

State of University- Business Cooperation FINLAND

Business Perspective

Study on the cooperation between
higher education institutions and
public and private organisations



The State of Finnish University-Business Cooperation: the business perspective

Partners



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Executive summary

Summary

This report aims at contributing to our understanding of the business perspective on university-business cooperation (UBC) in Finland. Examining the perceptions of a wide range of businesses provides positive signs for the future, with 100% of Finnish businesses that already established relationships with universities planning to maintain or increase their cooperation in the future. Yet, more can be done, for example in supporting businesses with the development of activities that facilitate their cooperation efforts in education and training, as well as strategies to bridge the existing organisational and knowledge differences between Finnish businesses and universities.

About the study

The results presented in this report reflect the perceptions of business representatives in Finland with respect to cooperation between universities and business. Data was collected by means of an online survey sent out via email to a European business database that was developed from publicly available information for 33 countries during October-November 2016, leading to a total of 89 Finnish business responses. The study measured the perceptions of respondents with respect to their businesses and cooperation efforts.

University-Business Cooperation

Finnish businesses engage mostly in research related cooperation, with collaboration in R&D and

consulting being the most developed UBC activities. Regarding education activities, mobility of students is the most developed one. Particularly low are the activities of curriculum co-design and dual education programmes. Valorisation and management activities are also significantly less developed with more than 40% of businesses in Finland not undertaking any of them.

Finnish businesses perceive themselves as the main actors reaching out for collaboration, indicating that UBC in Finland typically starts from an identified need arising from the business. They also see individual academics and university management as proactive initiators of UBC. On the contrary, Finnish representatives identify intermediaries (both internal and external) as those stakeholders that less often initiate UBC, revealing that the market of intermediaries specialising in UBC is still relatively undeveloped in the country.

It is them, not us

The strongest barriers identified by respondents relate to the universities. Their focus on producing scientific outcomes and their lack of people with business knowledge hinders cooperation from the business perspective. Additionally, the cultural differences such as differing time horizons and differing motivations between universities and businesses also represent significant barriers. Finnish businesses are interested in UBC activity, but perceive that HEIs are not as forthcoming and active as they could be.

NOTE: This report provides a business perspective on university-business cooperation UBC, drawing on a survey of European higher education institutions, academics and 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 as to areas that require future development.

Relationships matter

While funding to undertake cooperation emerges as one of the top five facilitators, relational factors are much more relevant. It is the existence of trust, prior relations with a partner, a shared goal and mutual commitment that facilitate cooperation. These results indicate that any effort towards enabling cooperation between businesses and universities should focus on relationship development as the key success factor.

Pragmatic approach to UBC

Finnish businesses engage in cooperation with HEIs driven by innovation and competitiveness related motivations. They also seek to obtain funding and financial resources. Getting access to new technologies, knowledge and discoveries at an early stage and enhancing the innovation capacity as well as obtaining a customised solution stimulate cooperation in the Finnish context. Generating societal impact through collaboration is not considered a priority for Finnish businesses.

Underdeveloped structural mechanisms

Strong emphasis has been placed on the development of UBC supporting mechanisms by universities; yet little is known about such mechanisms in the business realm. This study indicates that strategies are the most developed mechanisms, with two thirds of the respondents

indicating a committed top-level management and one third indicating the existence of a strategy for collaborating with HEIs being present at the their companies.

Additionally, some operational supporting mechanisms are implemented by more than a third of the business respondents, including networking sessions for employees to interact with academics and presentations, lectures or mentoring within universities. However, dedicated structures or activities, are less adopted by the businesses represented in the sample, with co-working spaces, joint laboratories and adjunct positions available within university for business people among the less developed mechanisms.

Not our responsibility

Finnish businesses have a positive view of their abilities in undertaking cooperation. In particular, they state they have the capability to absorb knowledge and technology from universities and the sufficient university contacts and relations to approach for collaboration.

Yet, although claiming to be the initiator of UBC, Finnish businesses find themselves least inclined towards taking the responsibility to collaborate with universities in both education and research.

Introduction

About the study

The study focusses on the cooperation between higher education institutions (HEIs) and public and private organisations in the 28 European Union Member States and 5 associated countries.

The State of European university-business cooperation (UBC) study is executed for the DG Education and Culture at the European Commission (EAC/10/2015) by a consortium led by the Science-to-Business Marketing Research Centre (S2BMRC), in Germany from January 2016 until November 2017.

The aim of the study is to get a more profound, comprehensive and up to date understanding of the state of UBC in Europe: what is the state of play of a wide range of UBC activities in the different countries, what are the main drivers and barriers for the different stakeholders and at what levels; what is the regulatory framework and socio-economic conditions and what kind of measures/initiatives exist on a national level to support the development of UBC. The project investigates UBC from the perspective of both university and business.

Main activities

The main components of the project were a series of expert interviews with 23 recognised UBC experts, 52 good practice case studies, a UBC policy and indicators review as well as a major quantitative survey of stakeholders within both HEIs and business. The survey was translated into 25 languages and sent to all registered European HEIs (numbering over 3,000) in the 33 countries during October-November 2016. Through this, a final

sample of 17,410 representatives from within HEIs and business was achieved. This makes the study the largest international study into cooperation between HEIs and business yet completed.

Why care about university-business cooperation?

- UBC is considered to be the engine towards knowledge-based societies and economies
- UBC is specially needed in the European context, threatened by increased global competition, with ongoing economic and social problems and high levels of youth unemployment
- UBC helps to create a more connected and functioning relationship between government, business and HEIs, which is at the core of EU funding schemes, such as Horizon 2020 and Erasmus+.
- UBC direct outcomes include:
 - improving the competitiveness of business,
 - increasing the relevance and innovativeness of research and teaching in HEIs,
 - improving the future job prospects of students and graduates,which can in the longer term:
 - create jobs,
 - stimulate economic growth,
 - increase living standards,
 - reduce hindrances to good living.

Study Objectives

The specific objectives for the study are:

- Chart the current state of play and provide an in-depth analysis of UBC in the countries covered by this study, from the HE and business perspectives
- Deliver 50 case studies of UBC (representative sample, balanced distribution among countries and organisations, balanced distribution of HEI and business led cases);
- Review indicators measuring UBC and propose possible scenarios for the implementations of UBC monitoring in Europe;
- Provide policy conclusions and recommendations for the furthering of UBC and the best approaches to take.



UNIVERSITY-BUSINESS
COOPERATION IN EUROPE

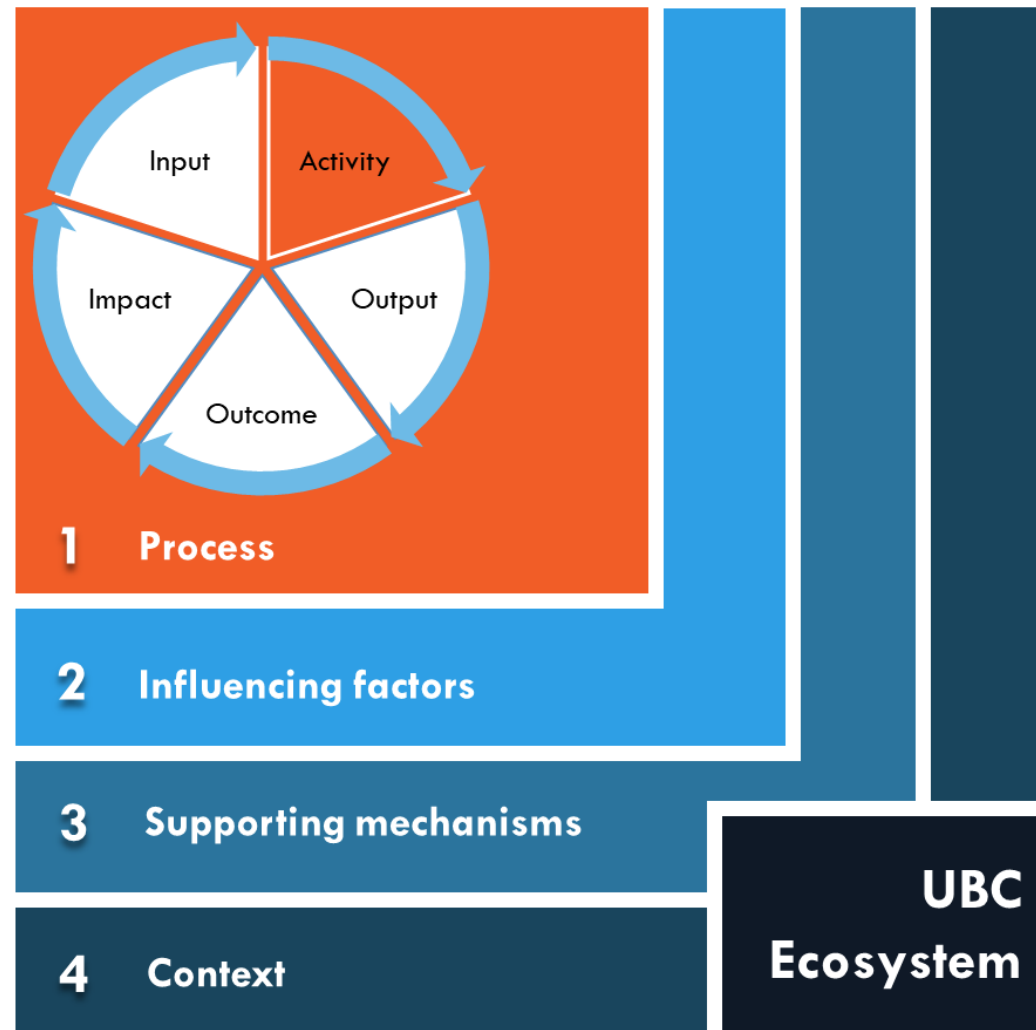
UBC activities

UBC Ecosystem Framework™

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

The UBC Ecosystem Framework possess a number of interrelated elements including the process of undertaking UBC, factors that are influencing UBC, mechanisms supporting UBC and finally the context in which UBC 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. (2017) *The UBC Ecosystem: Putting together a comprehensive framework for university-business cooperation*. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-017-9562-3>

UBC activities

Fourteen UBC activities are recognised, commonly categorised into the areas of education, research, valorisation and management.

