different roles within the UBC ecosystem.

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Executive summary

The university-business cooperation of France is above the European average in most of the types but documented strategies should be translated into real actions.

France has a focus of university-business cooperation (UBC) in *Collaboration in research and development (R&D)*, *Mobility of students* and *Curriculum development and delivery*. The greatest *Barriers* to UBC, in France are '*relational barriers*', specifically, the 'differing time horizons between university and business' and 'business lack awareness of university research activities / offerings'. Paradoxically, the main *drivers* of UBC are also relationships. '*Relational barriers*' seem to call for a greater extent of communication and a greater degree of trust among University and Business to coordinate activities; for that reason, 'understanding of common interest by different stakeholders' is perceived as the main driver for UBC, whilst, the second main driver, perceived by HEI in France is 'existence of mutual trust'.

French academics see low personal *benefits* from UBC whilst higher education management (HEI) management perceive high *benefits* for the HEI from UBC. Furthermore, there is a high degree of development on '*documented strategies*' such as 'a top-level management committed to UBC' and 'a strategy for UBC'. Despite the high degree of an official commitment of the HEI management to UBC, '*implementation and motivation strategies*' are less developed in France; therefore, there is a need to bring the '*documented strategies*' into real actions to further develop UBC.

About the study

The results presented in this report were from a study commissioned by the European Commission (EC). Surveys were sent out to all registered European HEIs in 33 countries in 2011. In total, 6,280 responses were received from European academics and HEI management (HEI managers and HEI professionals working with industry) whilst from the France, 301 responses from academics and 213 from HEI management were received. The study measured the perceptions of these two groups in respect to their own cooperation efforts and those of their university respectively.

Collaboration and Mobility of students are the most developed forms of UBC

The most developed types on UBC in France are: (1) *Collaboration in research R&D*, (2) *Mobility of students*, and (3) *Curriculum development and delivery*, with the least developed type being: *Mobility of academics*. In respect to the European average, France performs slightly better than the European average in most of the forms of UBC, with a slightly lower performance in *Commercialisation of research and development results* and *Mobility of academics*.

Relational and funding barriers are the biggest barriers to UBC in France

The primary *barriers* to UBC in France are: (1) 'differing time horizons between university and business', (2) 'business lack awareness of university research activities / offerings' and (3) 'lack of external funding for UBC' in France.

However, compared to the European average, '*funding barriers*' are perceived by French HEI management and academics to be lesser *barriers* to UBC than by their European counterparts. As with the European results, academics primarily perceive the UBC *Barriers* similarly to the HEI management except for: funding. HEI management perceive a slightly higher '*funding barrier*' than academics whilst academics perceive higher barriers the '*usability of results*' and '*relational barriers*'.

Relationships drive cooperation in France

French HEI management and academics alike name relationship *drivers* as the *drivers* of UBC. In France, relationships *drivers* such as (1) 'understanding of common interest by different stakeholders', (2) 'existence of mutual trust' and (3) 'having a shared goal' were nominated as the biggest *drivers* of UBC. This suggests that greater effort to bring academics together with business could be a focus for further improvement of cooperation. Furthermore, both French academics and HEI management also perceive a considerably higher level of '*relationship drivers*' generally for UBC than their European counterparts.

Academics still perceive lesser personal benefit from UBC

French academics perceive the primary winners from UBC to be: (i) students, (ii) business, (iii), *benefits* to the HEI business (same as the EU average) and lastly (iv) personal *benefits* with a low amount of academics

stating that UBC activities increase their chances of promotion (below the EU average). These results imply that academics need to receive greater personal *benefits* from their HEI in terms of chances of promotion in order to increase UBC activity. HEI management state that (i) students (slightly higher than the EU average) and (ii) HEIs (significantly higher than the EU average) are the biggest winners from UBC whilst (iii) business and (iv) society (though less than the EU average) get a less, but moderately-high, amount of benefit.

UBC supporting mechanisms are developed slightly to a higher level than the EU average except 'Internally focused education and workshops focused on academics'.

UBC Strategies are well developed in France especially '*documented strategies*' such as 'top-level management committed to UBC' and 'a strategy for UBC'. However, there is still some room for improvement in respect to '*implementation strategies*' especially in 'the inclusion of cooperation with businesses as part of the assessment of work performance for academics' and in 'providing incentives to academics for UBC'.

'*Role-based approaches*' to UBC are significantly more developed than '*internal/external agencies dedicated to UBC*' and are more developed in French HEIs than in Europe. 'The presence of business people on the university board' and the 'an alumni network' are UBC Structures that are the highest developed as well as being significantly above the EU average. The remainder of the *Structures* are developed to approximately the same or to a higher level as the EU average.

In terms of UBC Activities France is slightly more developed than the European average with respect to '*externally focused networking, promotional and project activities*' as is '*internally focused education and workshops focused on students*' however '*internal activities focused on academics*', lags a bit behind the European average.

Introduction

Background

With the creation of the Europe 2020 programme, the European Union's (EU) growth strategy for the coming decade, and the higher education modernisation agenda, Europe is embracing the need to create a more connected and functioning relationship between government, business and HEI in order to increase employment, productivity and social cohesion¹. If fostering UBC is understood as 'interactions' between HEIs and businesses for mutual benefit, then fostering UBC and extracting its value can help society face a number of issues. UBC helps universities to face the problem of decreasing public funds² help businesses to gain and maintain their competitive advantage in today's dynamic international markets, contribute to the economic development on regional and national level³ as well as meet the demands of the labour market to provide more relevant knowledge and skills and greater job prospects of students⁴. Additionally, there are substantial indirect outcomes of UBC including support in the creation of a knowledge economy⁵, support for local business⁶, creation of jobs⁷, stimulation of economic growth and increased living standards whilst reducing hindrances to good living⁸. In this context, UBC creates mutual benefit for all parties involved, and wider, to society.

Over the last few decades there has been a dramatic shift in the focus of HEIs and policy makers towards the HEI's so-called 'third mission'. Through this, HEIs have had their roles focussed to a greater extent on the need to contribute to society in a more meaningful way through knowledge and technology creation, transfer and exchange⁹. In recent years, the focus has been extended to recognise all the ways in which HEIs can contribute to society including *Lifelong learning* (LLL), *Entrepreneurship* or exchanges of workers with businesses as means to reach the third mission. Owing to this, the holistic extraction of value via UBC has become more important for the viability and relevance of HEIs as the *benefits* of closer and better cooperation between HEIs and businesses and the *benefits* for the students have been increasingly recognised

¹ European Commission, 2011

² Carayol, 2003

³ OECD, 2002

⁴ Bozeman & Boardman, 2013

⁵ Etzkowitz & Leydesdorff, 2000

⁶ Davey et al., 2011

⁷ *ibid*

⁸ Etzkowitz & Leydesdorff, 2000

⁹ *ibid*

Objective

The objective of this report is to evaluate the current status of UBC in France and benchmark these outcomes against European HEIs. As a result of this analysis, the reader will have a clearer understanding of the extent of cooperation with business. Furthermore, the report aims to highlight the *Barriers* and *drivers* preventing or motivating cooperation as well as the extent of development of mechanisms supporting UBC, in comparison with the European average.

Methodology

The survey

The survey was created during a project completed with the EC in a fifteen and a half month study on the cooperation between HEIs and public and private organisations in Europe. The main components of the project were in-depth qualitative interviews with 10 recognised industry experts as well as a major quantitative survey. The survey was translated into 22 languages and sent to all registered European HEIs (numbering over 3,000) in 33 countries during March 2011. Through this, a final sample of 6,280 academics and HEI management was achieved making the study the largest study into cooperation between HEIs and business yet completed in Europe.

Questions were posed to two groups within HEIs. These groups were asked about their perception of UBC:

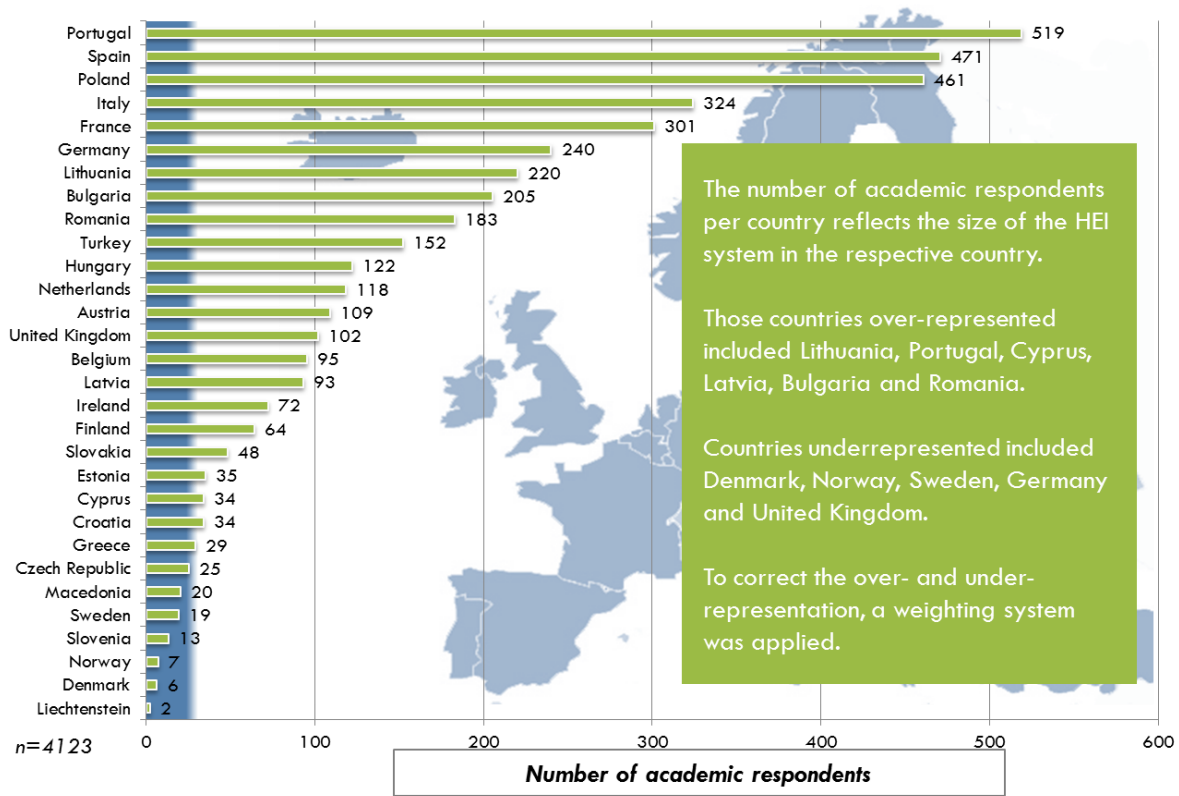
1. **Individual academics** were asked to respond on behalf of themselves.
2. **HEI management** (HEI managers and university professionals working with industry) were asked to respond on behalf of their HEI.

