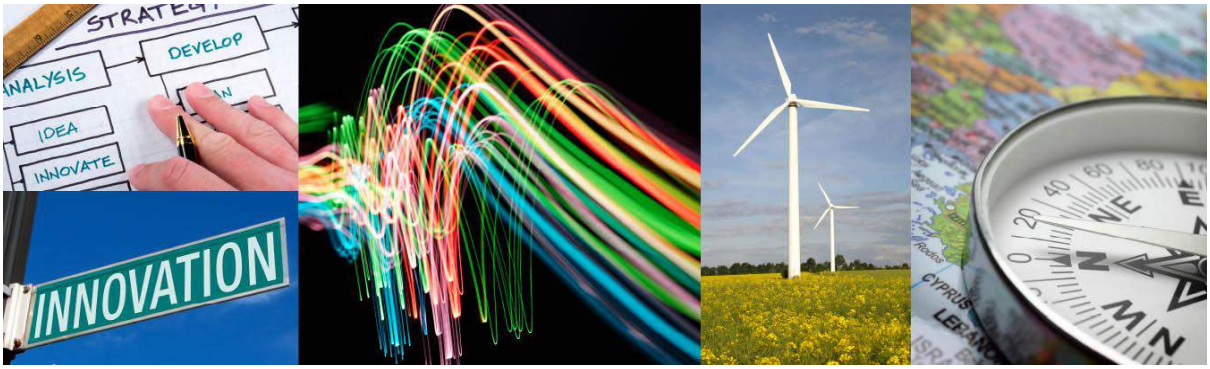
Technology Agency of the Czech Republic

Fraunhofer MOEZ



Motives, Barriers, and Services regarding Technology Transfer in the Czech Republic – an Analysis of the TA CR Survey 2014

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Preface

Applying knowledge from scientific research in practical applications, collaboration between the public and private sectors in research, development and innovation is an important factor for maintaining competitiveness and growth in the Czech economy. Public investments made in the last few years into research in the Czech republic (e.g. highly specialized research centers, technology transfer offices, science and technology parks, etc.) are a great chance to fill a gap in this area left after the second half of the 20th century. These investments are a good basis for the intensification of cooperation between public research and enterprises as well. Further development will have to be partly financed from private funds raised from commercialization of knowledge and collaboration with industry.

In 2013 and 2014 a series of surveys was carried out, in order to identify the current major problems that limit the effective transfer of technology and knowledge and their commercialization. The surveys focused on technology and knowledge providers (universities, research institutes), technology and knowledge intermediaries (technology transfer centers, science and technology parks), and technology buyers (companies).

The evaluation of survey results which are prepared in the following was done in collaboration with the Fraunhofer Institute for Central and Eastern Europe in Leipzig (Fraunhofer MOEZ). I would like to thank the representatives of the Fraunhofer Institute for the highly effective and constructive approach and - of course - all survey participants.

Martin Bunček, Vice-Chairman, TA CR

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1. Project Background

The Technology Agency of the Czech Republic (TA CR) is a government body of the state that was founded in 2009 by Act No. 130/2002 Coll. on the support of research, experimental development and innovation. The creation of TA CR is one of the cornerstones of the fundamental reforms of research and development (R&D) in the Czech Republic. The key feature of the reform is a new distribution of financial support from the national budget. The Technology Agency of the Czech Republic organizes the state support of applied research and experimental development, which had been split and was executed by a number of bodies before the reform.

In this context TA CR prepares and realizes its own programs of applied research, experimental development and innovation. It executes programs from those governmental departments without public financial support. To fulfill its tasks TA CR collects data from different stakeholders by means of surveys.

TA CR and Fraunhofer MOEZ analyzed data of three surveys as well as results of three round table discussions organized by Technology Agency of the Czech Republic.

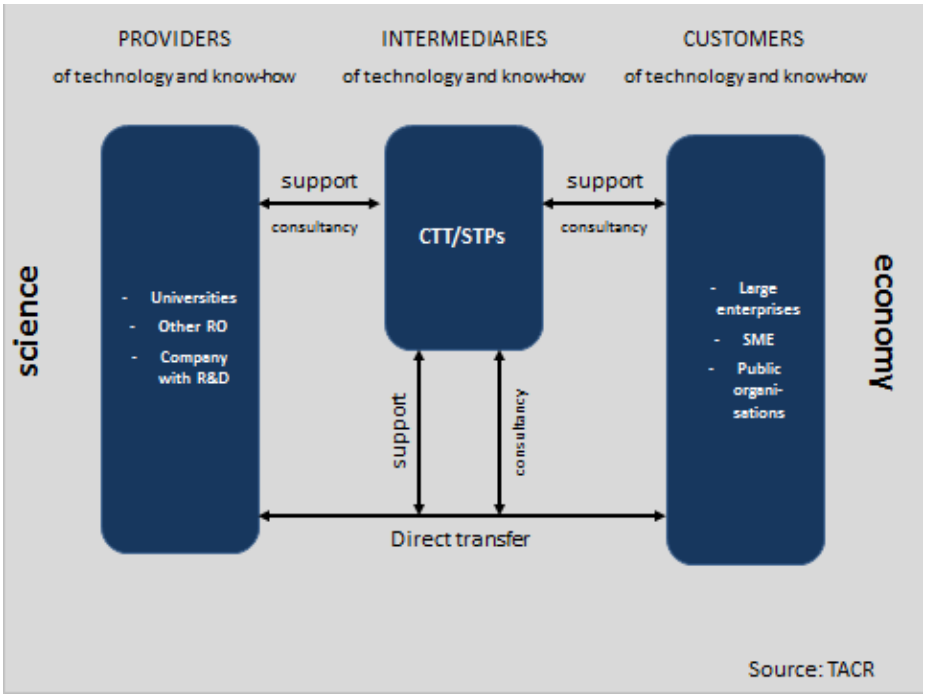
The surveys were addressed to (1) Research Organizations, (2) Centers for Technology Transfer[1] / Science and Technology Parks and (3) Enterprises including (a) TACR´s clients, (b) other companies with R&D expenditures, (c) other companies without R&D expenditures.