Area	Activities
Education	<ol style="list-style-type: none">1. curriculum co-<u>design</u>2. curriculum co-<u>delivery</u> (e.g. guest lectures)3. mobility of students (i.e. student internships/placements)4. dual education programmes (i.e. part theory, part practical)5. lifelong learning for people from business (e.g. executive education, industry training and professional courses)
Research	<ol style="list-style-type: none">6. joint R&D (incl. joint funded research)7. consulting to business (incl. contract research)8. mobility of professionals (i.e. temporary mobility of academics to business and vice versa)
Valorisation	<ol style="list-style-type: none">9. commercialisation of R&D results (e.g. licencing/patenting)10. academic entrepreneurship (e.g. spin offs)11. student entrepreneurship (e.g. start-ups)
Management	<ol style="list-style-type: none">12. governance (e.g. participation of academics on business boards and businesspeople participation in university board)13. shared resources (e.g. infrastructure, personnel, equipment)14. industry support (e.g. endowments, sponsorship and scholarships)

Development of UBC activities

Finnish businesses engage mostly in research UBC activities, like joint R&D (6.1) and consulting (4.0).

As for education related UBC, mobility of students (5.0) is the most developed UBC activity. Internships provide Finnish businesses of all sizes a straightforward way to engage in collaboration with universities.

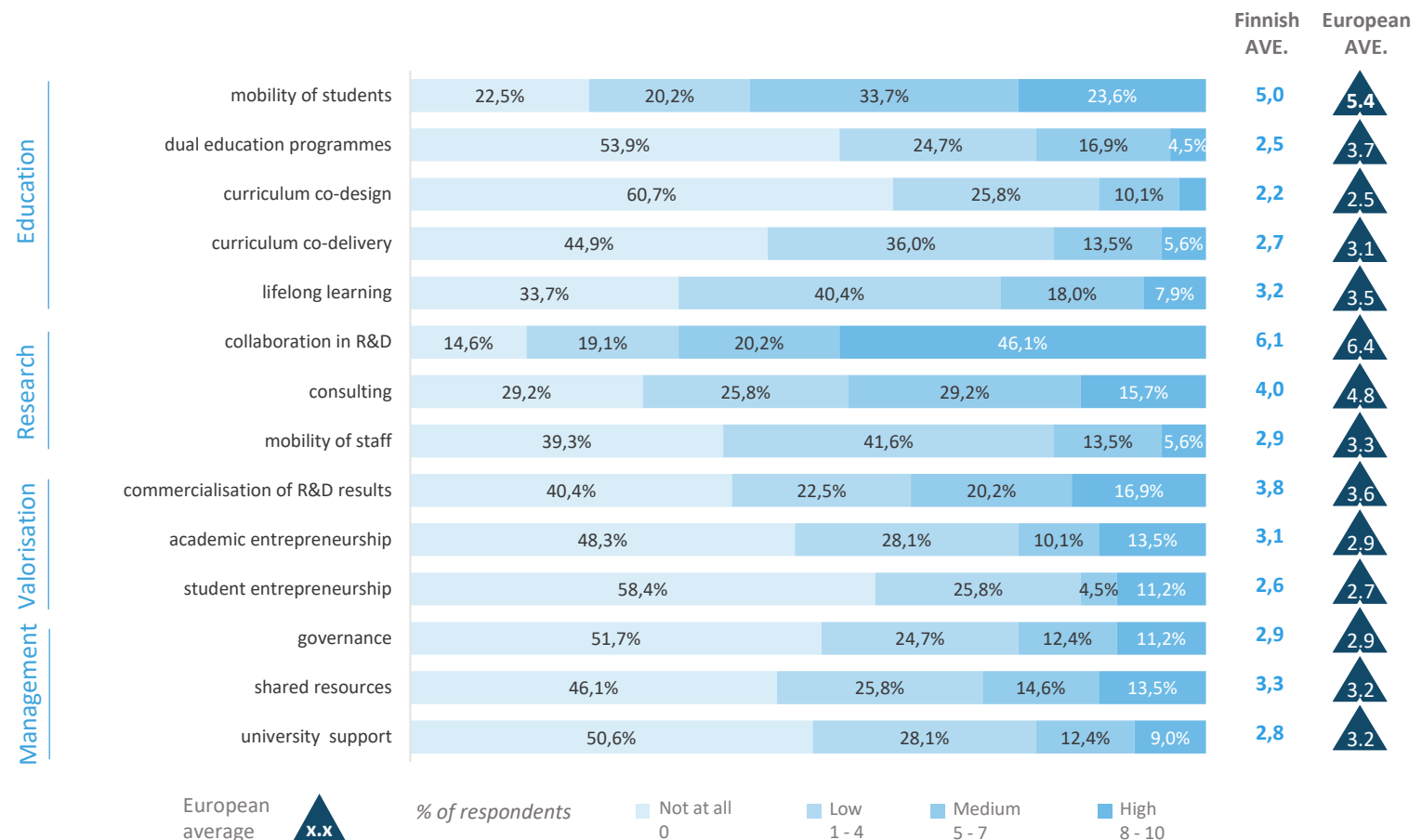
Almost 50% of businesses do not undertake any management or valorisation related collaboration. This percentage is particularly high for student entrepreneurship (58,4%).

Particularly low are the activities of curriculum co-design and dual education programmes.

Overall, in comparison to the development of the UBC activities for European business, the Finnish state of UBC is very similar.

UBC activities development

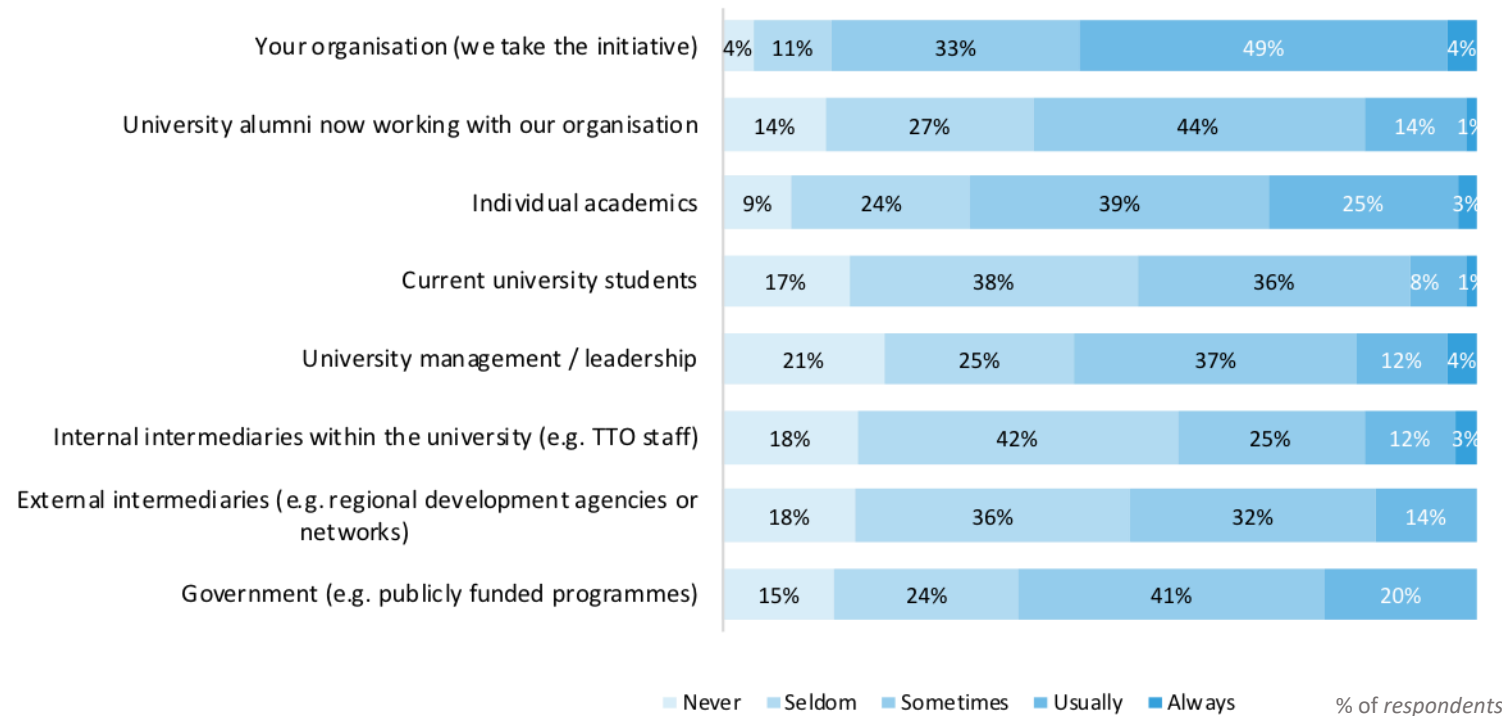
'Which UBC activities do you collaborate with universities in?'



Initiation of UBC

How UBC is initiated

'How often various stakeholders initiate UBC activities'



Finnish businesses clearly see themselves as the main initiators of cooperation with universities. 53% of business state that their organisation always or usually initiates UBC. This illustrates that in many cases, UBC activities in Finland typically starts from an identified need that arises from the business.

Finnish businesses see the individual academics and university management also active in initiating cooperation.

Intermediaries (both internal and external) are perceived as passive in UBC initiation. 60% and 54% of the businesses report that they never or seldom undertake any first actions towards UBC initiation. Generally, Finland has a relatively underdeveloped market for UBC intermediaries.

Similarly, 55% of business state that current university students do never or seldom initiate UBC.