	Focus	Responded on behalf of	Colour code for results
1	Academics	Indv. academics	Green
2	HEIs	HEI management and university professionals working with industry	Orange

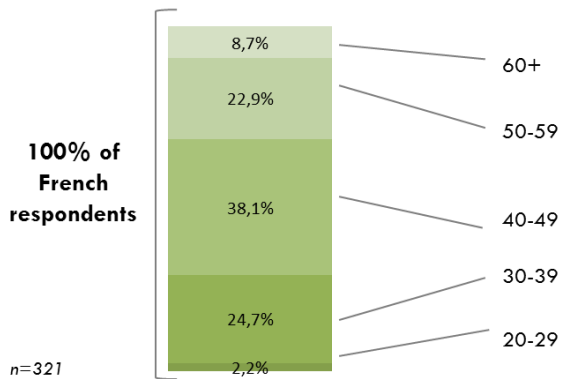
Colour codes have been used throughout the report to identify those results received from the academic (green) and those results received from the HEI (orange).

Respondents (academic)

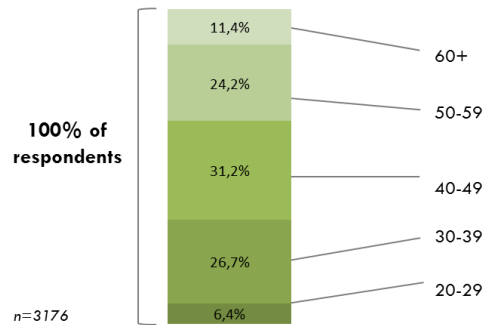
Country



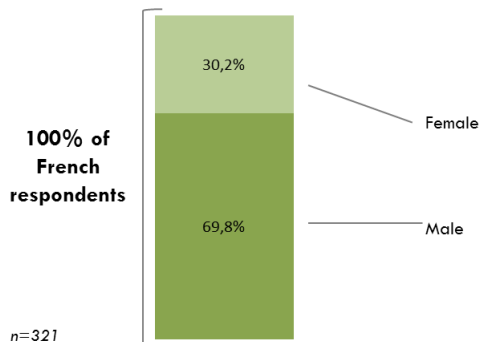
Age of respondents in France



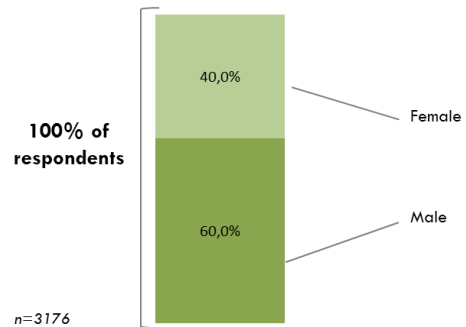
Age of respondents in Europe



Gender of respondents in France

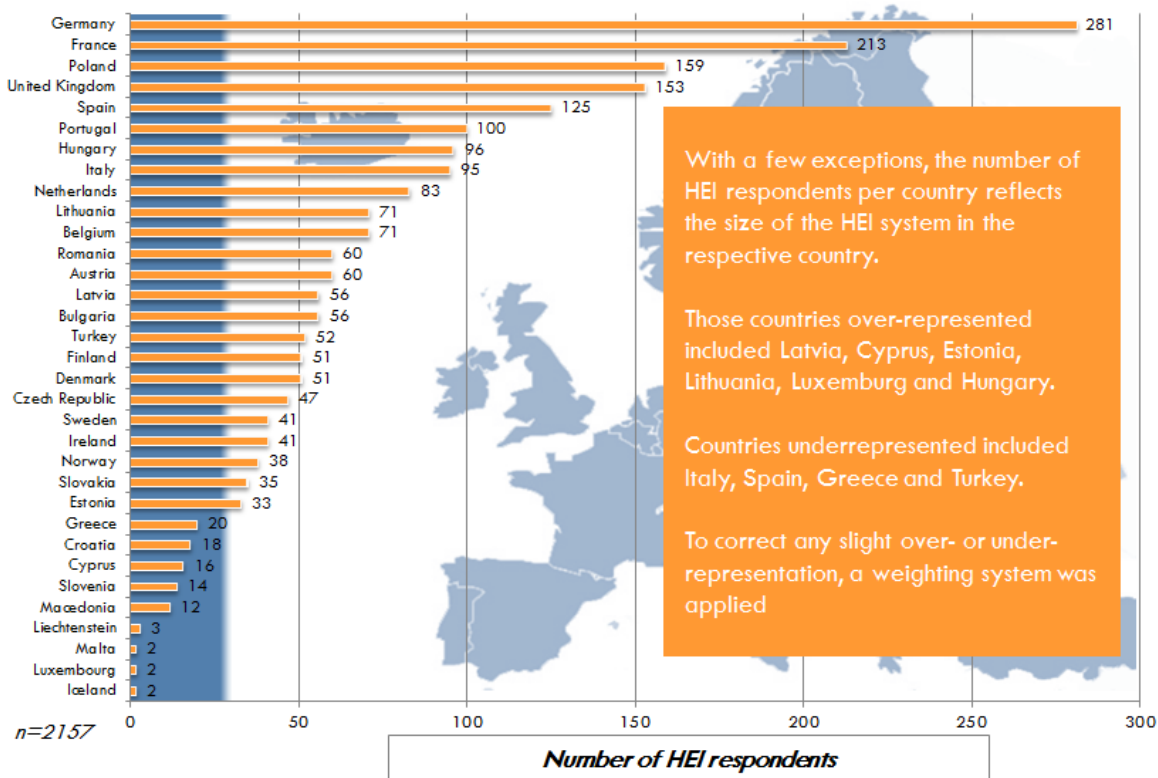


Gender of respondents in Europe

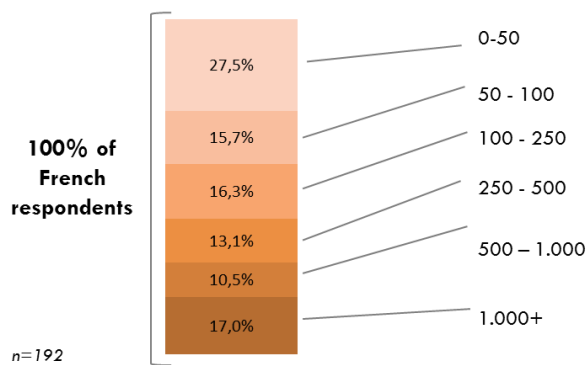


Respondents (HEIs)

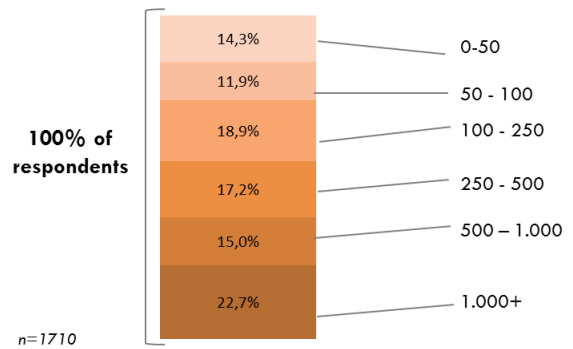
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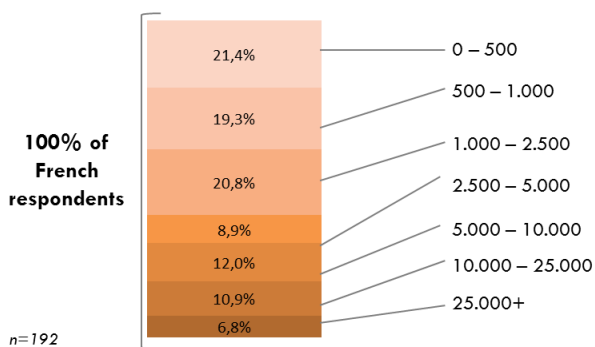
Number of academics per HEI in France



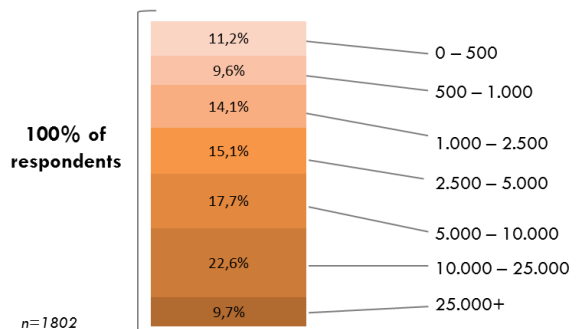
Number of academics per HEI in Europe



Number of students per HEI in France



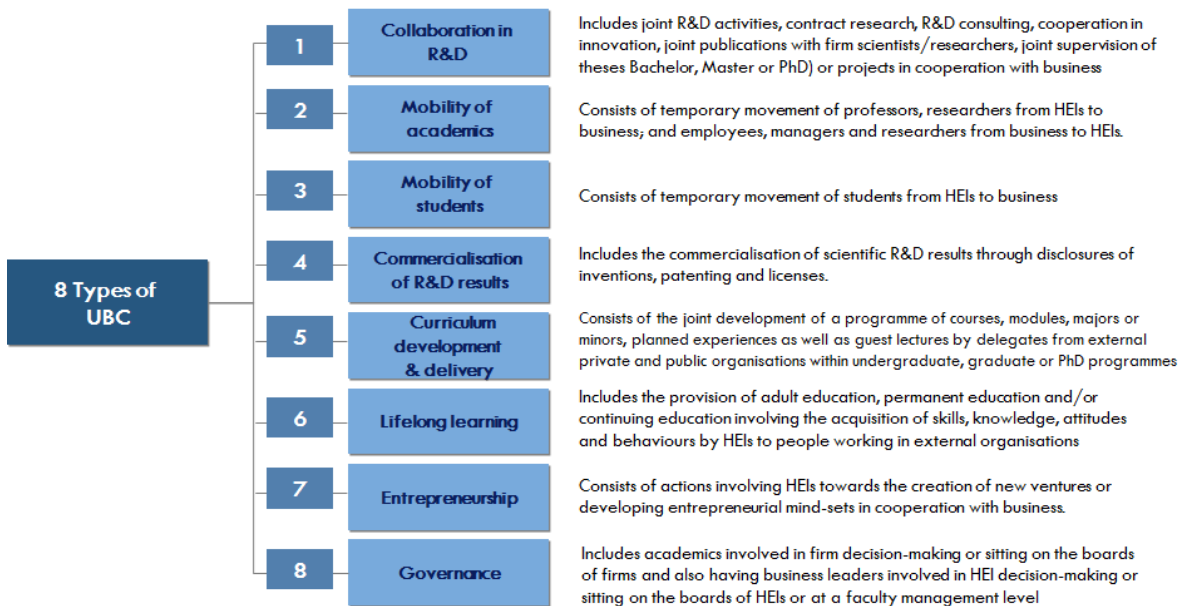
Number of students per HEI in Europe



Results

Extent of UBC

There have been eight types of cooperation recognised between university and business as found in the *State of European UBC Report* with the following descriptions:



3 clusters of HEI cooperation

In respect to cooperation with business it was found that HEIs could also be categorised into 3 clusters:

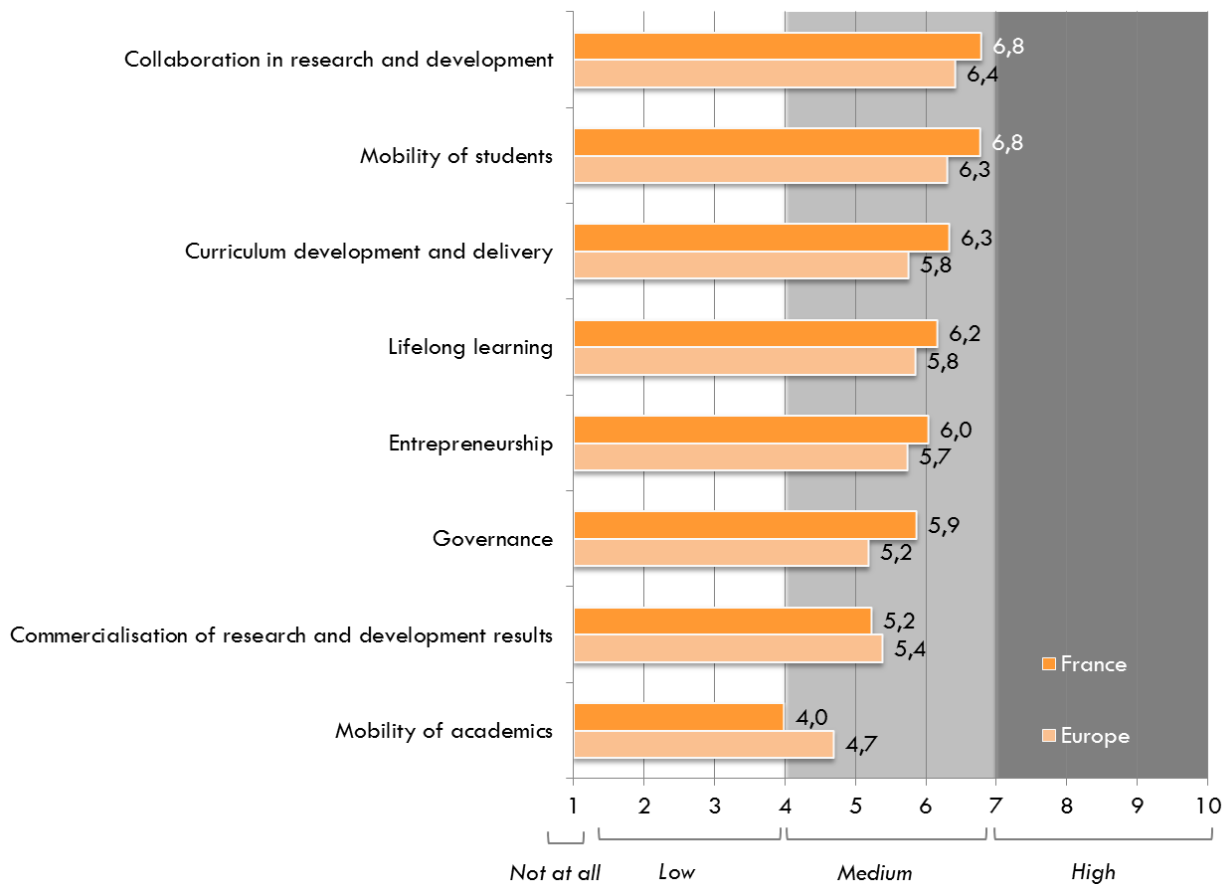
1. the 'innovators' undertaking a higher level for all types of UBC,
2. the 'majority' undertaking a medium level for all types of UBC,
3. the 'laggards' executing generally a low level (or not at all) for all types of UBC.

Relationship among cooperation types

The study identified that HEIs tend to cooperate at a similar level in all UBC types e.g. if they cooperate to a high extent with business in *Collaboration in R&D*, they cooperated to a similar extent for all the types of UBC.

Extent of University-Business Cooperation in France

As answered by HEI management



Extent of cooperation in France

There is a medium degree of development for the different types of UBC in France. *Collaboration in R&D* (6.8), *mobility of students* (6.8) and *curriculum development and delivery* (6.3) are the most developed types, while *mobility of academics* (4.0) remains as the least developed UBC type.

Benchmarking France

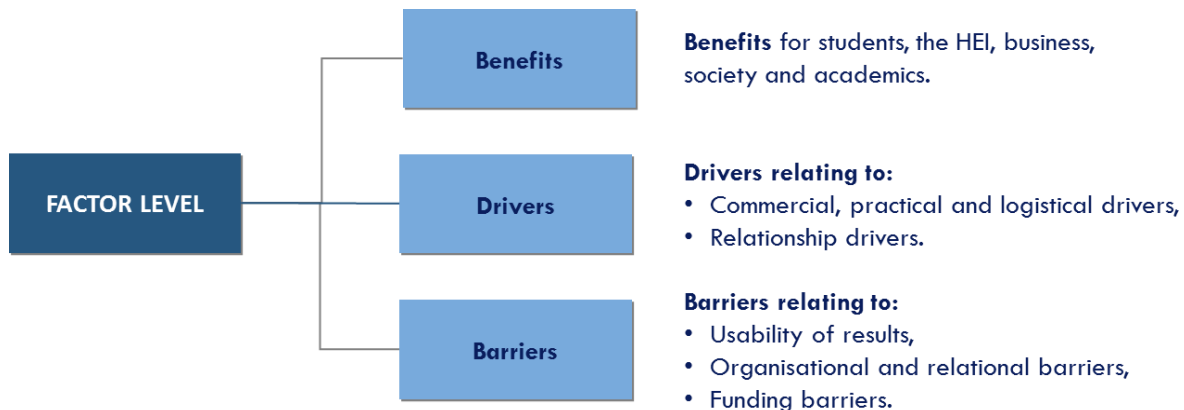
According to the results, French HEI management report a higher extent of UBC than the European average, with only a worse performance in *Commercialisation of R&D results* and *Mobility of academics*.

In comparison with the European average, the extent of development of UBC types is as follows:

	France	Europe
Highly developed	-	-
Moderately developed	<ol style="list-style-type: none"> 1. Collaboration in R&D 2. Mobility of Students 3. Curriculum development and delivery 4. Lifelong Learning 5. Entrepreneurship 6. Governance 7. Commercialisation of R&D results 8. Mobility of Academics 	<ol style="list-style-type: none"> 1. Collaboration in R&D 2. Mobility of Students 3. Curriculum development and delivery 4. Lifelong Learning 5. Entrepreneurship 6. Commercialisation of R&D results 7. Governance 8. Mobility of Academics

Factors influencing the extent of UBC

The coming section will outline the extent to which a number of factors affect cooperation within business in France. These factors have been found to significantly influence cooperation within the European context.



Relationship between barriers and drivers

A barrier provides a hindrance or obstacle to do something, while a driver provides the motivation to do that thing. More specifically, removing a barrier does not create UBC, rather it makes UBC possible. Instead it is the driver that means that an academic cooperate with business. As an example, even when the lack of funds is nominated as the highest barrier (obstacle), owing to the impossibility of cooperating without funds, the presence of funds may not be enough to cooperate if the 'relationship drivers' or perceived *benefits* (motivators) are not developed.

Benefits explained

Benefits are the perceived positive outcome (financial and non-financial) from undertaking UBC for the different stakeholders groups that can potentially participate in UBC. This perception can be a reason to increase or decrease their participation or the involvement of other groups. For example, if academics perceive their own *benefits* to be low, that might cause a low participation in UBC and if they perceive that *benefits* for students are high, they might undertake actions that contribute to students' involvement in UBC.

Barriers hindering UBC in France

Barriers are those obstacles that restrict or inhibit the ability of academics or HEIs to engage in UBC.

The following table explains the extent of relevance of *Barriers* to UBC by academics (green) and HEIs (orange) in France compared to the EU average. The *Barriers* have been factored into 'meta-groups' in order to provide a more strategic understanding.

Barriers (grouped) to cooperation – France vs Europe

As answered by academics and HEI management

Three groups of UBC barriers

Resulting from a factor analysis of the results, *Barriers* can be categorised in the following groups:

1. *usability of results,*
2. *funding barriers and*
3. *relational barriers.*

Usability of results	Extent of relevance (1-10)		Extent of relevance (1-10)	
	France		Europe	
	ACAD	6.5	ACAD	6.1
HEI	6.2	HEI	6.0	

Funding barriers	Extent of relevance (1-10)		Extent of relevance (1-10)	
	France		Europe	
	ACAD	6.3	ACAD	6.5
HEI	6.4	HEI	6.8	