[1] The definition "Centers for Technology Transfer (CTTs)" is used in the same way as the definition "Technology Transfer Offices (TTOs)".

2. Methodology

The analysis of the Czech knowledge and technology transfer landscape is based on the Research Framework for transfer of technologies and know-how provided by TA CR.

Fig. 1: Research Framework provided by TA CR



General information and additional characteristics of the sample are given in the third chapter.

TA CR submitted a data set consisting of a survey "Providers of technology and know-how", a survey "Intermediaries of technology and know-how" and a survey "Customers of technology and know-how". The data sets contains a large variety of details, attributes, and categories of questions. In addition there are "single answers", "multiple answers", quantitative

attributes, and qualitative attributes. The data set includes metric data, nominal and ordinal scaled data as well as written specifications.

The data were codified in order to use the SPSS-software:

Positive answers were marked by crosses, negative answers were left ("empty"). In cases where there are no explicitly binary coded variables (e.g. yes or no answers), "empty" and "no answer" responses are accounted as invalid;

qualitative attributes were often presented by four ordinally scaled classifications like: big, rather big, rather small, small;

The analysis focuses on four core elements: (1) characteristics of the institutions (TTO, STP, enterprises etc.), (2) motivation for transfer of technology and know-how (not explicitly included in survey no. 2), (3) barriers of technology and know-how transfer, (4) technology transfer services.

To analyze the data, descriptive statistics were used. Concerning nominally and ordinally scaled data frequency, percentage, valid percentage, and cumulative percentage were analyzed. Concerning metric data minimum, maximum, mean, and standard deviation were examined. To detect specific characteristics, cross tabulation was used. In the final report boxplots will be used as well.

Due to the good response rates, the survey is highly representative. Nevertheless, a number of questions have been left unanswered.

The questions for similar items differ between the surveys. This is sometimes problematic for the cross-survey analysis. Furthermore, some questions are not clear defined.

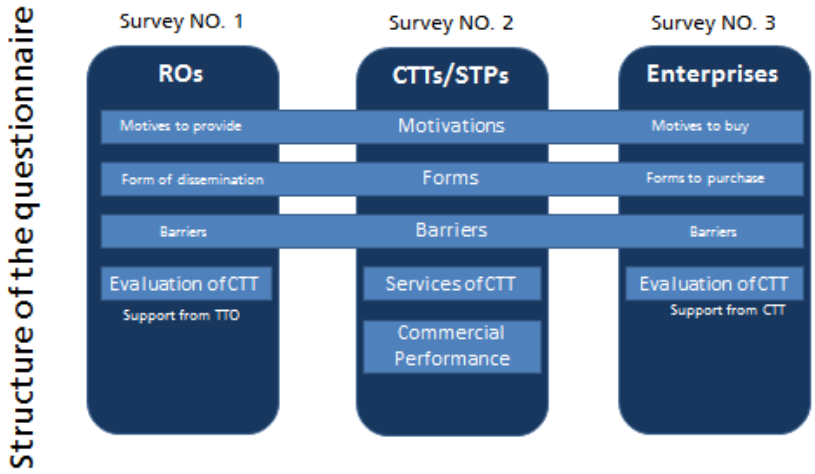
Control questions are often missing. The intensity (quality) of contacts between companies and partners had not been asked for.

The analysis uses Boxplots (Annex B). This tool is used to compare statistical characteristics (distribution, median, mean) of different samples.

3. Analysis

The Analysis follows the structure of the survey provided by TA CR.

Fig. 2: Structure of the questionnaire provided by TA CR



Source: TACR (2014)

In the following we concentrate on major findings of the research. More details such as the size, age or forms etc. of the various groups of respondents could have been analyzed, but this was beyond the scope of this work.