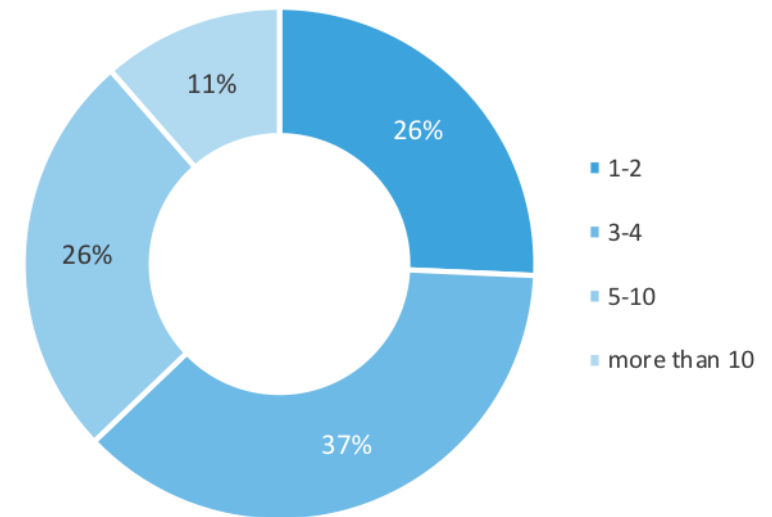
Geographical location still matters

Location of university partners

Percentage of cooperating businesses with...	
universities in their region	99%
universities in their country	97%
universities outside their country	77%

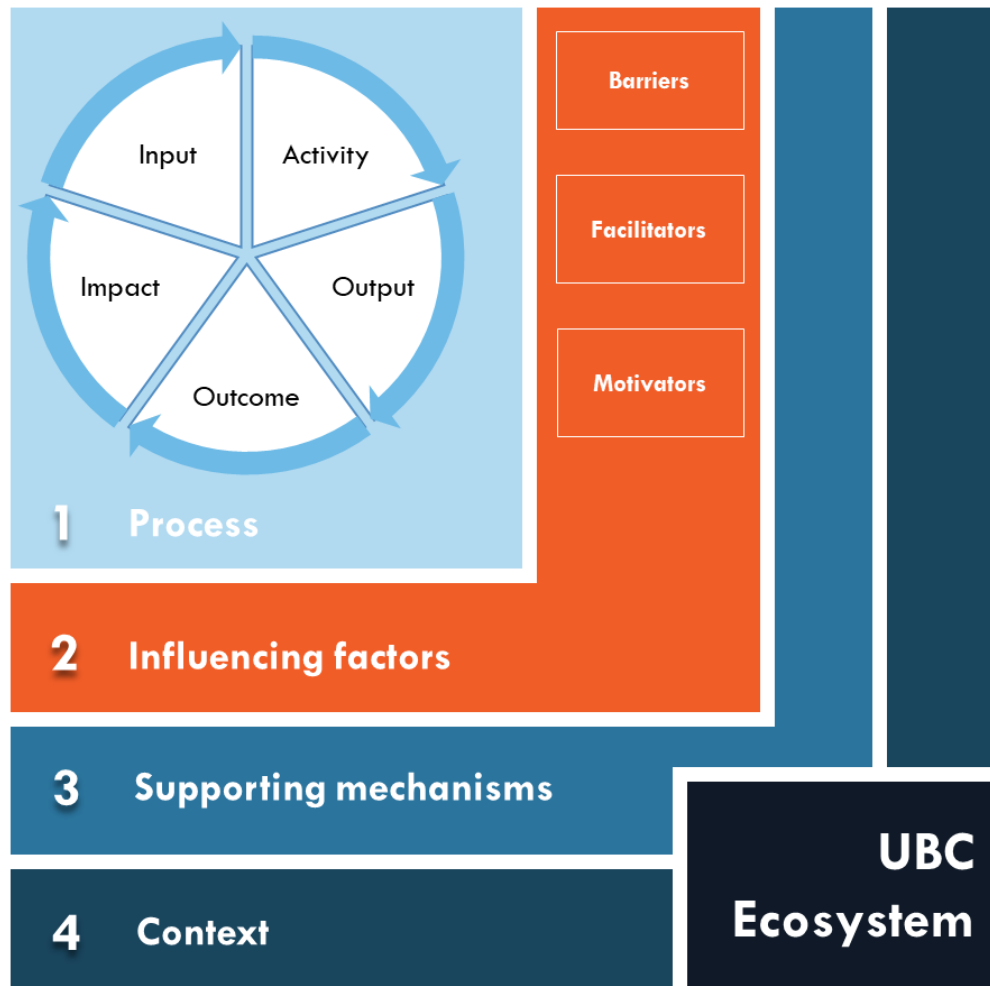
While most Finnish businesses cooperate with university partners from the region (99%) and from the country (97%), they also cooperate with universities outside Finland (77%).

Number of university partners



Almost two thirds (63%) of the Finnish businesses cooperate with less than 4 university partners. While 26% have established relations with 5-10 partners, only 11% cooperate with over 10 universities.

Factors influencing UBC



This section outlines the extent to which various factors affect UBC.

Generally, a barrier provides a hindrance or obstacle to do something. Drivers comprise facilitators, which enable or ease the process, and the motivators, which triggers the starting of an activity and are often related to the expected outcome(s).

At the European level, this study has found that removing a barrier does not necessarily create UBC but rather it makes UBC possible. Instead, it is the facilitators and motivators (drivers) that initiate UBC.

For example, even when a lack of funds is often named as a major barrier to cooperation, the presence of funds may not be enough for cooperation to happen if the perceived facilitators or motivators are not sufficient.

Barriers hindering UBC

The main five factors inhibiting Finnish businesses to cooperate with universities are diverse.

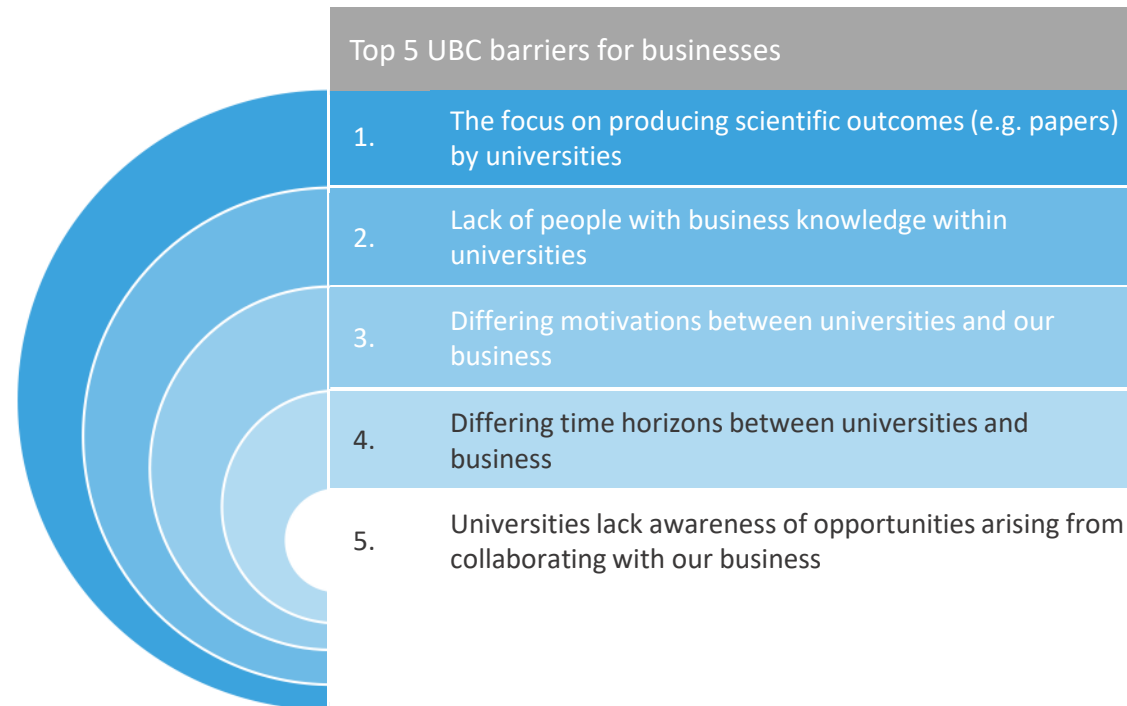
The main facilitators are related to organisational and knowledge differences, such as the universities' focus on producing scientific outcomes and a lack of people with business knowledge within universities.

Cultural characteristics, namely differing motivations and differing time horizons between universities and business, are also important barriers for businesses. From a business point of view, UBC outcomes are translated into concrete results at a pace that is too slow for their adoption. Furthermore, SMEs often have ad hoc needs that arise suddenly without a warning.

Finally, business state that Finnish universities lack awareness of opportunities arising from UBC. Furthermore, they also generally lack personal connections to business.

Barriers

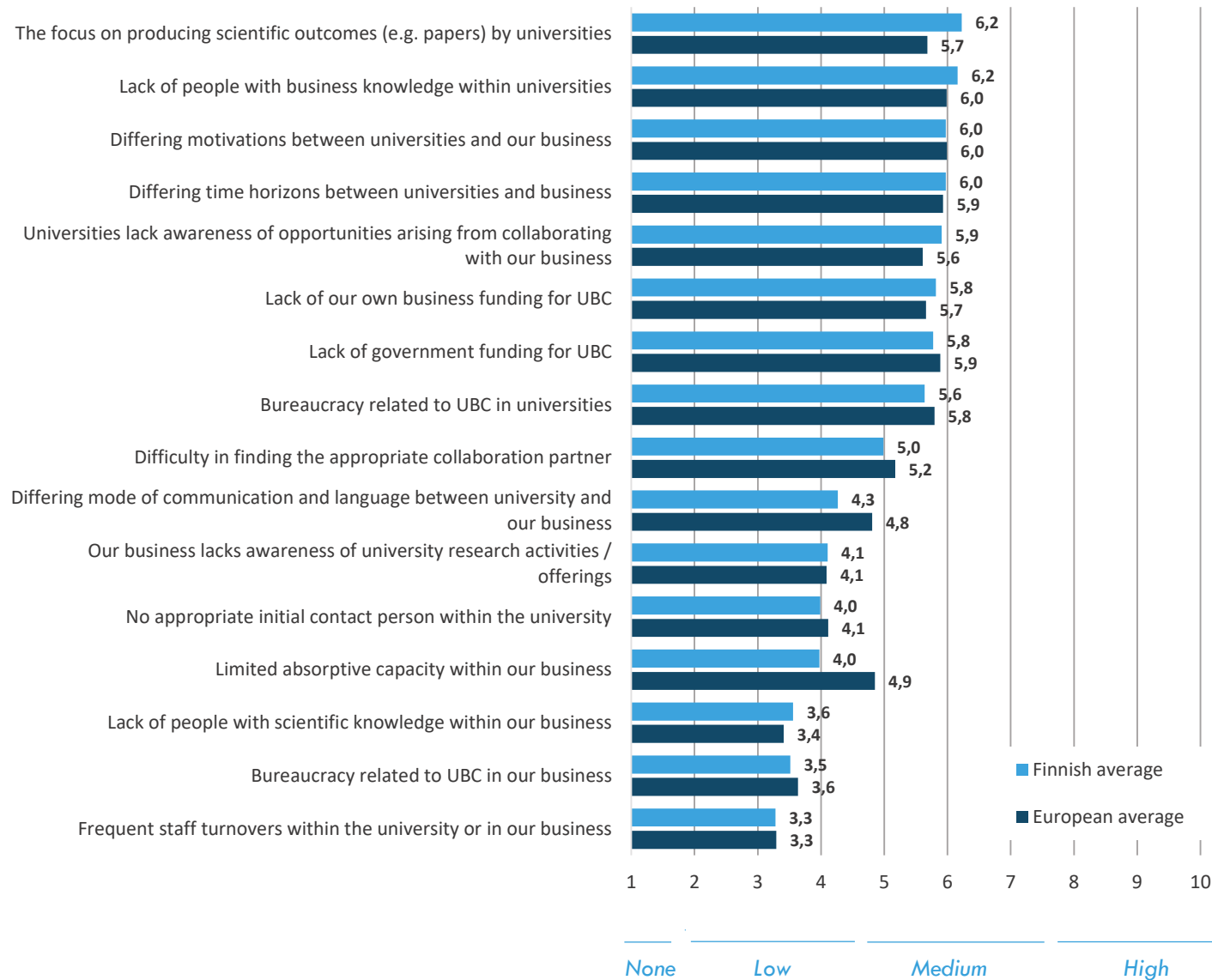
'What is inhibiting your cooperation with universities?'