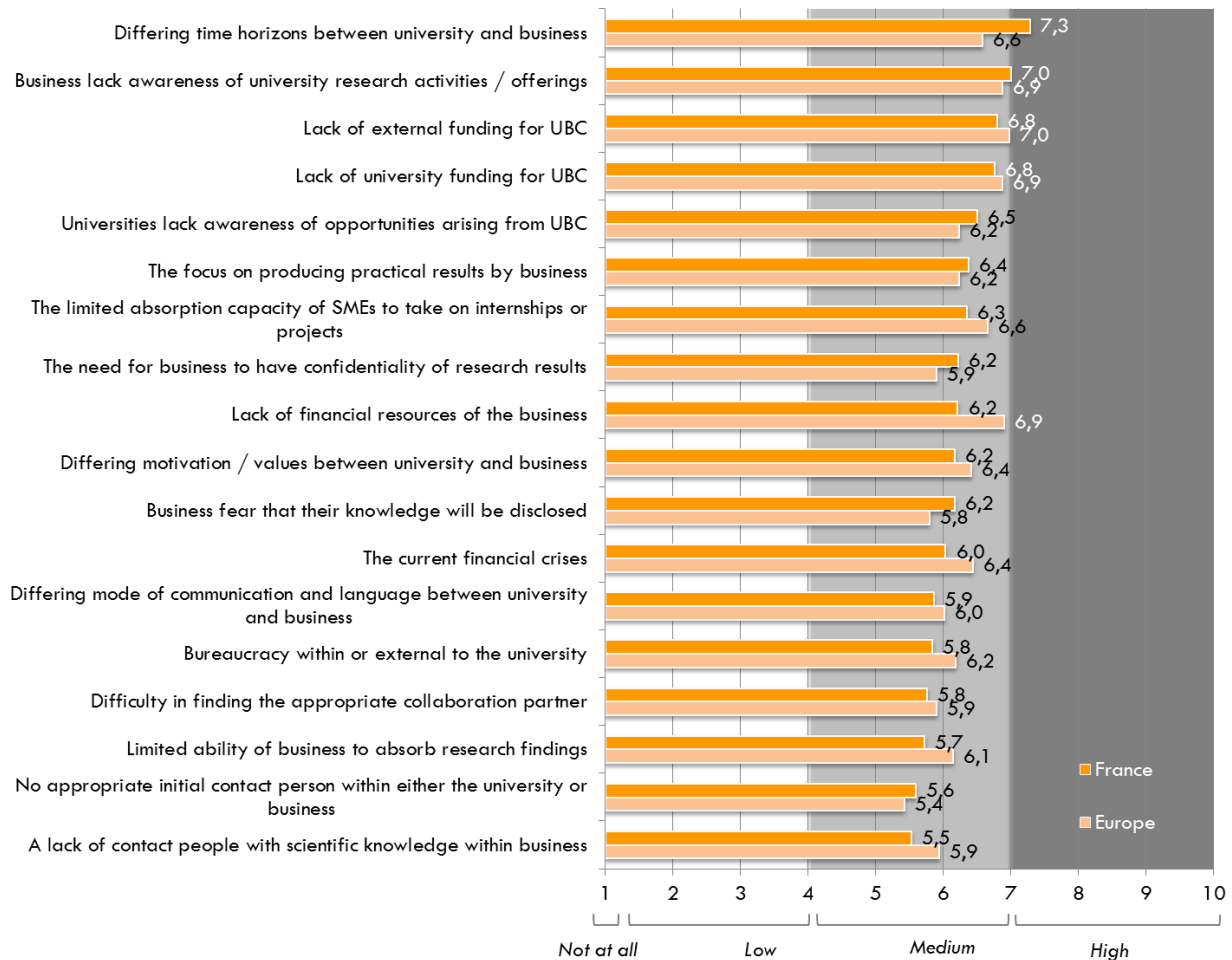
Relational barriers	Extent of relevance (1-10)		Extent of relevance (1-10)	
	France		Europe	
	ACAD	6.5	ACAD	6.4
HEI	6.2	HEI	6.2	

Comparing French HEI representative with French academic responses

French academics assess '*usability of results*' and '*relational barriers*' higher than HEI management, whereas the '*funding barriers*' are slightly higher for HEI management.

Main barriers to cooperation – France vs Europe

As answered by HEI management



Relational and funding barriers are the biggest barriers to UBC in France

HEI managers perceive most barriers of medium importance. The most prominent barriers named by the French HEI managers are relational, such as differences in time horizons (7.3) and lack of awareness of the research from universities (7.0), as well as funding related, like the lack of external funding (6.8) and the lack of university funding for UBC (6.8). However, the lower barriers for HEI management in France are also relational barriers, related to the limitation of business to absorb research outcomes (5.7), the inappropriateness of the initial contact person (5.6) and the lack of people with scientific knowledge within business (5.5).

There are no large differences between France and Europe in the perception of barriers

French HEI management assess most barriers almost as relevant as the European average, being the biggest gaps 'differing time horizons between university and business' (7.3 compared to 6.6) and 'lack of financial resources of the business' (6.2 compared to 6.9).

Comparing barriers in a factor level analysis, usability of results is slightly higher for French HEI management than for their European counterparts. However, funding barriers are perceived to be higher in Europe than in France. For relational barriers there are no differences at all between France and Europe. Analysing differences between academics and HEI management, academics perceive higher barriers than HEI management for usability of results and for relational barriers, and only slightly lower for funding barriers.

Primary barriers to UBC in France	
1.	Differing time horizons between university and business
2.	Business lack awareness of university research activities /offerings.
3.	Lack of external funding for UBC
4.	Lack of university funding for UBC
5.	Universities lack awareness of opportunities arising from UBC

Drivers stimulating UBC in France

Drivers are those factors that encourage academics or HEIs to engage in UBC.

The following table explains the extent of relevance of drivers of UBC by academics (green) and HEIs (orange) in France compared to the EU average. The drivers have been factored into 'meta-groups' in order to provide a more strategic understanding of UBC drivers.

Drivers (grouped) of cooperation – France vs Europe

As answered by academics and HEI management

Relationship drivers	Extent of facilitation (1-10)		Extent of facilitation (1-10)	
	France		Europe	
	ACAD	7.5	ACAD	6.7
HEI	7.7	HEI	7.0	

- Existence of mutual trust,
- Existence of mutual commitment,
- Having a shared goal,
- Understanding of common interest by different stakeholders (e.g. universities; business; individuals; students),
- Prior relation with the business partner,
- Cooperation as effective means to address societal challenges and issues.

Business drivers	Extent of facilitation (1-10)		Extent of facilitation (1-10)	
	France		Europe	
	ACAD	5.9	ACAD	5.6
HEI	6.3	HEI	6.7	

- Employment by business of HEI staff and students,
- Interest of business in accessing scientific knowledge,
- Possibility to access funding / financial resources for working with business,
- Short geographical distance of the HEI from the business partner
- Flexibility of business partner,
- Access to business-sector research and development facilities
- Commercial orientation of the HEI.

Comparing drivers in France and Europe, it can be said that both HEI management and academics in France and Europe agree that *relationship drivers* are greater facilitators for UBC than *business drivers*. This highlights the importance of long term relationships in cooperation activities, where trust and commitment play a key role. The importance of relationship drivers by both French academics and HEI is perceived as

Two groups of UBC drivers

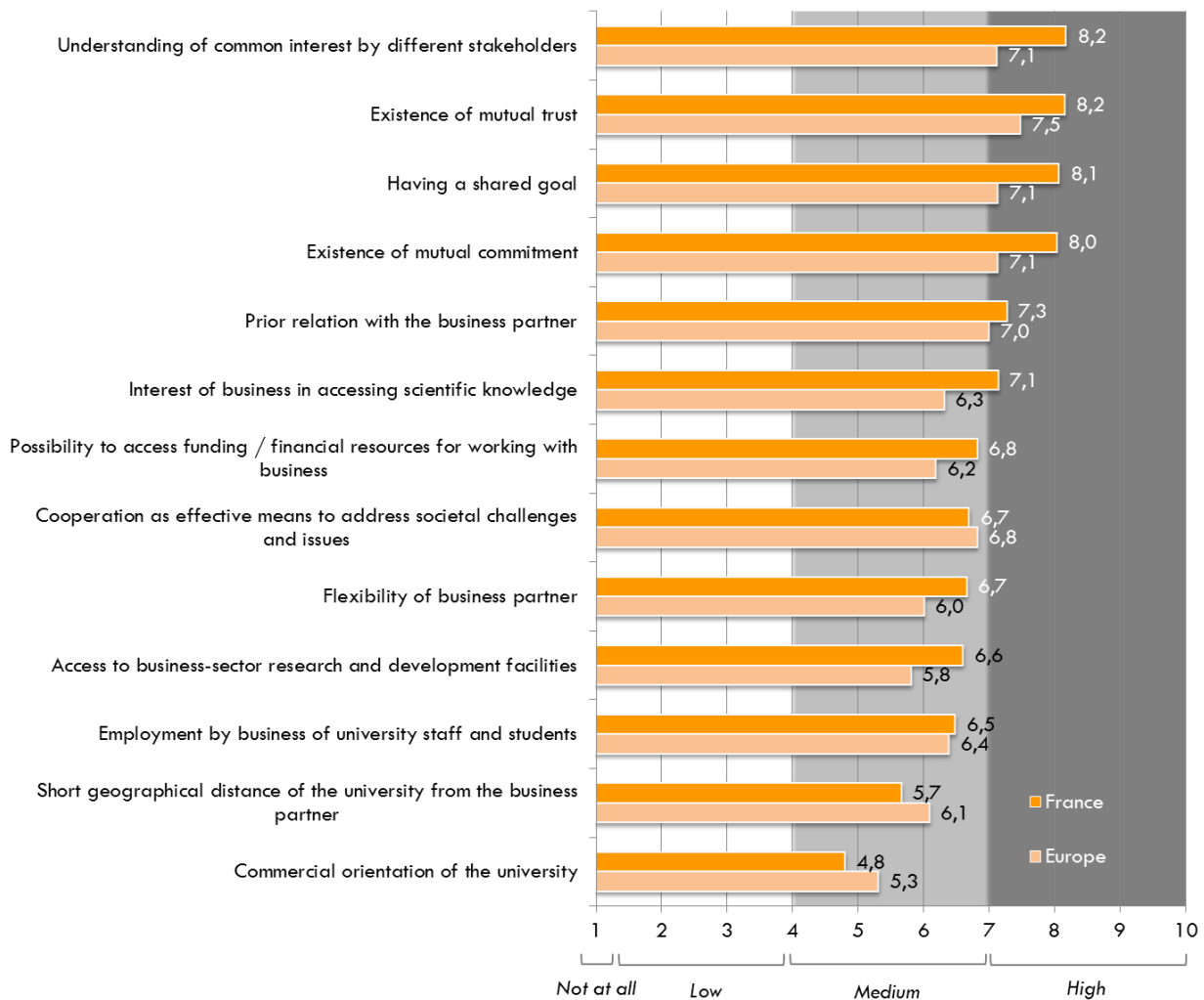
Resulting from a factor analysis of the results, drivers can be categorised in the following groups:

1. *relationship drivers* and
2. *business drivers*.

higher than their European counterparts. The perceptions of business drivers in respect to the European average are higher for French academics and lower for French HEI managers. In all cases, the importance given by HEI managers is higher than the one given by academics.

Main drivers of cooperation – France vs Europe

As answered by HEI management



Relationships drive UBC in France

The HEI management in France perceive the highest drivers of UBC to be *relationship drivers* such as ‘understanding of common interest by different stakeholders’ (8.2), ‘existence of mutual trust’ (8.2) and ‘having a shared goal’ (8.1). Only one *business driver* is developed to a high extent, ‘interest of business accessing scientific knowledge’, which is 0.8 units above the European average. Even when *relationship drivers* are also the most important ones in Europe, France shows a UBC profile even more affected by personal relationships.