3.1. Survey: Research Organizations[2]

General information about the sample[3]

	Research Organizations
Date	20.06.2013
Return	6% (223 researchers from 3852 e-mails)
	27% (71 of 265 institutions)

The analyzed sample consists of 223 researchers (60% universities or higher education institutes, more than 50% are located in Prague). All staff positions are more or less equally represented (only director-level is underrepresented).

Motivation

In the first place respondents named scientific motivation (very large and rather large): more than 80% "developing technologies and knowledge to the applicability stage in the framework of joint research", almost 80% "possibility of ongoing testing of research results in practice". Reputation was also ranked very high: 80% "Increasing the reputation (image) of your institute through collaboration with partners from the application sphere".

In the second place respondents named commercial motivations (approximately 70%) like "Obtaining strategic information on research challenges from practice to further research work; Access to larger projects and more complex technological fields; Generation of third sources for the financing of leading research workers" and motivations related to human resources like: "Obtaining quality students / doctoral students / leading workers based on interesting research themes from the application sphere;

[2] For the results (Tables, Figures) see Annex B.
[3] Provided by TA CR.

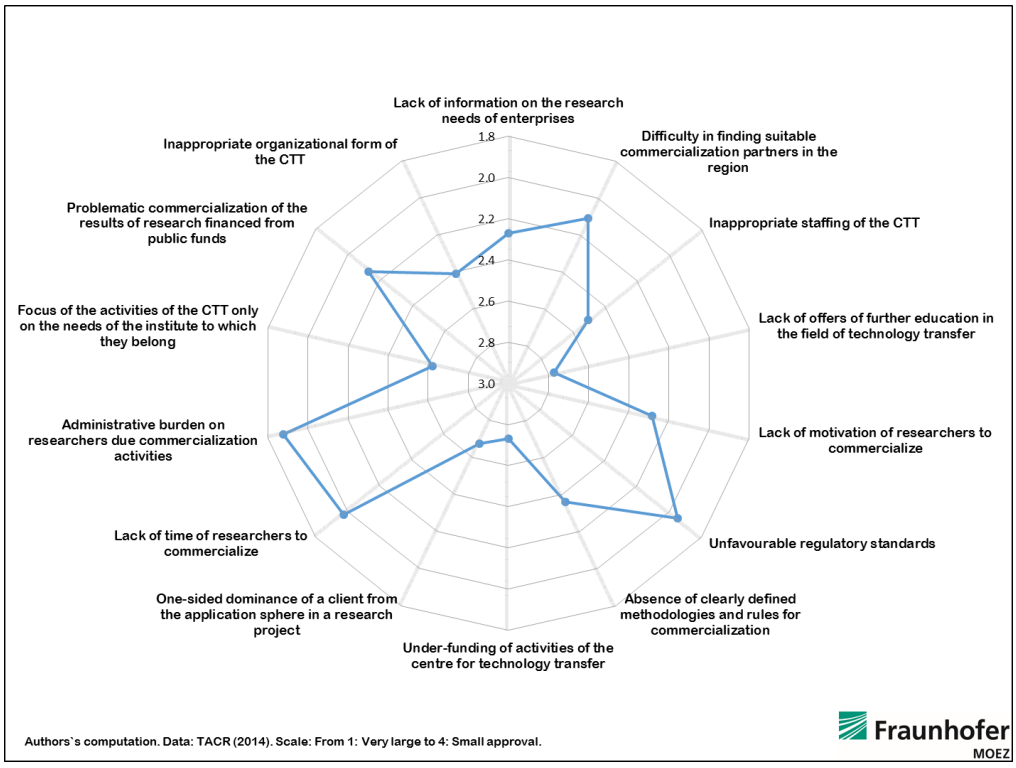
Involving students / doctoral students in research collaboration in order to increase their chances on the labour market".

Barriers

In the first place respondents named "administrative burden on researchers due to commercialization activities" and "lack of time of researchers to commercialize" (75%).

In the second place respondents named unfavorable regulatory standards like funding for research and higher education (more than 70) and "difficulty in finding suitable commercialization partners in the region" and "problematic commercialization of the results of research financed from public funds (conflict of interest)" (70%).

Fig. 3: Barriers to Technology Transfer – Research Organization[4]



[4] For larger presentations of the figures see Annex B.

Technology Transfer Services

Answering the question "Do you consider following activities of the center for TT beneficial for you institute?", most respondents addressed:

- Regarding "Information": "Informing partners from application sphere about the possibilities of collaboration with research/academic institutes" with yes/rather yes (81%);

- Regarding "Searching": "Mediating direct contacts with partners from the application sphere (workshops, seminars, round tables)" with yes/rather yes(77%);

- Regarding "Commercialization": "Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy (valuation, IP protection)" with yes/rather yes (79%);

- Regarding "Network": "Activities to promote collaboration between research and academic institutes" with yes/rather yes (71%);

- Regarding "Culture": "Providing information and advice to university staff in relation to intellectual property and technology transfer" with yes/rather yes (75%);

Quotations concerning different industries

"It is clear to me that the IT sector is quite specific, and what works for IT does not work for medicine. In IT we can, in several cases, afford to "commercialize" research for a single day. We can just rent a server, launch a website, create a mobile application, and see how the market reacts (if it is interested / not interested)."