Barriers hindering UBC

Barriers

'What is inhibiting your cooperation with universities?'



The majority of barriers perceived by cooperating Finnish businesses and their European counterparts are to some extent similar.

The differing mode of communication and language between university and business as well as the limited absorptive capacity are significantly higher barriers for European business than they are for Finnish business.

The strongest barriers emerged for both groups are related to knowledge and cultural issues such as lack of business knowledge within universities as well as differing motivations and differing time horizons.

Frequent staff turnovers within the university or in business is the weakest barrier.

Drivers stimulating UBC

The main factors that facilitate Finnish business cooperation with universities are related to their personal relationships.

A relationship based on trust, commitment and a shared goal highly facilitates cooperation for Finnish businesses, resulting in smoother and more successful collaboration with universities. A prior relation with the university partner also stimulates a good cooperation.

The existence of funding to undertake UBC is also likely to play an important role in facilitating UBC.

Drivers are those factors that encourage businesses, academics or HEIs to engage in UBC. Drivers of UBC are divided into two factors:

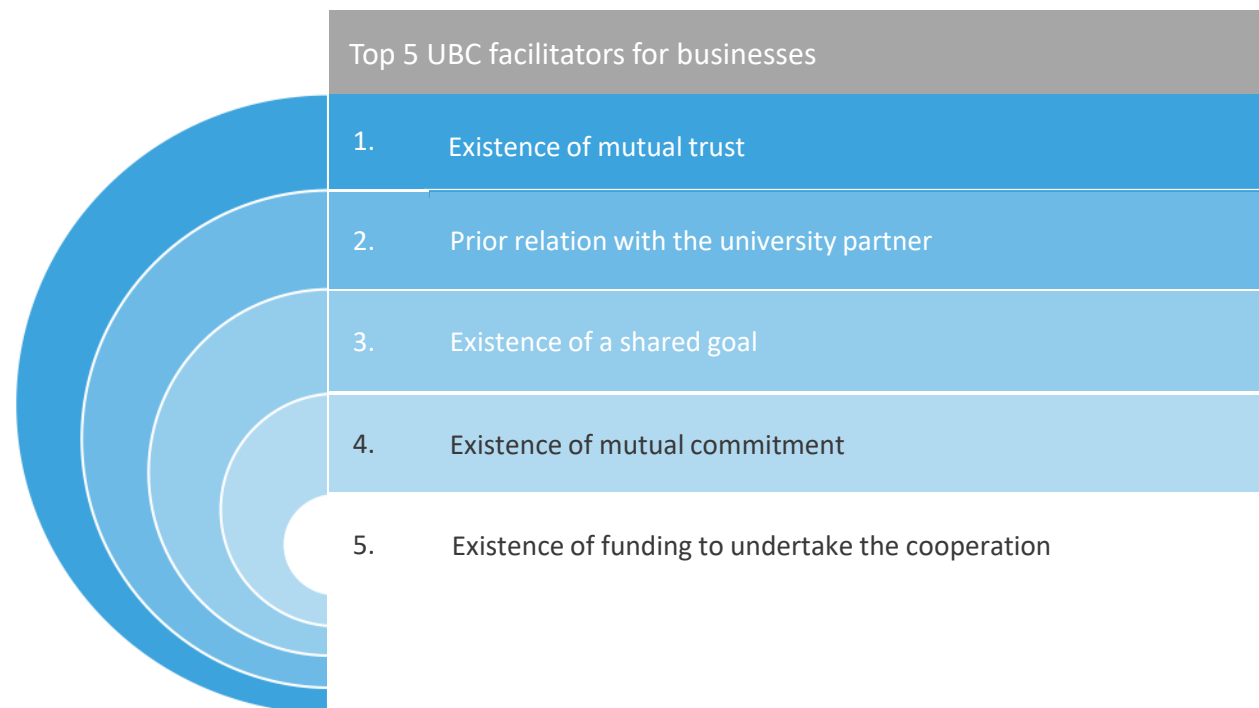
1. **Facilitators** – factors that enable or ease cooperation
2. **Motivators** – incentives or benefits that the respective stakeholders would like from the cooperation

Together, these two factors provide a comprehensive picture of what compels businesses to cooperate.

The 2010-11 State of European UBC study showed that for European universities the existence of strong UBC drivers can overcome the presence of barriers to UBC.

Facilitators enabling UBC

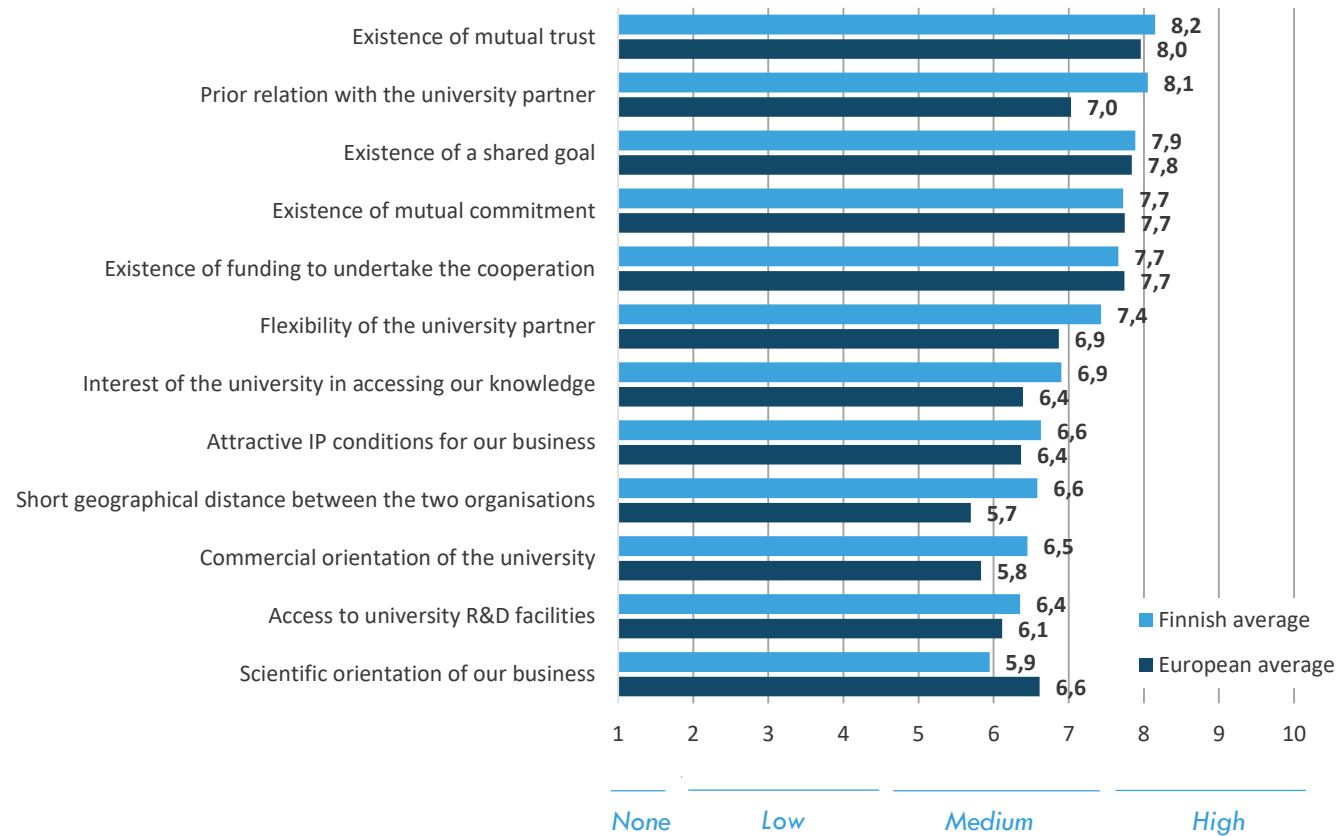
'What is facilitating your cooperation with universities?'



Drivers stimulating UBC

Facilitators

'What is facilitating your cooperation with universities?'



Most facilitators are perceived higher by Finnish than European businesses. This is the case for the personal relationship facilitators, which bear great importance in the advance of UBC in Finland. Interpersonal relationships and trust play a big role in Finnish business context. Generally, attitudes of Finnish society towards higher education are positive. The low number of hierarchies between HEIs and business facilitates open culture and interaction¹.

The existence of funding supporting cooperation and the flexibility of the university partner also drive UBC activities to a large extent.

The difference between perceptions of Finnish and European businesses with respect to facilitators related to the prior relation with the university partner and the short geographical distance between the two organisations is significantly high. Finnish businesses perceive these factors as more facilitating, whereas the scientific orientation of the business is considered to be less important in comparison to the European average.