Compared to the *relationship drivers*, the graph above portrays that most *business drivers* are seen as considerably less important including, ‘flexibility of business partner’ (6.7), ‘access to business-sector research and development facilities’ (6.6), and ‘employment by business of university staff and students’ (6.5).

Compared with the European average, all the *relationship drivers* are perceived by the French HEI managers to be more important, while some of the *business drivers* are perceived to be lower.

Primary drivers of UBC in France

1. Understanding of common interest by different stakeholders
2. Existence of mutual trust
3. Having a shared goal
4. Existence of mutual commitment
5. Prior relation with the business partner

Benefits of cooperation (academic perspective)

Benefits are the positive results that stakeholders perceive that they obtain from undertaking UBC.

The following table explains the extent of relevance of benefits of UBC by academics (green) in France compared to the EU average. The benefits have been factored into 'meta-groups' in order to provide a more strategic understanding.

Four groups of UBC benefits for academics

Resulting from a factor analysis of the results, Benefits for academics can be categorised in the following groups:

1. benefits for students,
2. benefits for business,
3. benefits for HEIs and
4. personal benefits for academics.

Benefits (grouped) from cooperation – France vs Europe

As answered by academics

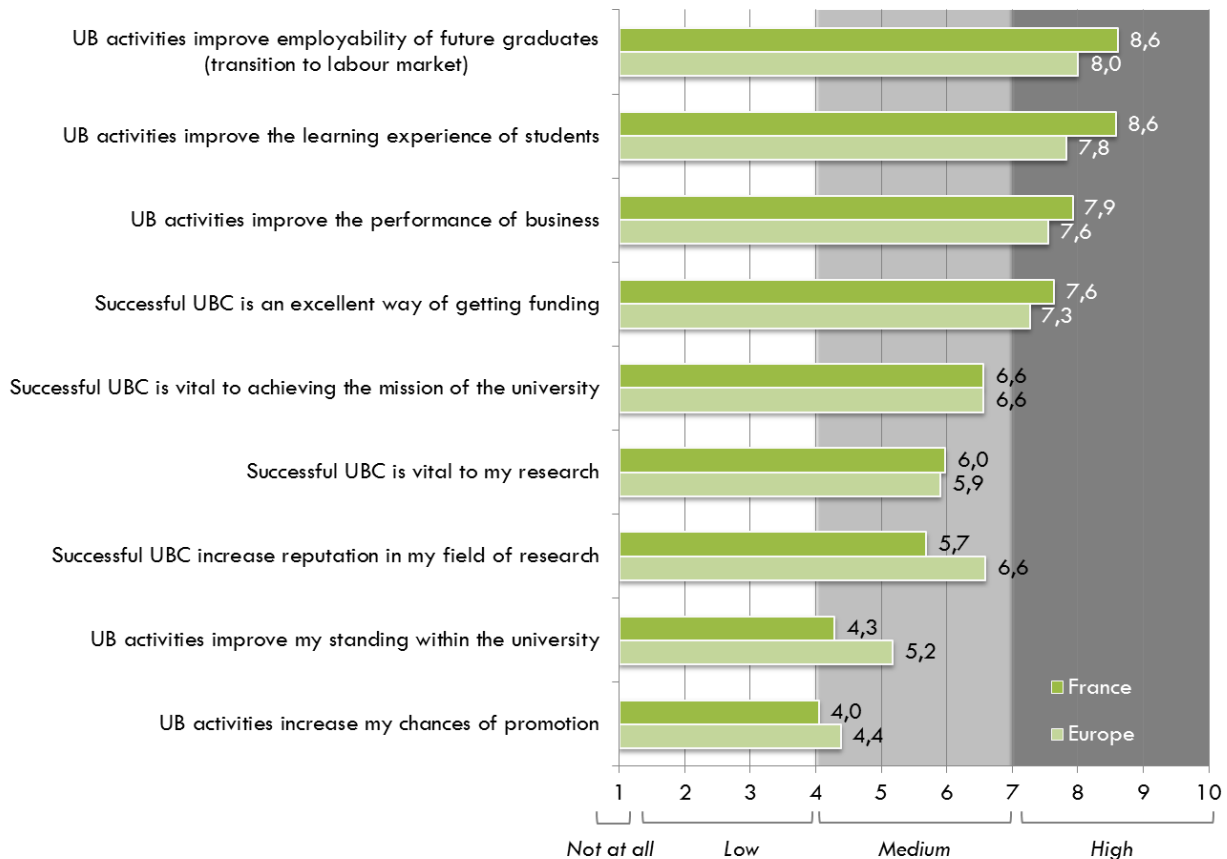
Benefits for students <ul style="list-style-type: none"> • UB activities improve employability of future graduates • UB activities improve the learning experience of students 	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	ACAD	8.6	ACAD	7.9
Benefits for business <ul style="list-style-type: none"> • UB activities improve the performance of business 	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	ACAD	7.9	ACAD	7.6
Benefits for HEIs <ul style="list-style-type: none"> • Successful UBC is vital to achieving the mission of the HEI 	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	ACAD	6.6	ACAD	6.6
Benefits for academics <ul style="list-style-type: none"> • Successful UBC is an excellent way of getting funding • Successful UBC increases my reputation in my field of research • Successful UBC is vital to my research • UB activities improve my standing within the university • UBC activities increase my chances of promotion 	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	ACAD	5.6	ACAD	5.9

French academics perceive the benefits for students and business higher than their European counterparts; the benefits for HEIs at the same level but the benefits for themselves are perceived lower than the European

average. Not seeing the benefit that UBC has for them could be a reason for academics not getting engage with business.

Benefits from cooperation – France vs Europe

As answered by academics



Students get the highest benefit from UBC

Academics in France think that the greatest *benefits* from UBC are for students ('University-Business activities improve employability of future graduates' (8.6) and 'UB activities improve the learning experience of students' (8.6), even to a higher level than the rest of Europe. *Benefits* for businesses are also seen as relevant, 'UB activities improve the performance of business' (7.9).

Benefits of UBC for the HEI are also identified by French academics although at a medium level ('Successful UBC is vital in achieving the mission of the university' - 6.6). Finally, academics rate their own *benefits* as the lowest, lagging far behind the European average.

French academics perceive low self-benefit from UBC activities

Even if academics report that UBC is an excellent way of getting funding (7.6), they perceive their *benefits* with respect to UBC role in their reputation much more negatively (5.7), also regarding their standing within the university (4.3) and their chances of promotion (4.0). Despite literature states that academics are often more driven by non-financial *benefits*, it seems that French academics only see potential financial *benefits* from UBC.

French academics perceive slightly more benefits from UBC than in Europe

French academics see *benefits* of UBC slightly higher than their European counterparts. However, exceptions to this can be seen regarding personal *benefits* in 'successful UBC increase reputation in my field of research' (6.6 compared to 5.7), in 'UB activities improve my standing within the university' (5.2 compared to 4.3), and in 'UB activities increase my chances of promotion' (4.4 compared to 4.0), which shows that UBC is still neither a recognised nor a reputed activity within French HEIs.

Primary benefits of UBC identified by French academics	
1.	UB activities improve employability of future graduates
2.	UB activities improve the learning experience of students
3.	UB activities improve the performance of business
4.	Successful UB cooperation is an excellent way of getting funding
5.	Successful UBC is vital to achieving the mission of the university

Benefits of cooperation (HEI perspective)

Benefits are the advantages that are received by the stakeholders from undertaking UBC.

The following table explains the extent of relevance of perceived benefits of UBC by HEI management (orange) in France compared to the EU average. The benefits have been factored into 'meta-groups' in order to provide a more strategic understanding.

Benefits (grouped) from cooperation – France vs Europe

As answered by HEI management

Benefits for the HEI	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	HEI	8.6	HEI	7.7
<ul style="list-style-type: none"> • UBC is vital to achieving the mission of the HEI. 				

Benefits for students	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	HEI	8.8	HEI	8.5
<ul style="list-style-type: none"> • UBC increases skills and graduate development 				

Benefits for business and society	Extent of importance (1-10)		Extent of importance (1-10)	
	France		Europe	
	HEI	7.1	HEI	7.3
<ul style="list-style-type: none"> • UBC has beneficial effects on the local industry • UBC improves regional productivity • UBC creates local employment • UBC increases local GDP and disposable income • UBC creates a range of beneficial social and recreational benefits 				

HEI managers from France perceive benefits for the HEI and for students higher than the European

Three groups of UBC benefits for HEIs

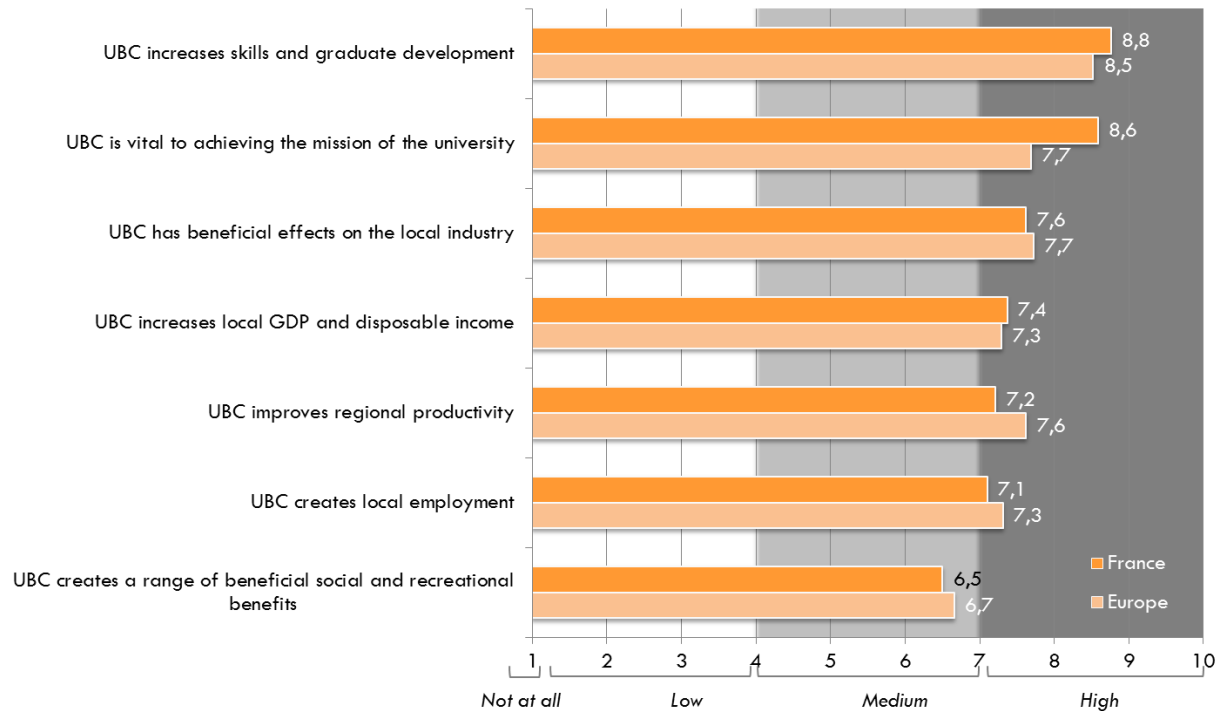
Resulting from a factor analysis of the results, Benefits for HEIs can be categorised in the following groups:

1. benefits for students,
2. benefits for business and society, and
3. benefits for HEIs.

average, while the benefits for the business and the society are perceived at a lower level.