… absorptive capacities

"It is necessary to raise the overall level of expertise in the corporate sector. As long as there are not qualified people able to articulate their needs and understand the answer, neither of the parties will be able to communicate with each other. This is not provided by any CTT"

… awareness

"Commercialization is not a prestigious activity, it is not evaluated scientifically, it is not a traditional activity. It is difficult for the institute to looking for suitable partners who are willing to invest sufficiently in joint research."

3.2. Survey: Centers for Technology Transfer/ STPs

General information about the sample[5]

	Technology Transfer Offices	**Science and Technology Parks**
Date	08.07.2013	29.10.2013
Return	76% (19 TTOs of 25 TTOs)	20% (18 STPs of 92 STPs)

Centers for Technology Transfer

More than 26% of the CTTs have an annual budget of more than 10 Mio CzK., 53% of the CTTs have an annual budget less than 5 Mio. CzK.

Barriers

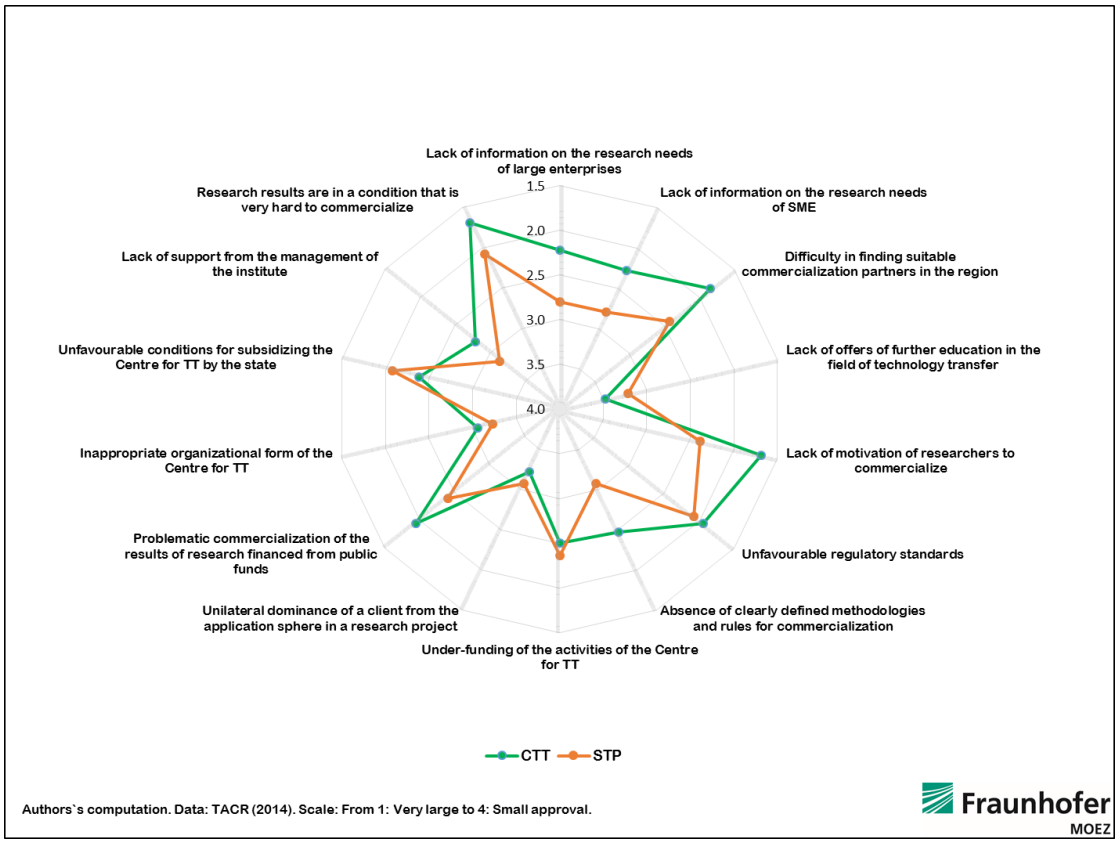
Answering the question "Please indicate the significance of the following barriers to successful TT" the respondents addressed mostly the following barriers:

- "Lack of motivation of researchers to commercialize" (95%); "Difficulty in finding suitable commercialization partners in the region" (84%); "Research results are in a condition that is very hard to commercialize" (84%).

At the same time, no institution addressed the issue of "Lack of offers of further education in the field of technology transfer" very often/rather often.

[5] Provided by TA CR.

Fig. 4: Barriers to Technology Transfer – CTT and STP



Technology Transfer Services

Answering the question "Please indicate the forms of technology transfer at your center for TT in terms of their frequency" the respondents addressed mostly the following form:

- "Frequency of patent application" very often/rather often(89%); "Frequency of Utility model applications" very often/rather often (89%).

