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Guideline for collaboration with companies from the point of view of universities

1 Problem

In our globalized and economy driven world it gets more and more important to prepare students for real life problems. The number of university students increases in the EU. The majority of graduates will work in the economy on practical issues. Therefore it is essential to increase the implementation of practical applications in addition to theoretical approaches on universities. Initially the work on real life problems with project proposals from companies appear inconvenient and time consuming. Once a solid company network is built, which often already exists at universities, it becomes easier to access the possibilities that are connected to those partnerships. This guideline supports universities in collaborating with companies to enhance the practical knowledge transfer for students.

2 Context

EPIC seeks to increase employability through closer collaboration between students and industry, by promoting active and problem-based learning, and by promoting international collaboration as well as distance cooperations.

A further goal is to increase the labour market relevance of education through closer collaboration between industry and academia, and making the students better prepared for both national and international labour markets in a globalized world as well as increasing the students learning outcome by promoting active learning methods, based on students solving real-life problems.

Proof that collaboration between a research institution and a company can bring many benefits is a model in Finland. Laurea University of Applied Sciences in Helsinki can be considered as a precursor to the practical use of knowledge transfer in Europe and the creator of the "SIDlab International program". This program focuses on:

- R&D service;
- Mechanisms for the application of education and research;
- Developing innovative solutions for existing problems;
- Integrating the academic potential of academic staff as well as students and university graduates;
- Designing solutions tailored to the needs of specific entrepreneurs.

The IRPro2015 knowledge transfer model has been established on the basis of the aforementioned assumptions, the key objective of which is to broaden cooperation in the field of services and research internationally (it involves exchange of expertise between Finnish universities and their foreign partners or the possibility of multi-annual cooperation). In this model, the most important thing is that students are the main executive force.





3 Factors that affect collaborations

- Aversion to new methods
- Existing networks / options for new partnerships
- Appreciation from the collaborating partners
- Reliability
- Common understanding of terms and conditions
- Overall aims

4 Possible gains for companies

First of all universities need to consider that companies have different reasons to choose to collaborate with universities. Motives can be for example to attract future employees, to get access to upto-date academic knowledge, to widen the network for future projects, to have the least expenditure for people working on company problems / challenges, etc.

5 Roadmap for universities

Regardless of the motive the companies want to get as much output for the least possible effort and expenditures. Therefore, it is important that universities identify and formulate the requirements for future collaborations as precise as possible. Also it has to be clear that the companies will not focus as much on the theoretical and model-driven work rather than searching a matching practical solution for their case. Therefore, we suggest the following steps to take on behalf of the university:

- 1. Define topics/areas for possible collaborations
- 2. Define requirements for possible companies
- 3. Identify existing network
- 4. Use university staff as well as students to find further potential companies
- 5. Identify matching companies for your areas
- 6. Contact companies with as precise information as possible (offer templates for project proposals, further guidelines on what exactly you expect, ...)
- 7. Show the company the additional value they perceive due to the collaboration
- 8. Offer a personal date for further clarification
- 9. Invite them to present their company to the students
- 10. (Depending on the project create a contact between the company and the student assigned to the project)
- 11. Make sure the students prepare a clear and lively output that shows as much results as possible for the company
- 12. Evaluate the results and record possible improvements
- 13. Share best practices and further possible collaboration ideas to keep your collaboration running





6 Common mistakes

Experience e.g. from the <u>COLIBRI project</u> shows, that some common mistakes occur in this collaborations.

- Too much complexity in the projects.
- Different understanding of project targets and single tasks.
- Workload per student does not fit to the project duration.
- Underestimation of overhead-effort for communication between international students, university-staff and companies.
- Missing communication of project status during the implementation.
- Misunderstanding of the outcome.
- Poor management.
- Cross-cultural misunderstanding.
- Lack of including personal backgrounds / experiences.
- Underestimation of higher efforts due to long distance cooperation.

7 Examples and implementation

- Template for project proposals
- Guideline on how to formulate project proposals
- Guideline for collaboration between students and companies
- Create a Project-database of past projects, include pros and cons of the project implementation
- Carry out knowledge- and experience-exchange events together with former students in the programme