Benefits from cooperation – France vs Europe

As answered by HEI management



French HEI managers state that students get the most benefit from UBC

HEI management in France perceive most *benefits* from UBC to be of a high extent, being '*benefits for students*' the highest ones ('UBC increases skills and graduates development' – 8.8), closely followed by '*benefits for the HEI*' ('UBC is vital to achieving the mission of the university' – 8.6). '*Benefits for businesses*' are the less relevant for HEI management, stating that 'UBC has beneficial effects on the local industry' (7.6), that 'UBC increases local GDP and disposable income' (7.4) and that 'UBC improves regional productivity' (7.2). Finally, social and recreational *benefits* are seen as the less relevant ones for HEI management (6.5).

Higher benefit perceived from UBC for students and HEIs by French HEI management than in Europe

Comparing the results to the European average, it can be stated that French HEI management see

considerably higher *benefits* from UBC for HEI than in Europe, slightly higher for students and slightly lower for business and society. Thus, no large differences can be observed between France and Europe, finding the biggest gaps in the perception of the *benefits* for achieving the mission of the HEI (0.9 difference), as well as in the *benefits* for regional productivity (0.4 difference).

Primary benefits of UBC identified by French HEI management

1. UBC increases skills and graduate development
2. UBC is vital to achieving the mission of the university
3. UBC has beneficial effect on the local industry
4. UBC increases local GDP and disposable income
5. UBC improves regional productivity

Benchmark

...universities in your region!

Assisting governments and universities improve University-Business Cooperation

Using the State of European University-Business Cooperation study results, decision makers, managers and practitioners involved in university-business cooperation can benefit from receiving:

1. a benchmark in terms of UBC of your organisation, institution, sector, region or country against others.
2. a clear picture of progress in efforts to increase university-business cooperation,
3. proactive areas of focus for increasing UBC,
4. the required information to advance university-business cooperation within their region or institution

Provided to your organisation in the form of a report and/or presentation, a state of the UBC report dedicated to your organisation can assist with developing greater financial and other *benefits* from University-Business Cooperation



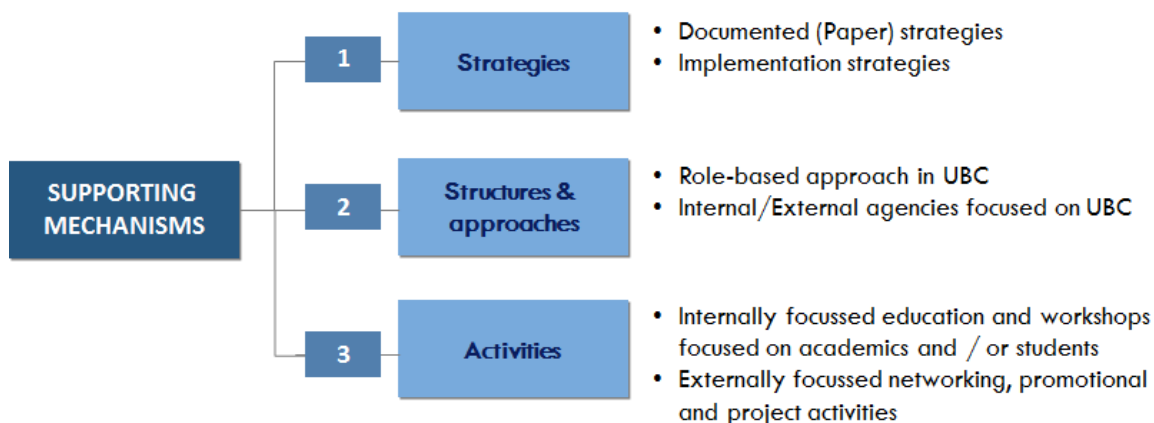
...your university!

Please contact davey@apprimo.com for more information.

Supporting mechanisms for UBC

Supporting mechanisms are interventions designed to support the development of cooperation between HEIs and business.

The coming section will outline the extent to which UBC *supporting mechanisms* are developed in France. The development of these mechanisms has been found to significantly influence cooperation within the European context.



Supporting mechanisms explained

The UBC *supporting mechanisms* constitute the ‘action-level’, where all stakeholders need to focus their efforts when they want to influence the extent of UBC.

The specific role and importance of *supporting mechanisms* at HEIs has long been recognised in both practice and literature. They are often recognised in multiple ways including (i) in a variety of different names (e.g. interventions, enablers), (ii) captured in a model (e.g. ecosystem, regional innovation system) or (iii) known as individual elements (e.g. activities, infrastructure).

A key finding of the *State of European UBC Report* was that the extent of development of the *supporting mechanisms* was found to significantly affect the extent of general activity between HEIs and business. The nature of the *supporting mechanisms* in terms of (i) responsibility, (ii) expense and (iii) time to impact are summarised in the table below.

	Primary responsibility for the mechanism	Secondary responsibility	Expense	Time to impact
Strategies	HEI management	All UBC stakeholders	Low	Long term
Structures and approaches	HEI / regional Govt. and agencies	Regional UBC stakeholders	Agencies: High Personnel: Med-high	Agencies: Long Personnel: Medium
Operational activities	Knowledge transfer Professionals	Regional UBC stakeholders	Medium	Short-medium term

Strategies for UBC in France

Strategies are the drafting and implementation of cross-functional decisions by a HEI that will enable it to achieve its long-term objectives with respect to UBC.

The primary responsibility for the creation of UBC *strategies* is with HEI management as a strategic instrument is usually created by decisions made at a HEI board level.

Two groups of UBC strategies

Resulting from a factor analysis of the results, strategies can be categorised in the following groups:

1. *Documented strategies*
2. *Implementation and motivation strategies*

Development of UBC Strategies (grouped) – France vs Europe

As answered by HEI management

Documented (Paper) strategies	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	7.5	HEI	6.8
<ul style="list-style-type: none"> • 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. 				

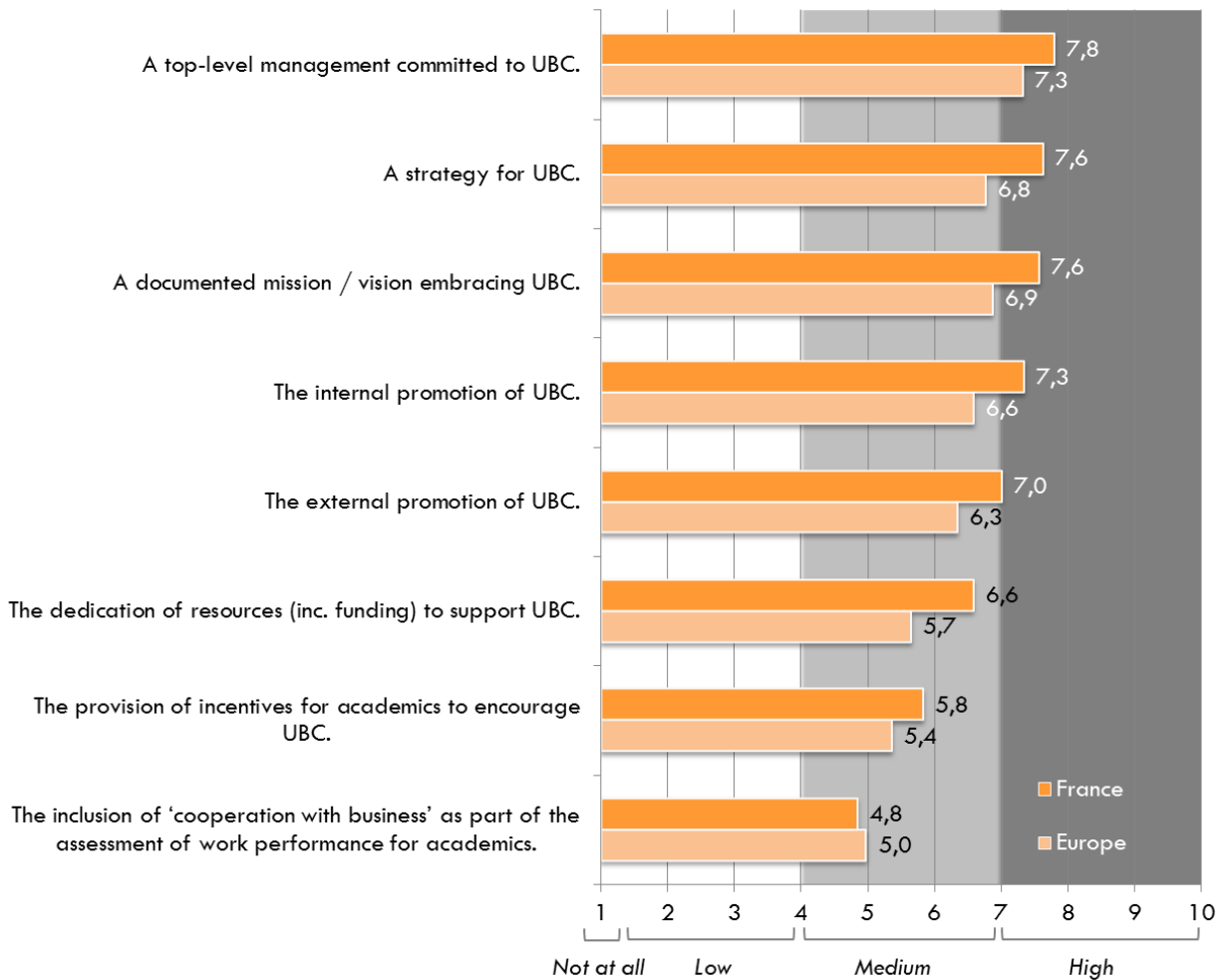
Implementation and motivation strategies	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	5.8	HEI	5.4
<ul style="list-style-type: none"> • The dedication of resources (inc. funding) to support University-Business cooperation, • The provision of incentives for academics to encourage University-Business cooperation, • The inclusion of 'cooperation with business' as part of the assessment of work performance for academics. 				