On the other hand, less than 6% of the respondents addressed the issues of "Form and Frequency of TT establishment and operation of spin-offs" very often/rather often.

Answering the question "Please indicate the frequency of the following activities of your center" the respondents addressed mostly:

- Regarding "Informing": "Presentation of the research results / services of your institute" very often/rather often (79%); "Informing partners from the application sphere about the possibilities of collaboration with research / academic institute" very often/rather often (73%);

- Regarding "Searching": "Comprehensive mapping of university resources suitable for commercialization" (79%). On the other hand, less than 6% of the respondents addressed the issue of "Searching and implementation of external technologies and knowledge to meet the needs of your institute";

- Regarding "Commercialization": "Commercial and legal security of orders and offers, including negotiating and securing contracts" (89%) and "ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy" (89%);

- Regarding "Network": "Networking activities directed at partners from another Centre for TT" (53%) and "Activities to promote collaboration between research and academic institutes" (53%) very often/rather often. However less than 6% of the respondents addressed the issues of "Mediating practice / theses for students / PhD students at partners from the application sphere" or "Mediating internships of colleagues of the institute at partners from the application sphere";

- Regarding "Culture": "Providing information and advice to university employees in relation to intellectual property and technology transfer" (100%) and "Draft methodologies, guidelines and strategies related to technology transfer" very often/rather often (84%). On the other hand, less than 30% addressed the issues of "advising partners from the application sphere in defining the terms of reference for research and development - especially SME" (26%) or "Advising partners from

the application sphere in the implementation of the research and services of your institute into practice - especially SME" very often/rather often. Only 11% of the respondents addressed the issue "Ensuring qualification measures from the area of technology transfer for interested parties from the application sphere" very often/rather often;

Quotations concerning absorptive capacity

"There are no local partners, scientists are pushed by the funding system to publish / (not only publications but e.g. student dissertations), a large distance from the market"

… incentives and structures

"One of the main barriers is the aforementioned lack of interest of researchers in commercialization, career plans are set so that workers have virtually no incentive to commercialize. There are also no examples of successful commercialization, and if there are, the remaining often less successful scientists cook up all sorts of obstacles and gossip about the theft of state property, etc. + Generally, the position of CTTs at universities is also desperate, the ideal form would be a separate entity in the form of a limited company owned by the school. This would straighten out a lot of misunderstandings on a faculty level."

… management issues and public support

"Lack of experts for "proof of concept" – we have been looking for nine months (++Amendment to the Act on Public Procurement - quality and uniqueness basically cannot be tendered – the government simply doesn't know how to do it and does not evaluate anything over than the price cost."

"The obligations for partners in pre-seeds are in many fields difficult to fulfil"

… centralized/ de-centralized transfer services

"Separation of the Czech Republic into two transfer centers i.e. Prague and the others meaning Prague has completely different conditions for the transfer centers than the rest of the country. This I see as a very poor solution. I think the conditions should be the same for all universities."

… entrepreneurship

"Mainly the organization of what I would call "entrepreneurial spirit". This is particularly the establishment of the SPINUP club, which brings together people interested in conducting business in research and development. It is about the underpinning of this 2.5% sleeping minority which is able to set up a company from their research and sell licenses. If activities of a similar nature were part of a future TACR program it would help to create a long-term strategy."

Science and Technology Parks (STPs)

80% of the STPs offer/provide services to external clients. 60% of these STPs provide external clients discounts for their services.

55% of the STPs have experiences with the establishment and operation of start-up companies. 28% of the STPs have experiences with the establishment and operation of spin-offs.

35% of the STPs have an annual budget of more than 10 Mio CzK.

44% of the STPs estimate the share of their costs for services related to technology transfer of up to 5% of their annual budget (2012/2013).

Barriers

Answering the question "Please indicate the significance of the following barriers to successful TT" the respondents addressed mostly the following barriers:

- "Research results are in a condition that is very hard to commercialize" very large/rather large (72%); "Unfavorable conditions for subsidizing the Centre for TT by state" very large/rather large (67%); "Unfavorable regulatory standards" very large/rather large (62%);

Technology Transfer Services

Answering the question "Please indicate the frequency of the following activities of your center" the respondents addressed mostly:

- Regarding "Information": "Informing partners from the application sphere about the possibilities of collaboration with research/ academic institutions" (67%) and "Presentation of the research results/ services of your organization" very often/rather often (67%);

- Regarding "Searching": "Searching, analysis, and monitoring of market opportunities and trends" very often/rather often (64%);

- Regarding "Commercialization": "Preparation of plans for the commercialization of positively evaluated projects" very often/rather often (67%);

- Regarding "Network/trust": "Networking activities directed at partners from other mediators of technologies and knowledge" very often/rather often (64%);

- "Regarding "Culture": "Providing information and advice to clients of your organization in relation to intellectual property and technology transfer" very often/rather often (71%);

Quotations concerning absorptive capacity

"There has been no interest from local companies in our services - incubator, technology transfer - for a long time (a problematic region of North West Bohemia"

… time for development and trust

"(…) is a business and innovation center, which has operated in the Czech Republic for over 20 years. Through our activities, especially in the field of "technology transfer" we create a bridge between research institutes and industrial companies, and we support the transfer of innovation into practice. + Our aim is to support entrepreneurs in the creation of innovative projects and provide active consultation, assistance, training, as well as important information. Our long-term partners are part of what we call the "BIC Family".