¹ Holopainen, H. (2016). Yhdessä kohti tulevaa - Selvitys korkeakoulujen ja muun työelämän yhteistyöstä. http://www.sivistystyonantajat.fi/tiedostopankki/437/Korkeakoulujen_tyoelamayhteistyoselvitys_21.5.2016.pdf

Drivers stimulating UBC

The main motivators for Finnish businesses to undertake UBC are related to innovation and competitiveness.

Businesses cooperate with universities primarily to get access to new technologies, knowledge and discoveries at an early stage to improve their own innovation capacity.

Finnish businesses are also motivated to engage in UBC activities to obtain funding and financial resources. Many Finnish R&D funding instruments (e.g. some Tekes programmes) are available if both university and business form a consortium. Universities are often more suitable for lead partner role.

A less important, but still relevant, motivation relates to obtaining a customised solution as Finnish businesses follow a pragmatic approach to UBC. They cooperate with universities primarily for their own benefit, and not necessarily for societal outreach or because of social responsibility. To succeed then, universities need to ensure that results are delivered in a quicker timeframe, even if cooperation aims for long-term goals.

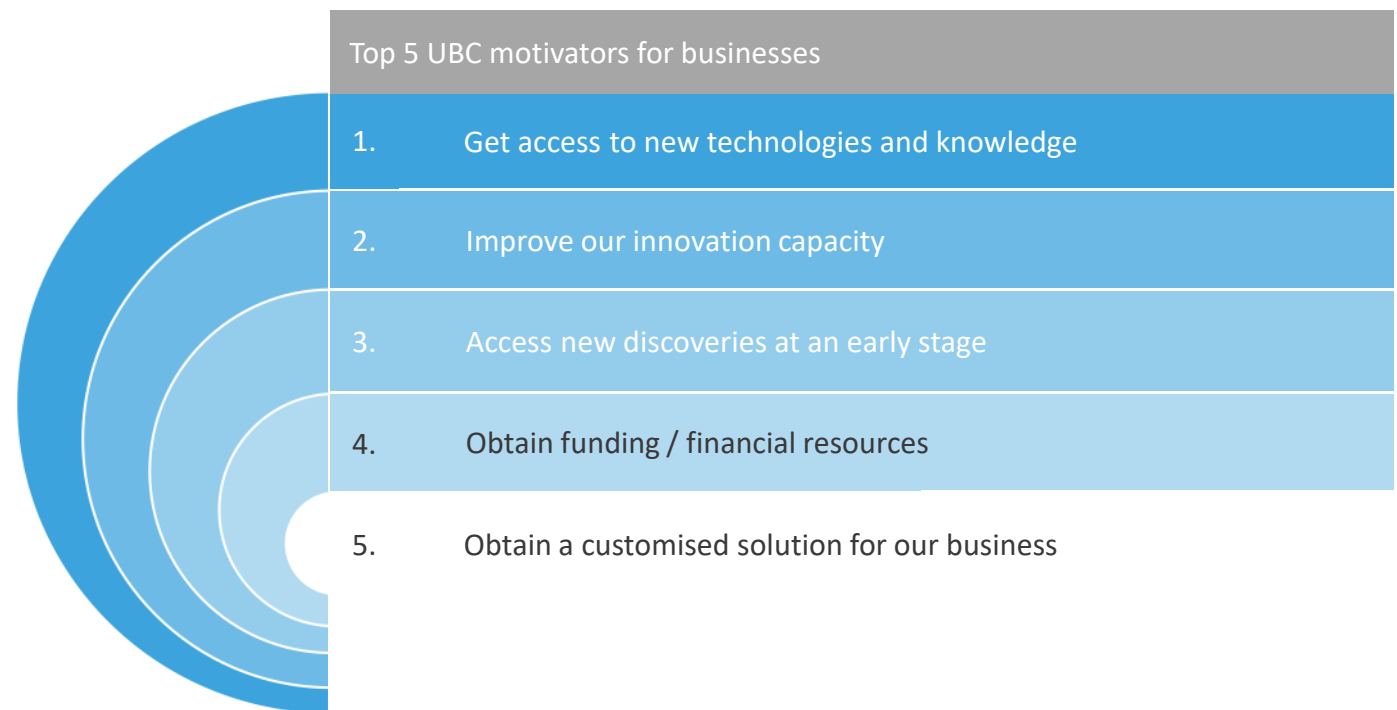
Motivations for UBC are the reasons why businesses collaborate with university.

They provide key information about the outcomes that the businesses seek from their collaborative activities relating to education, research, valorisation and management.

Motivators

'What motivates you to cooperate with universities?'

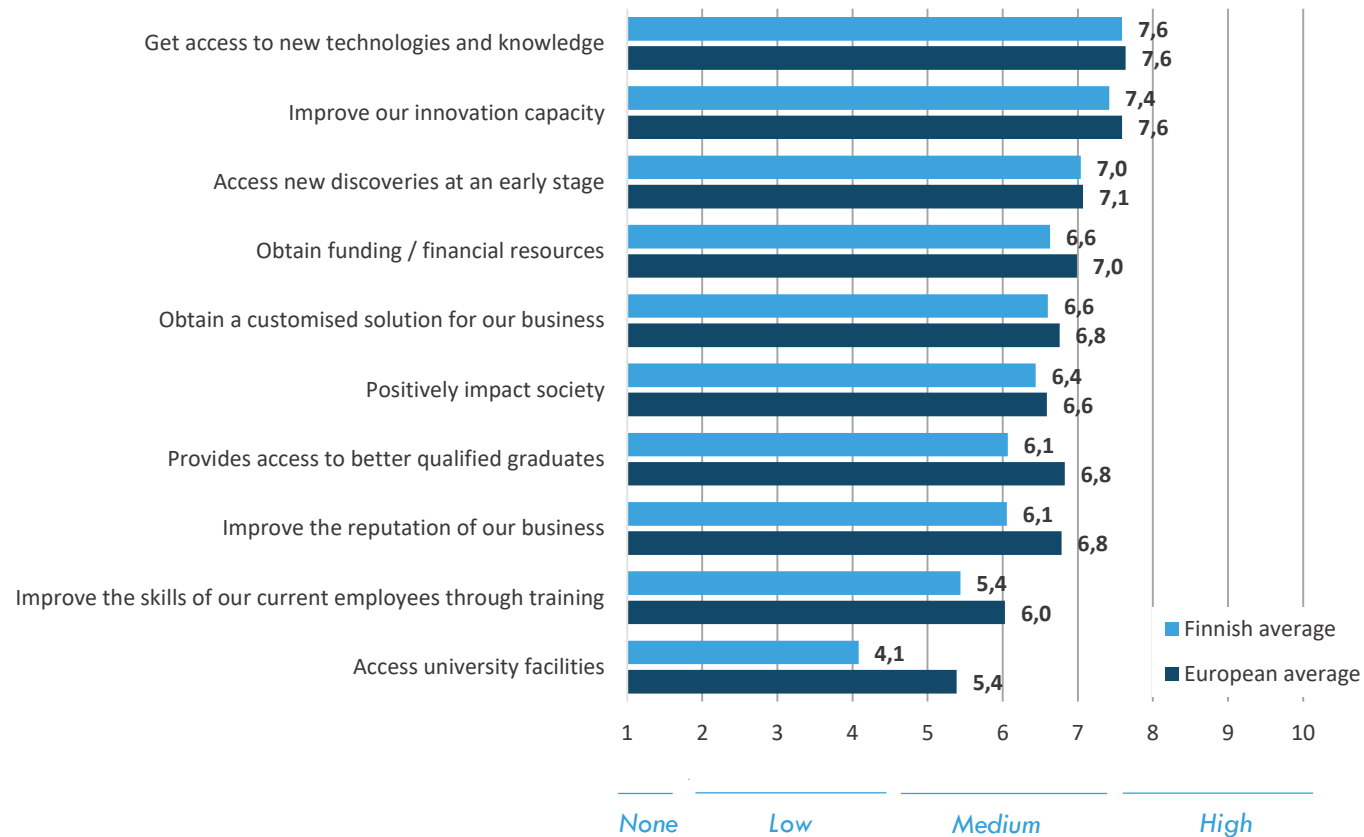
The ability of the collaboration to achieve these outcomes will have a substantial influence on the businesses' assessment of the success of their collaboration.



Drivers stimulating UBC

Motivators

'What motivates you to cooperate with universities?'



Overall, the importance of the motivations is perceived lower by Finnish than by European businesses.

The motivation of getting access to new technologies and knowledge as well as the willingness to improve the innovation capacity are important motivators for both groups.

Like their European counterparts, Finnish businesses are not highly motivated to collaborate in training opportunities with universities. Finnish HEIs are not allowed to offer subsidised training – training for companies must be offered with market-price. As such, private training organisations and consultancies are seen as huge competitors in this context.

Compared to the European average, Finnish businesses are significantly less motivated to access university facilities. Finnish HEIs have made shared use of facilities and equipment relatively difficult for businesses as there are often no easy interfaces to campuses. Recent campus development projects, such as Kampusareena in Tampere, aim to change this¹. New campus environments are designed with the intention to make them into hub-like environments with services and facilities that bring companies and university together.

Benefits of UBC

Both Finnish and European businesses have similar perceptions with respect to which stakeholder groups benefit more or less from UBC.

Both groups see students as the primary beneficiaries of UBC. Benefits from student-business activities are generally more obvious than other activities. It is easier to grasp how students as individuals benefit by gaining more work experience.

Finnish businesses also see more benefits for universities than for themselves. They also attribute important role to society and themselves, yet to a slightly lower extent.

The lowest benefits are perceived by both European and Finnish businesses to be for government, which is perceived as an indirect UBC beneficiary.


Benefits are the perceived positive outcomes (financial and non-financial) from undertaking UBC as relevant for the different stakeholder groups that can potentially participate in UBC.

The perception regarding who benefits from such cooperation can influence the decision to increase or decrease their participation or

the involvement of other groups. For example, if academics perceive their own benefits to be low, they may refrain from engaging in UBC. Yet, if they perceive benefits for students to be high, they might undertake actions that contribute to students' involvement in UBC.

Benefits of UBC

'Who receives the benefits of UBC?'