On a factored level, *documented strategies* are considerably more developed in France than *implementation and motivation strategies*. Also, there are some differences between France and Europe, with perception of development in France being higher than in the rest of Europe, especially in *documented strategies* (0.7 more developed). However, according to these results it seems that both

in France and in Europe there is an official commitment of the HEI management to UBC and UBC is promoted both internally and externally. Despite this, there is a much lower level of *implementation and motivation strategies* for UBC, such as incentives or the inclusion of UBC in the academics assessment. For this reason, there is a need to bring the *documented strategies* into real actions to further develop UBC.

Development of UBC strategies – France vs Europe

As answered by HEI management



Documented strategies are the most developed strategies in France

The most developed UBC Strategies in France reported by French HEI management, are 'a top-level management committed to UBC' (7.8) 'a strategy for UBC' (7.6) and a 'a documented mission/vision embracing UBC' (7.6), which are required but not enough for UBC to take place. On the other extreme, similar to their Spanish neighbours, the strategies that allow to transform the commitment into actions and motivations are the least developed ones: 'the inclusion of cooperation with business as part of the assessment of work performance for academics' (4.8), 'the provision of incentives for academics to encourage UBC' (5.8) and 'the dedication of resources, incl. funding, to support UBC' (6.6).

Strategies are more developed in France than in Europe

Comparing France to the European average, France shows a higher extend of implementation of UBC strategies, with most items showing at least 0.4 points difference above Europe and also most of them being developed at a high level. The only statement where

the value is higher in Europe than in France is 'the inclusion of cooperation with business as part of the assessment of work performance for academics' (4.8 for France and 5.0 for Europe), revealing a clear area of improvement.

Highly developed	<ol style="list-style-type: none"> 1. A top-level management committed to UBC 2. A strategy for UBC 3. A documented mission/vision embracing UBC 4. The internal promotion of UBC 5. The external promotion of UBC
Moderately developed	<ol style="list-style-type: none"> 3. The dedication of resources (incl. funding) to support UBC 4. The provision of incentives for academics to encourage UBC 5. The inclusion of 'cooperation with business' as part of the assessment of work performance for academics

Structures and approaches for UBC in France

UBC *structures and approaches* are mechanisms created as a result of top-level strategic decisions within (or related to) a HEI. They are enablers of UBC and include the creation or development of positions or agencies put in place in order to promote, develop or implement UBC with a mid to long term focus. They can be created within the HEI or externally, as a bridge between the HEI and business. *Structures and approaches* usually involve significant investment and can be funded by the HEI, the government, business or a combination of these sources.

Two groups of UBC structures and approaches

Resulting from a factor analysis of the results, *Structures and approaches* can be categorised in the following groups:

1. *the creation and /or expansion of positions (personnel) and*
2. *agencies (units of focus).*

Development of UBC structures and approaches (grouped) – France vs Europe

As answered by HEI management

Roles-based approaches in UBC	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	6.3	HEI	5.4
<ul style="list-style-type: none"> • 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. 				

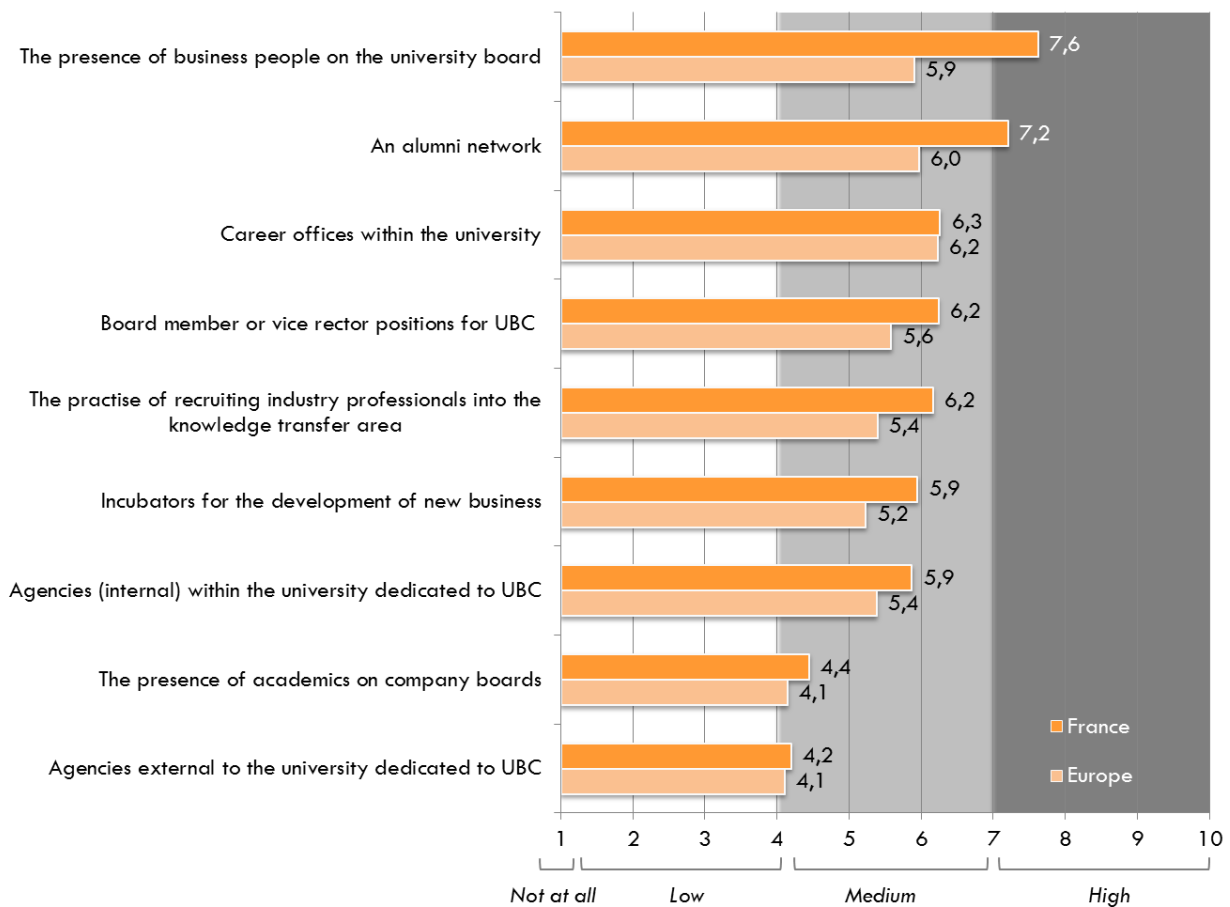
Internal/External agencies focused on UBC	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	5.7	HEI	5.3
<ul style="list-style-type: none"> • Career offices within the HEI, • Agencies external to the HEI dedicated to UBC • Agencies (internal) within the HEI dedicated to UBC, • Incubators for the development of new business. 				

While *role-based approaches* are considerably more developed in France than in the rest of Europe (6.3 compared to 5.4), *internal/external agencies focused on UBC* are only slightly more developed in France (5.7 to 5.3). The development of agencies to support the UBC processes is characteristic of a very active

UBC environment and a long term commitment by the UBC actors, due to the financial investment required. However, once structures are put in place, their efficient running must be guaranteed, as a real measure of success.

Development of UBC structures and approaches –France vs Europe

As answered by HEI management



Role-based approaches are the most developed ones in France

The extent of development of the UBC structures and approaches in France shows that *role-based approaches in UBC* are significantly more developed than *internal/external agencies focused on UBC* (6.3 compared to 5.7). This is supported by the result shown in the graph above where ‘the presence of business people on university board’ (7.6) and ‘an alumni network’ (7.2) have the highest scores and are developed at a high level.

Higher development of structures and approaches in France than in Europe

Business people on company boards and alumni networks are much more developed in France than in the rest of Europe (7.6 compared to 5.9 and 7.2 compared to 6.0). Only ‘career offices within the university’ and ‘agencies external to the university dedicated to UBC’ are almost at the same level (0.1 points difference between France and Europe). Despite France is above Europe in almost all structures and approaches, there is room for improvement especially in ‘internal/external agencies focused on UBC’, which are essential to increase UBC.

High developed structures and approaches	<ol style="list-style-type: none"> 1. The presence of business people on the HEI board 2. An alumni network
Medium developed structures and approaches	<ol style="list-style-type: none"> 3. Career offices within the university 4. Board member or vice rector positions for UBC 5. The practise of recruiting industry professionals into the knowledge transfer area 6. Incubators for the development of new business 7. Agencies (internal) within the HEI dedicated to UBC 8. The presence of academics on company boards 9. Agencies external to the university dedicated to UBC

Operational activities for UBC in France

Operational activities are actions of a practical and immediate nature undertaken by actors within HEIs, governments, regional agencies and business to create and support UBC. *Operational activities* are usually the *supporting mechanisms* that require the lowest financial investment and the lowest commitment and whose scope and volume can be more easily described, measured and managed.

Three groups of UBC operational activities

Resulting from a factor analysis of the results, *Operational activities* can be categorised in the following groups:

1. *Internally focused education and workshops focused on academics*
2. *Internally focused education and workshops focused on students*
3. *Externally focused networking, promotional and project activities*

Development of UBC operational activities (grouped) – France vs Europe

As answered by HEI management

Internally focused education and workshops focused on <u>academics</u>	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	5.1	HEI	5.3
<ul style="list-style-type: none"> • Workshops, information sessions and forums for University-Business collaboration targeting academics, • Entrepreneurship education offered to academics. 				

Internally focused education and workshops focused on <u>students</u>	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	6.6	HEI	6.3
<ul style="list-style-type: none"> • Entrepreneurship education offered to students. 				