3.3. Survey: Enterprises

General information about the sample[6]

	Enterprises		
	TA CR´s CLIENTS (1st wave)	**Other companies with R&D expenditures (2nd wave)**	**Companies without R&D expenditures (3rd wave)**
Date	23.01.2014	20.02.2014	20.2.2014
Return	9% (**447 respondents** from 5150 e-mails)	7% (**98 respondents** from 1450 e-mails)	2% (**85 respondents** from 5326 e-mails)
	29% (390 of 1329 companies)	12% (91 of 779 companies)	2% (84 of 3699 companies)

[6] Provided by TA CR.

Additional characteristics of the enterprises

Characteristic	**TA CR´s CLIENTS (1st wave)**	**Other companies with R&D expenditures (2nd wave)**	**Companies without R&D expenditures (3rd wave)**
Years of existence	12,6% between 2-7 years 70,3% older than 13 years	2,2% between 2-7 years 87,1% older than 13 years	31,3% between 2-7 years 57,8% older than 13 years
Company size	50,7% large and medium sized enterprises 33,6% small enterprises 15,8% micro enterprises	57,2% large and medium sized enterprises 31,9% small enterprises 11,0% micro enterprises	12,2% large and medium sized enterprises 22% small enterprises 65,9% micro enterprises
Ownership structure	71,9% owners from Czech Republic only 13,6% owners from abroad only 12,5% owners from Czech Republic and abroad	65,6% owners from Czech Republic only 15,6,% owners from abroad only 15,6% owners from the Czech Republic and abroad	83,1% Owners from Czech Republic only 7,2% Owners from abroad only 8,4% Owners from the Czech Republic and abroad
Regional distribution	29,9% Capital City of Prague 14,7% South Moravia Region 11,3% Central Bohemia Region	23,5% Capital City of Prague 17,3% South Moravia Region 11,2% Pardubice Region 10,2 Moravia-Silesia Region	25,6% Capital City of Prague 12,2% Zlin region 11,0 % Central Bohemia region
Experiences of collaboration with a university/RO in the last 3 years	94,4% yes 5,6% no	81,6% yes 18,4% no	24,7% yes 75,3% no

1st wave: TA CR clients

Motives

Major motives are competitive advantages (60% of respondents), getting access to the latest knowledge/ know-how (47%), saving costs (46%) and enhancing the reputation of the company (35%). All other motives rank considerably lower.

Barriers

Major barriers in collaboration with universities/ ROs are "Slowness and inflexibility of the university system" (43%), "High administrative burden on the company" (36%), "Insufficient quality of research services of the University/RO" (25%) and "Absence of clearly defined methodologies and guidelines for research collaboration" (22%).

Technology Transfer Services

In general the following services provided by CTT/STP are rated "no benefit/less benefit" in terms of the benefit by the companies:

- "Offer of joint participation with the University/RO at trade fairs" (86%); "Mapping the innovation potential of your business" (85%); "Arranging work placements of Professors/researchers in your company" (75%); "Mediating opportunities for "networking" and meetings" (74%); "Market analysis" (74%); "Advice on the introduction of new technologies into operation" (74%).

40% of the companies have no idea what advice CTT/STP could offer.

In particular the companies rated the services of the CTTs/STPs they collaborated with as "unsatisfactory/ less satisfactory":

- "Mapping the innovation potential of your business" (83%); "Market Analysis" (76%); "Offer of joint participation with the University/RO at trade fairies" (67%); "Arranging work placements of

Professors/researchers in your company" (67%); "Involvement of your company/employees in teaching at the university" (62%);

The companies considered the following services of CTT/STP as most beneficial ("rather beneficial/ greatest benefit"):

- "Informing about the services of R&D" (78%); "Mediating joint research projects" (78%); "Informing about the offer of know-how/ technology" (66%); "Mediating opportunities for "networking" and meetings" (63%);

Quotations concerning public support

"A more open policy of TACR supporting projects across the board without financial restrictions and a responsive approach to the concept of research, clear rules which do not change, flexibility of the institute, trust and responsibility of team leaders who can manage the grant without the incompetent intervention of superiors."

"There is no clear strategy from the state for supporting the transfer of innovation. Support of technical education at all levels is missing incl. support for practical training of students in companies. A concept of long-term support of collaboration between the academic and manufacturing sphere is also missing. There is no feedback from the collaboration between research institutes and companies."