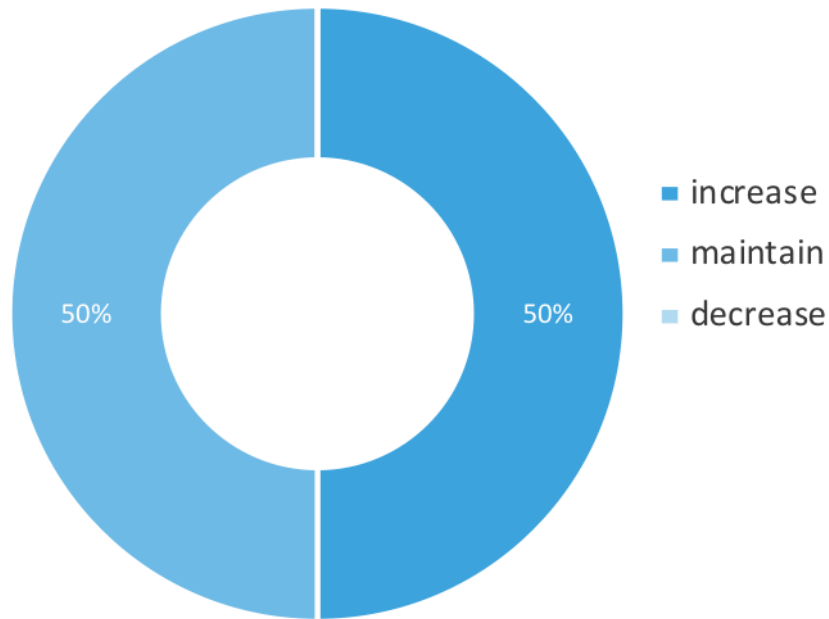


	Finnish businesses	European businesses
1.	Students	Students
2.	Universities	Universities
3.	Society	Businesses
4.	Businesses	Academics
5.	Academics	Society
6.	Government/ public authorities	Government/ public authorities

Future intentions

Future UBC intentions – Finland

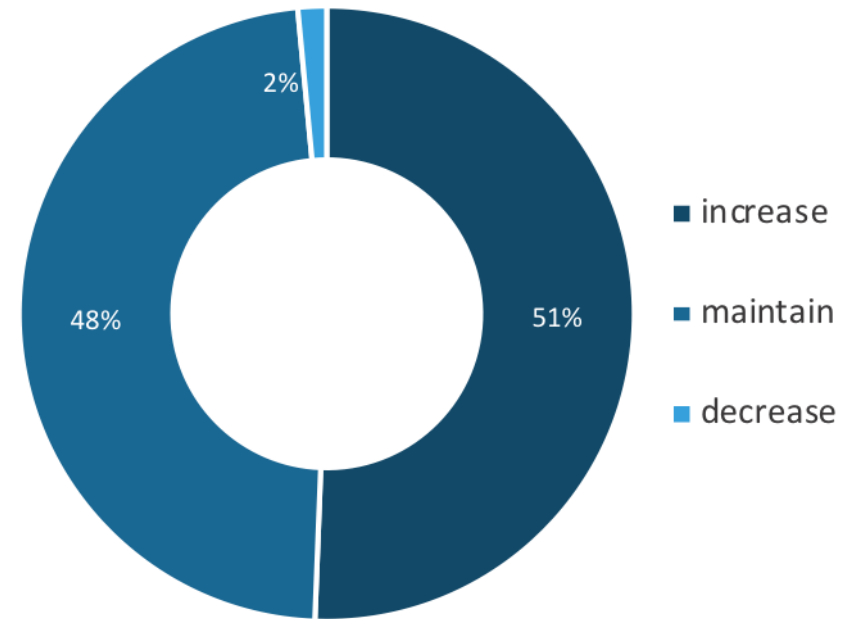
As answered by Finnish businesses



100% of Finnish businesses that currently cooperate with universities plan to maintain or increase their cooperation (50% each).

Future UBC intentions – EUROPE

As answered by European businesses



European businesses also seem to be confident in their future intentions towards UBC as over half (51%) of them plan to increase their cooperation activities and only 2% to reduce them.

Willingness to recommend UBC

The willingness of Finnish cooperating businesses to recommend to a colleague to engage in UBC is higher than the one of their European counterparts and varies depending on whether this cooperation is in research or in education.

While 53% of Finnish businesses will promote UBC in research positively, only 10% would do it negatively. Businesses who actively undertake cooperation with universities in research know how to make it work and obtain direct benefits.

Contrary, Finnish businesses are less satisfied with their cooperation in education (NPS=8). 33% would promote it and 25% will not recommended it at all. This is however a more positive attitude than the European average (NPS = -2).

Respondents were asked how likely it would be that they recommend to a business colleague to engage in UBC in the areas of R&D and

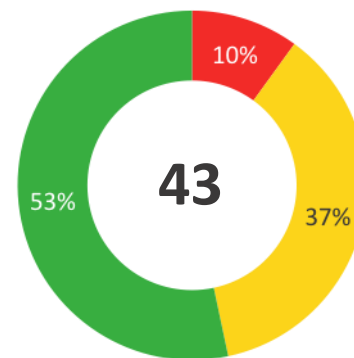
education and training (E&T). The *Net Promoter Score* metric offers a proxy for customer satisfaction.

Willingness to recommend cooperation with universities in R&D or E&T

	Detractors	Passives	Promoters	Net promotor score
Business cooperating with universities in R&D	10%	37%	53%	43
Business cooperating with universities in E&T	25%	43%	33%	8

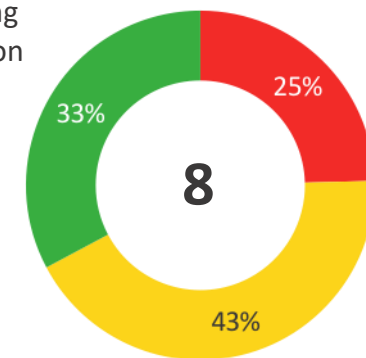
Satisfaction with cooperation with universities (net promoter score)

Business cooperating in research



■ Detractors ■ Passives ■ Promoters

Business cooperating in education

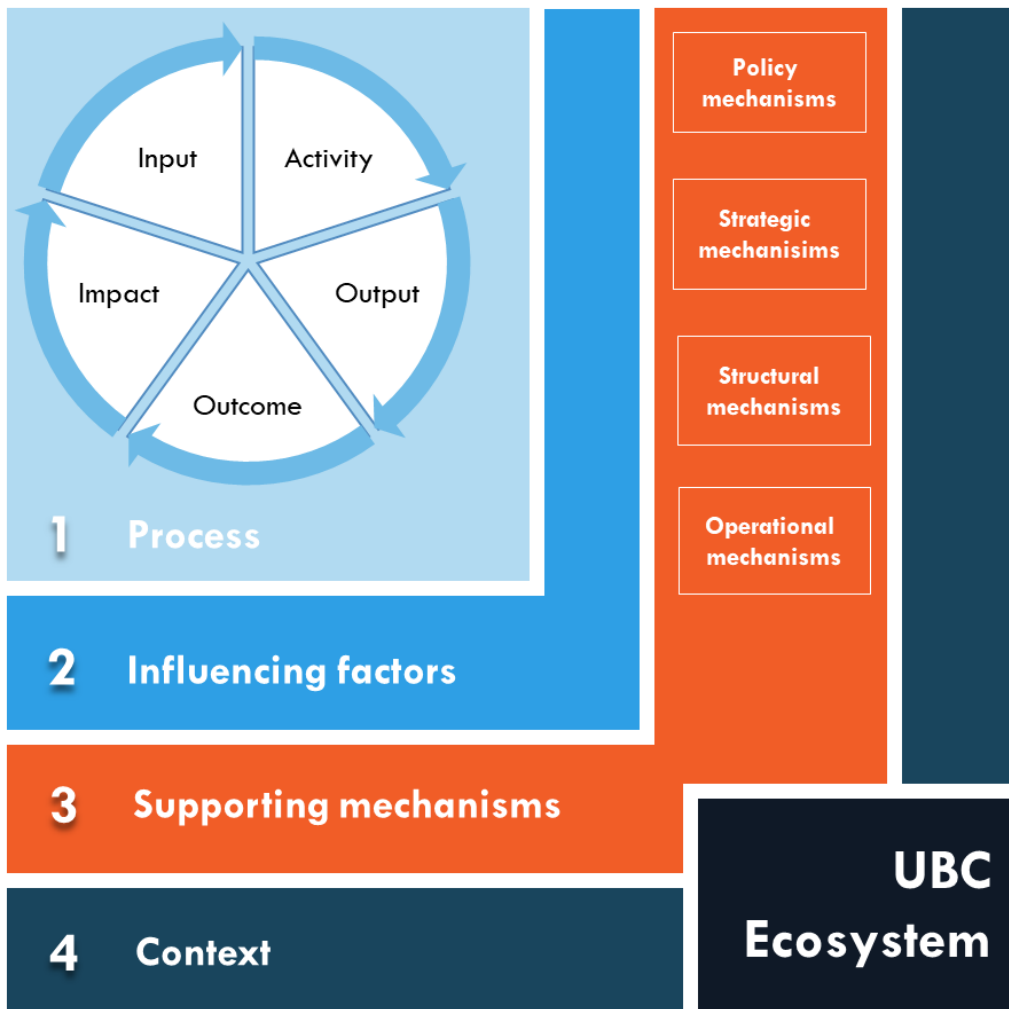


■ Detractors ■ Passives ■ Promoters

European business NPS result: 28.2

European business NPS result: -2.1

Supporting mechanisms for UBC



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

There are four types of supporting mechanisms:

- Policy
- Strategic
- Structural
- Operational

This section outlines the extent to which UBC supporting mechanisms are developed in this sample from the HEI perspective.

At the European level, the extent of development of all these mechanisms significantly influences the extent of cooperation.

Supporting mechanisms for UBC

Finnish businesses can adopt a range of supporting mechanisms in their interaction with universities, but more than half of them are present in under a third of businesses.