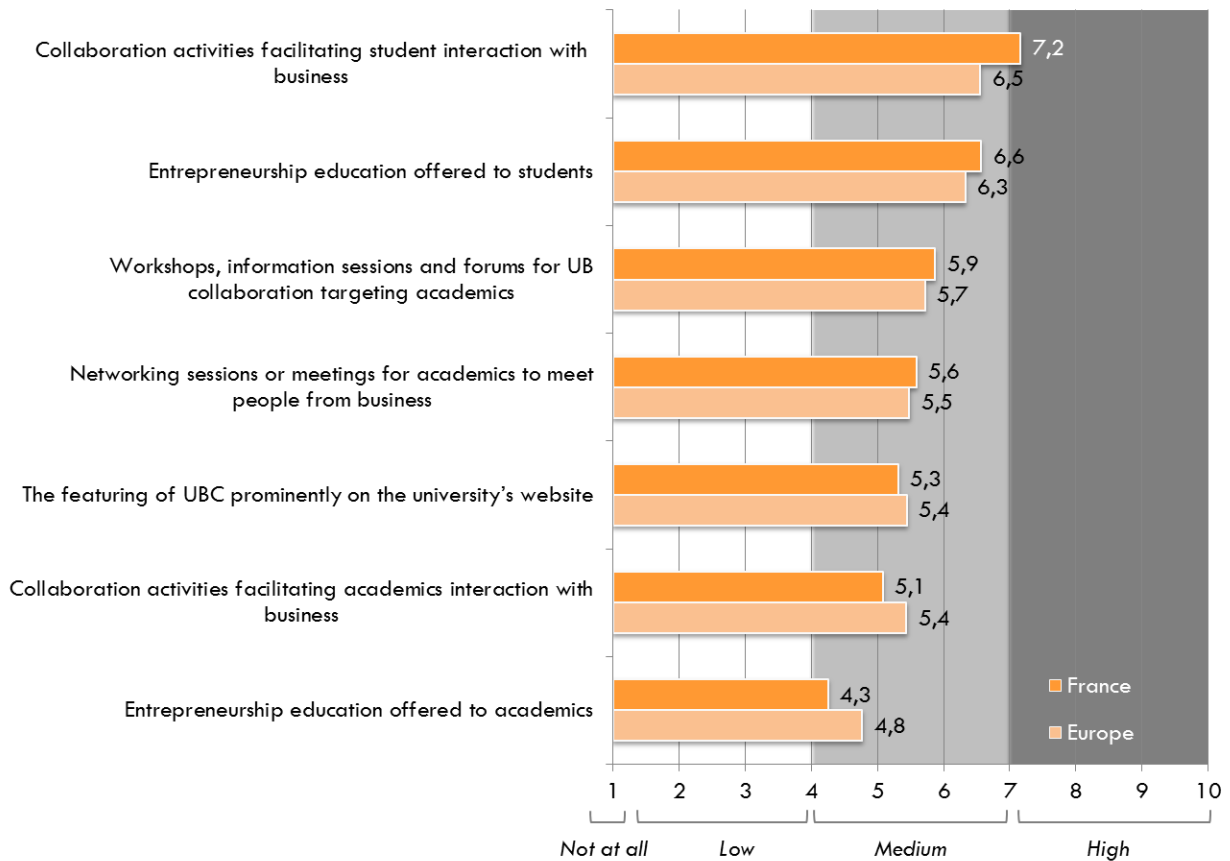
Externally focused networking, promotional and project activities	Extent of development (1-10)		Extent of development (1-10)	
	France		Europe	
	HEI	5.8	HEI	5.7
<ul style="list-style-type: none"> • Networking sessions or meetings for academics to meet people from business, • The featuring of University-Business cooperation prominently on the HEI's website, • Collaboration activities facilitating student interaction with business, • Collaboration activities facilitating academics interaction with business. 				

On a factored level, it can be observed that French HEI management rate the development of the three activity groups similar to the European average. The highest difference is found in the group '*internally focused education and workshop focused on students*'. (6.6 in France compared to 6.3 in Europe), which is also the most developed group and therefore it shows the big relevance of students in UBC. This aligns with

the result of the *benefits* section, where the *benefits* for students were consider to be very high. *Internally focused education and workshops focused on academics* is slightly less developed in France than in Europe, unlike *externally focused networking, promotional and project activities*, which is slightly more developed in France than in Europe.

Development of UBC operational activities – France vs Europe

As answered by HEI management



Almost all operational activities are medium developed in France

'Collaboration activities facilitating student interaction with business' (7.2) is perceived as the most developed activity and it is the only with a high development, also with the highest difference in comparison to the European average (7.2 compared to 6.5). It is followed by 'entrepreneurship education offered to students' (6.6) and 'workshops, information sessions and forums for UBC targeting academics' (5.9).

The least developed activity is 'entrepreneurship education offered to academics' (4.3), lagging behind Europe, and due to the lack of entrepreneurship courses or programmes for academics in French HEIs. 'The featuring of UBC prominently on the university's website' (5.3) and 'collaborations activities facilitating academics interaction with business' (5.1) are also some of the least developed activities, pointing out the lack of focus of UBC activities on academics to raise their interest on the topic.

In comparison to the European average, France performs at a similar level. However, France has a lower performance in '*internally focused education and workshops focused on academics*', showing an area for improvement. This lack of education and workshops

could be one of the reasons why French academics do not see their self-benefit from UBC.

Highly developed	1. Collaboration activities facilitating student interaction with business
Moderately developed	2. Entrepreneurship education offered to students
	3. Workshops, information sessions and forums for UBC targeting academics
	4. Networking sessions or meetings for academics to meet people from business
	5. The featuring of UBC prominently on the university's website
	6. Collaboration activities facilitating academic interaction with business
	7. Entrepreneurship education offered to academics

The UBC Ecosystem

The UBC ecosystem is a model for understanding the important elements affecting University-Business Cooperation (UBC)

Model created by

Todd Davey, Victoria Galan Muros, Arno Meerman

Model validation partners

Science-to-Business Marketing Research Centre, UIIN, aprimo UG

Co-created by

105 practitioners validating the model in their work.

The model relationships have been scientifically validated by the Science-to-Business Marketing Research Centre

1 Indirect outcome (society)

2 Direct outcome (actors)

3 University-Business Cooperation (UBC) types

4 Influencing factors

5 Supporting mechanisms

6 Key stakeholders

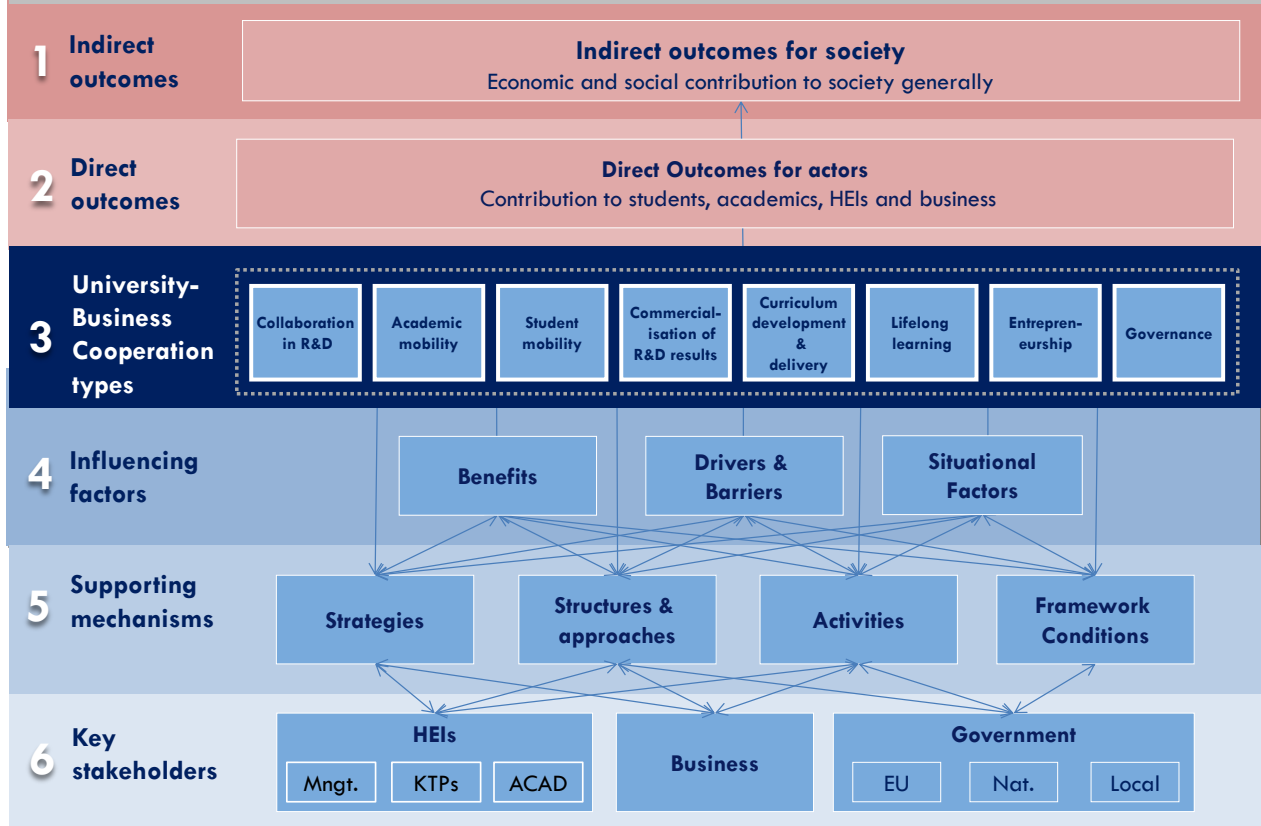
Are you...?

- ...attempting to develop UBC within your organisation?
- ...repetitively thinking about the factors affecting cooperation between university and business as well as their how they relate to each other?
- ...trying to foster open innovation involving universities?
- ...continually confronted with the challenge of creating better relationships between HEIs and business?
- ...a revolutionary trying to match researchers with business partners?

... if you answered 'yes' to any of these questions, you are not alone: this model was developed by people like you for these reasons



UBC ECOSYSTEM MODEL > Detailed



6 Ecosystem Elements (and their key findings)

1. UBC is vital in creating a knowledge society
2. UBC provides direct outcomes for students, HEIs, academics and businesses
3. Those UBC types with more direct, measurable, and promotable *benefits* are the most developed (e.g. *Collaboration in R&D*, *Mobility of students*)
- 4a. *Situational factors* (e.g. age, faculty) help to explain UBC but there is little that can be implemented from these results
- 4b. Lack of funding and excess of bureaucracy at all levels (HEI, national, European) are the highest *Barriers* to UBC
- 4c. Personal relationships drive UBC. It's a people game!
- 4d. Perceptions of high personal *Benefits* & incentives are motivators of UBC
5. The creation and development of *Supporting mechanisms* (especially those with the highest impact) are critical for UBC
6. In the UBC ecosystem, the multiple actors need to work cooperatively and in a coordinated manner

UBC ECOSYSTEM Layers explained		All aspects are measurable (benchmarking)
1 Indirect Impact	Impact level	How it impacts society
2 Direct outcomes	Outcome level	How it affects stakeholders
3 University-Business Cooperation types	Result level	What occurs
4 Influencing factors	Factor level	What you have to consider
5 Supporting mechanisms	Action level	What you can do
6 Key stakeholders	Stakeholder level	

Please go to <http://ub-cooperation.eu/pdf/UBCECO.pdf> for more information or contact davey@apprimo.com.

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