"The whole system of priorities in the country would have to change. I think that the "cheap" money would have to disappear from the system. + If it is easier to get money from state aid than it is to satisfy customer requirements then even manufacturing companies will ask for support."

… management issues

"Most transfer activities at specialized unskilled workplaces in the Czech Republic lead to an increase in administrative costs and have no obvious economic effect of the transfer. Therefore, there is an irrational tendency to provide these activities on a materially professional (but in terms of transfer amateur) level. As we know from abroad, we are still waiting in vain for professionals in this field."

"I feel that the knowledge and competence of our universities are significantly lower than in enterprise and in foreign schools. I do not see any motivation to adapt to our needs. Everything is slow, verbose, without any real or fast action."

… centralized and de-centralized services

"Transfer of technology should be focused on centers intended for several institutes in the given locality. The CTT should be highly professional and the state should allocate funds for the creation of technology transfer centers and support their activities. CTTs should actively work and be partly evaluated and remunerated by the impact of their work on TT. In Prague transfer of technology for ASCR should be concentrated to one of the several low quality CTTs. The obligation to establish a CTT at each institute will lead to low-level centers."

"Each research institute should have its own CTT or at least another means of finance it in collaboration. The activities of the CTT should therefore be supported in part by public funds and partly by the commercialization of results."

… lack of customers

"Very narrow range of potential customers for contract research primarily from small and medium-sized enterprises, difficult to apply research for the benefit of non-governmental organizations."

… performance of universities

"Completely different priorities of the university and the market. The university is much easier to apply for grants than working on a particular task, with a fixed timetable, the results of which cannot be published, adhere to a fixed budget and achieve real results."

"Universities have high overhead costs; the price charged for similar services by commercial entities is paradoxically cheaper, often significantly."

"I think the main problem is the people. While innovators and researchers from enterprise have strong and intensive experience with the academic sphere (study, practice, often leaving in disgust), academics have zero experience with the corporate sector."

"We generally do not have a problem with collaborating with universities. We found it helps to precisely define the rules of collaboration and ensure that the project manager controls the fulfilment of the time schedule, which researchers and students tend to interpret very loosely."

2nd wave: Other companies with R&D expenditures

Motives

Major motives are "Easier access to the latest know-how/ technologies" (39%), "Gain a competitive advantage through projects funded from public sources (research)" (36%), "Enhancing the reputation of the company" (35%) and "Saving costs for research (economically more efficient than internal R&D" (35%).

Barriers

Major barriers are "Slowness and inflexibility of the university system" (31%), "High administrative burden on the company" (27%) and "Absence of clearly defined methodologies and guidelines for research collaboration" (20%).

Technology Transfer Services

In general the following services provided by CTT/STP are rated "no benefit/less benefit" in terms of the benefit by the companies:

- "Mapping the innovation potential of your business" (91%); "Involvement of your company/employees in teaching at the university" (84%); "Information on further education" (81%); "Offer of joint participation with the University/RO at trade fairs" (81%);

46% of the companies have no idea what advice CTT/STP could offer. 21% of the companies stated that CTT/STP provides services they could not use.

In particular the companies rated the services of the CTTs/STPs they collaborated with as "unsatisfactory/ less satisfactory":

- "Offer of joint participation with the University/RO at trade fairs" (70%); "Arranging work placements of Professors/researchers in your company" (67%); "Mapping the innovation potential of your business" (50%); "Involvement of your company/employees in teaching at the university" (50%);

The companies considered the following services of CTT/STP as most beneficial ("rather benefit/ greatest benefit"):

- "Informing about the services of R&D" (84%); "Informing about the offer of know-how/technology" (81%); "Mediating joint research projects" (81%);

Quotations concerning public support

"Innovation vouchers are excellent. The principle is great, increase the amount of funding and extend the possibility of continuation of the already functioning teams to other similar projects."

… awareness

"We do not do innovation but research and development."

… universities

"PhD, associate professors and professors should be required to work in the corporate sector and should not be able to grow only in the school environment. Excessive specialization of fields is harmful. A universal technical education must be based on a good knowledge of physics and mathematics. Evaluate universities only based on publications with impact factor is short-sighted. If someone cannot implement their ideas in practice is worthless for the industry, even if he is crowned with titles and has published in journals worldwide. If a professor does not perform and at the same time implement research then he cannot nurture utilizable engineers and scientists in practice."

"If universities had a market approach to money they would increase work productivity and output would be of a better quality. Currently, the quantity of professional work is more important than the quality."

3rd wave: Companies without R&D expenditures

Motives

Regarding motives to collaborate there is no clear picture available due to the data.