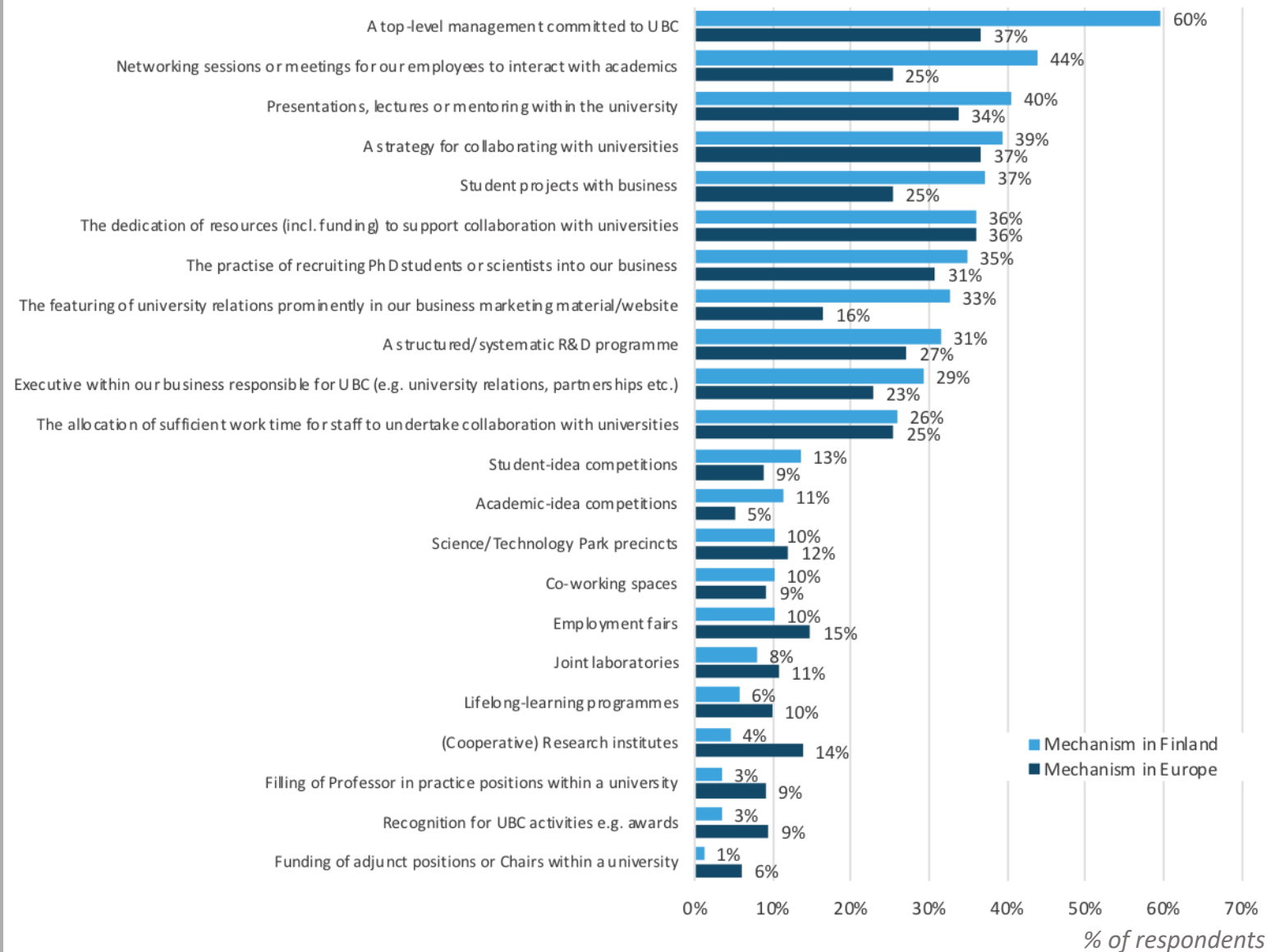
The most developed mechanisms, and the only one present in over half of Finnish businesses, is a top-level management committed to UBC (60%). Networking sessions or meetings for employees to interact with academics (44%) as well as presentations, lectures or mentoring within the university (40%) are the further mechanisms present. Various organisations, such as chambers of commerce and regional development agencies provide networking events for businesses as well.

Compared to the European average, UBC supporting mechanisms in Finland are generally more common and more often. Particularly, the Finnish business managers are significantly more devoted to UBC than the European average.

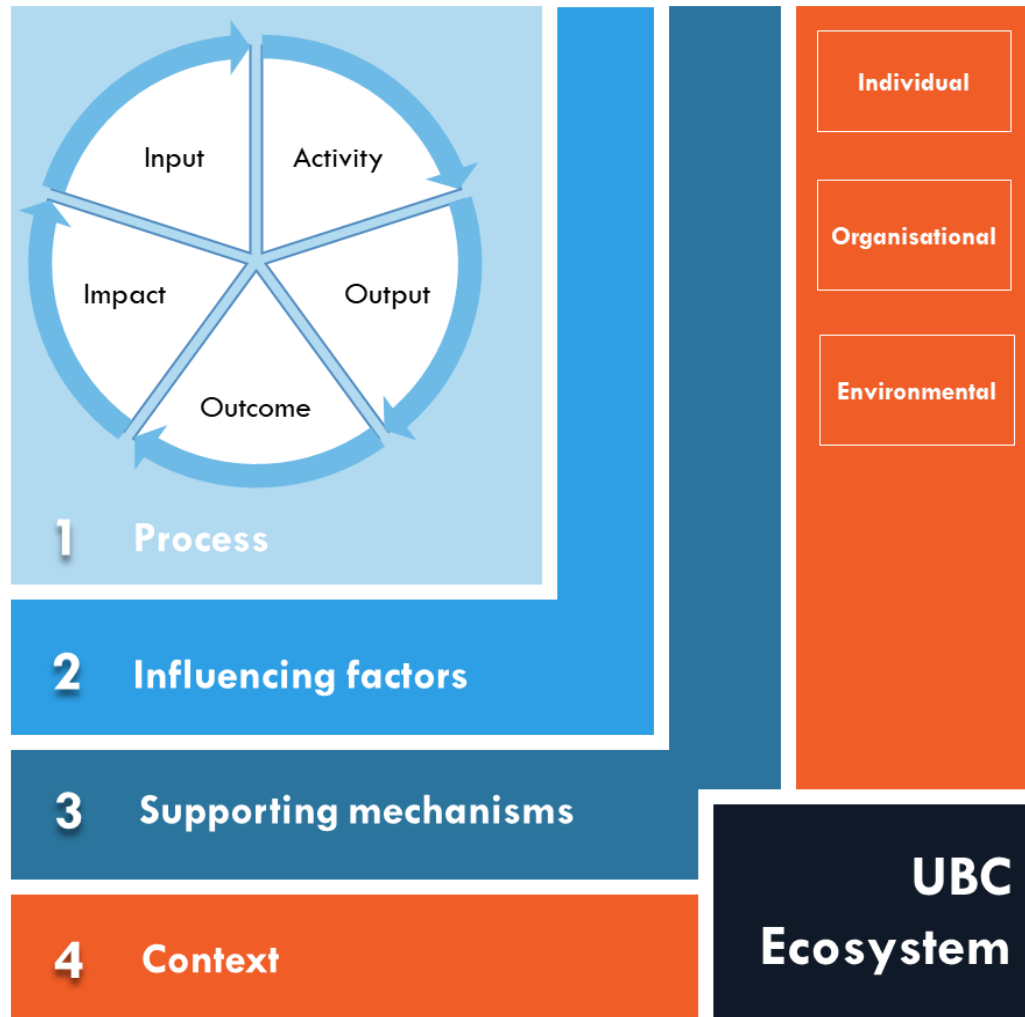
Additionally, the practise of featuring of university relations prominently in business marketing material/website is more common among Finnish businesses. They also organise more often student projects.

Mechanisms supporting UBC

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



Context



The degree to which UBC takes place is influenced by a set of elements present in the context of the organisation that cannot be changed in the short or medium term.

These include the characteristics of individual actors involved, the institutional factors relating to the university and business, as well as by a set of broader environmental factors (political, economic, social, technological, etc.).

This section outlines how some contextual factors influence UBC in the country.

Context

Finnish business cooperating with universities perceive their context similarly to European cooperating businesses.

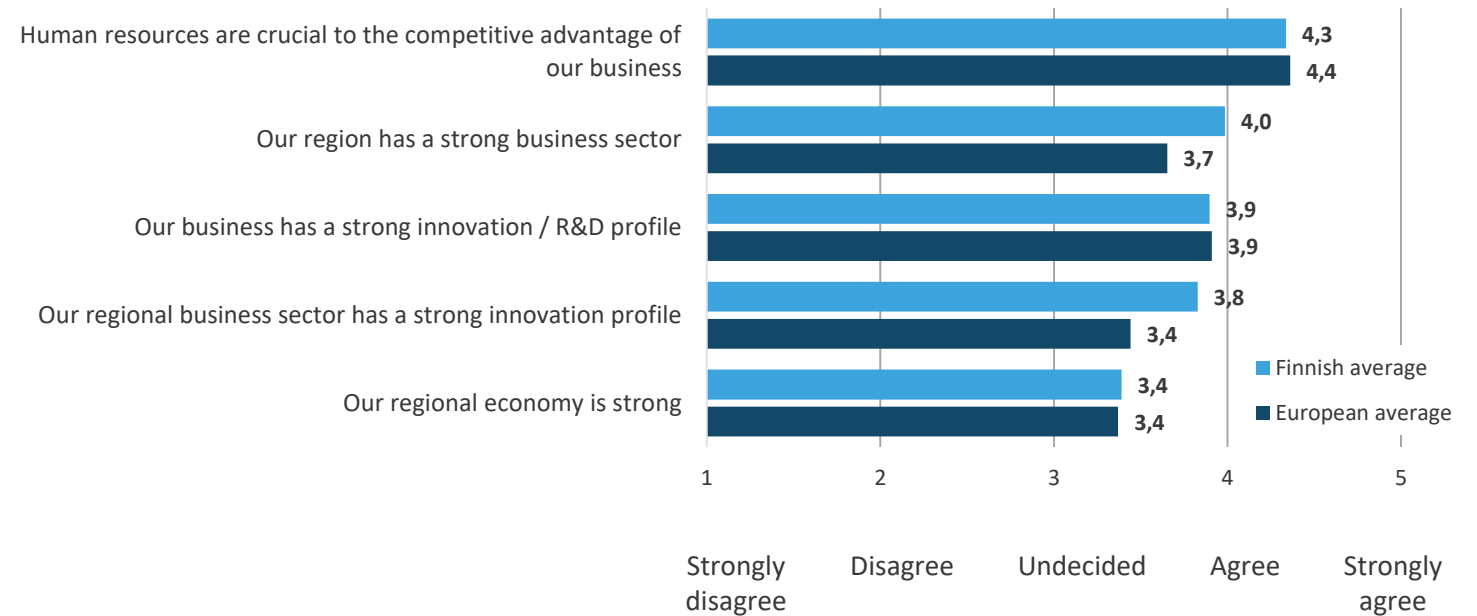
For both groups, human resources are essential for their competitiveness and business innovation and R&D profile is seen as strong.

Finnish businesses consider their regional business sector as being strong and far more important for innovation than the European average.

A lower perception emerges regarding the characteristics of the regional economy.

Contextual factors affecting UBC

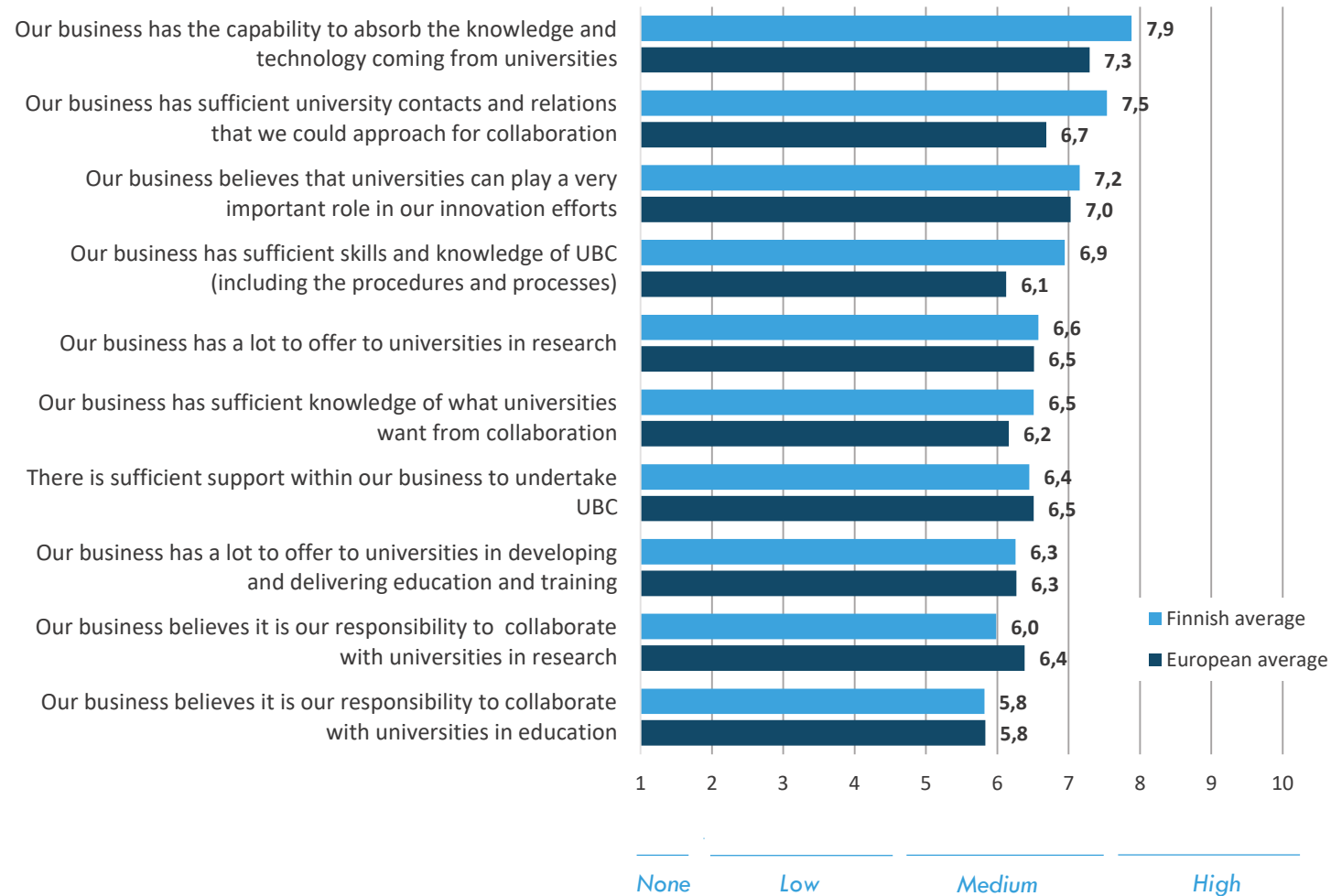
'To what extent do you agree with the following statements?'



UBC capabilities and beliefs

Supportive UBC environment

How supportive are your organisation and environment for UBC?'



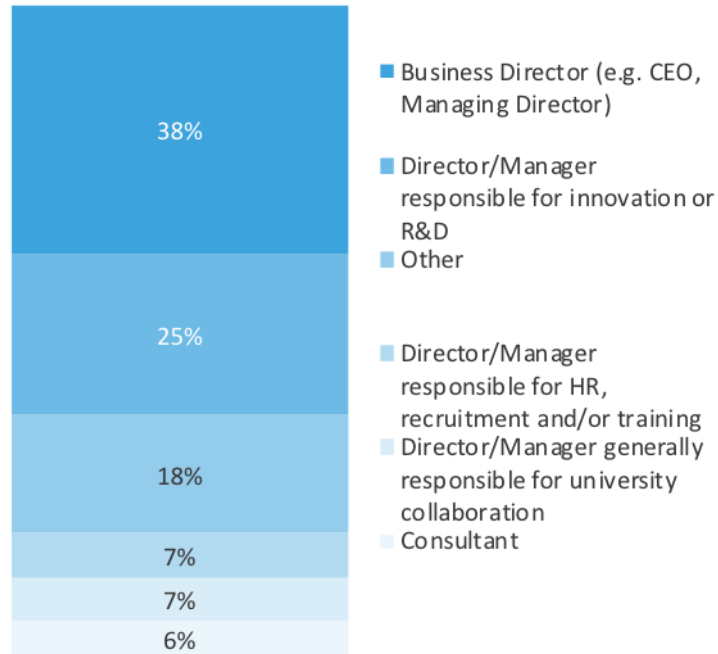
Finnish businesses perceive themselves as supportive towards cooperation with universities. In particular, they have the capability to absorb knowledge and technology from universities. They also have sufficient university contacts and relations to reach out for collaboration. Yet, Finnish businesses are less supportive towards UBC in education and training.

Finnish businesses state that universities play an important role in the innovation efforts. They have sufficient skills and knowledge of UBC as well as knowledge of what universities want. Furthermore, they believe that they have a lot to offer to them in research.

Overall, Finnish businesses perceive their own capabilities related to UBC in a more positive way compared to European average.

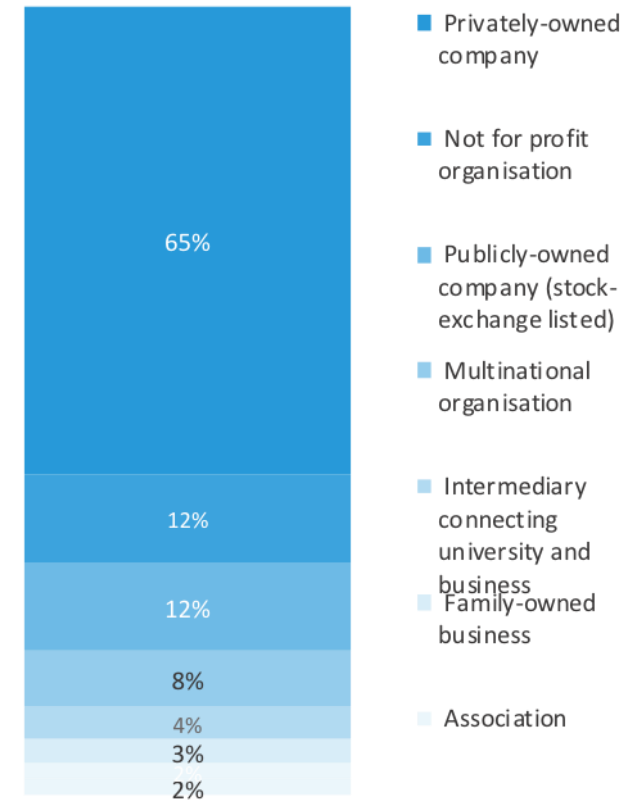
Respondents profile

Position of respondent



More than a third of the Finnish business sample (38%) are business directors, which represent the largest group. It is followed by directors responsible for innovation or R&D (25%). The remaining businesses identified themselves as HR directors, managers responsible for university collaboration (7% each) and consultants (6%). 18% of Finnish respondents hold 'other' positions.

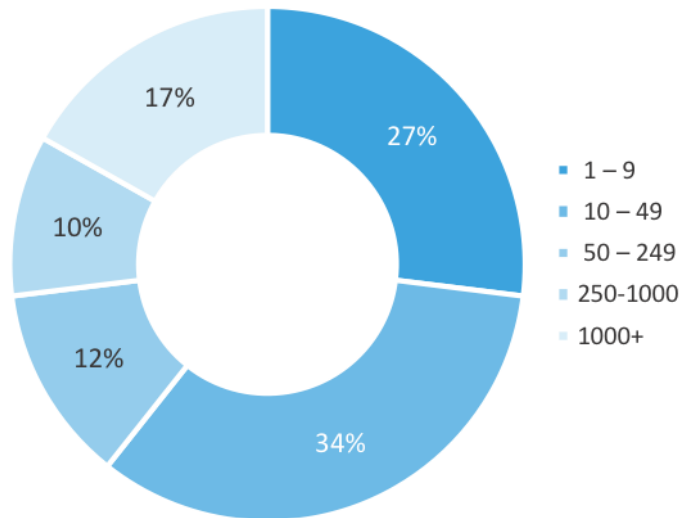
Type of business



A wide variety of businesses were represented in the Finnish sample, but almost two thirds of them (65%) are privately-owned companies, followed by not for profit organisations and publicly-owned companies (12% each). The type of businesses with less than 10% of representation include: multinational organisations, intermediaries connecting university and business, family-owned businesses, associations and sole-trader or partnerships.

Respondents profile

Business size



Sample Size	
Finnish business representatives	n = 89
European business representatives	n = 3.113

One third of the Finnish business sample is comprised by small firms (10 to 49 employees) whereas one quarter are employed in micro-companies (1 to 9 employees). 27% of business representatives work for large companies with more than 250 employees. Medium-sized companies are represented by 12% of the business representatives in the sample.

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