Barriers

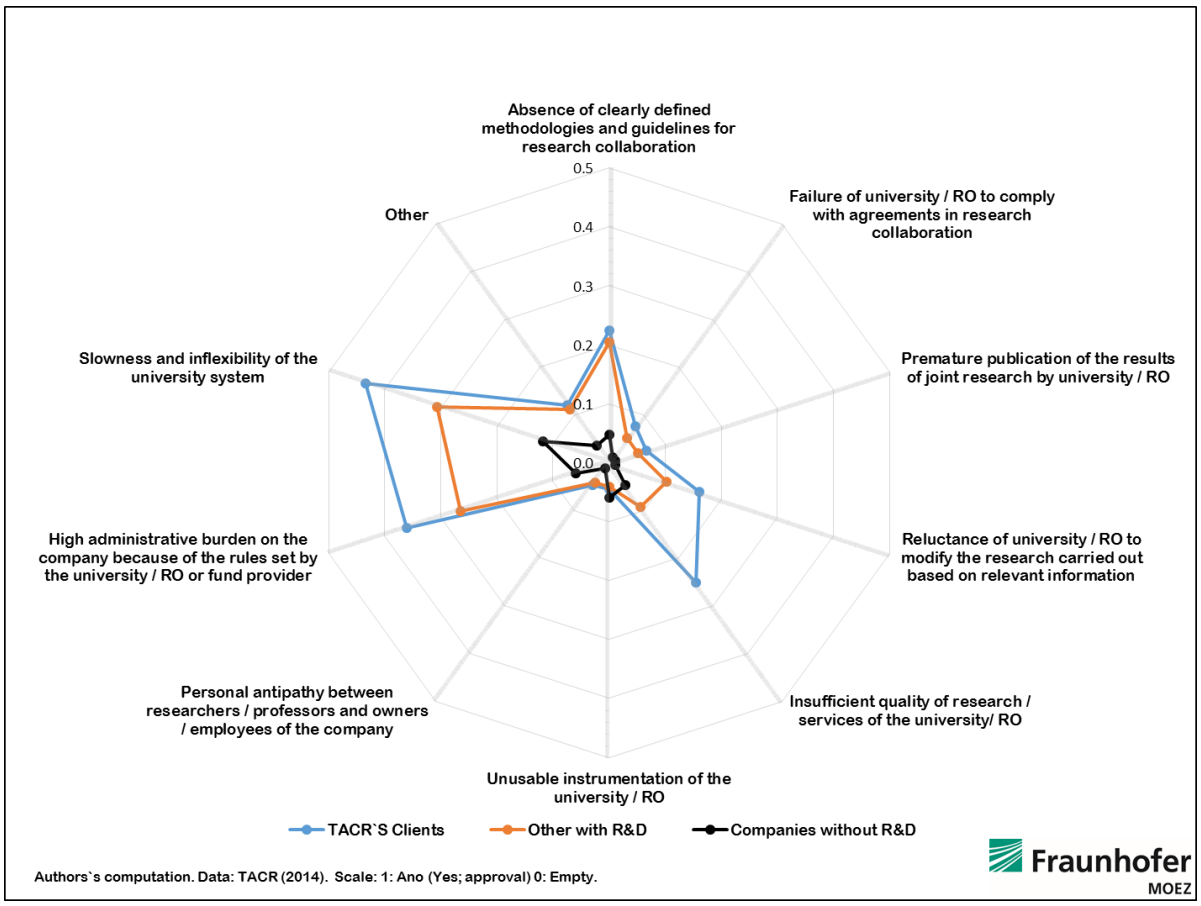
Regarding barriers to collaborate, there is only one answer with more than 10% frequency: "Slowness and inflexibility of the university system" (12%).

Technology Transfer Services

There is no clear picture available, because only very few out of 85 companies of 3rd wave answered the following questions:

- "CTT/STP offer companies a wide range of services - rate in general these services in terms of the benefit for your company"; "Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction" and "Please state what services of CTT/STP you consider in general to be the least and the most beneficial";

Fig. 5: Barriers to Technology Transfer – Companies



Quotations concerning knowledge access

"There are no barriers, we know what we want and we always get it, if not in the Czech Republic then in America - we are a multinational company."

… universities

"Support for the creation of joint ventures, which would determine the area of research and development and use the results of joint research and development in practice. Greater emphasis on use of European funds to create such projects with an emphasis on projects that have a clear potential to increase the competitiveness of both companies as well as universities. Allow the use of such funds on risky research and development, where the sustainability (return) of the projects is not so clear at the beginning."

3.4. Round Table Discussions

In order to discover the causes of current deficiencies and to identify the major problems that limit the effective management of intellectual property and technology and knowledge transfer, the Council for Research, Development and Innovation of the Czech Government initiated in cooperation with the Technology Agency of the Czech Republic a series of round table discussion with representatives of research organizations, enterprises, staff of technology transfer organizations, the Industrial Property Office and other professionals dealing with these issues. The results of these discussions are, in addition to the description of the main problems, also proposed actions that can help to remove or mitigate them.

During April and May 2014 three discussion tables were held. The first roundtable was carried out only with representatives of technology transfer centers (TTC) selected from a list of all technology transfer centers and technology parks in the country. The second roundtable was composed of researchers from the universities selected internally from the staffs of the Technology Agency. Aims of the third table were to create a space for cross-cutting discussions with representatives of the CTT, researchers and businesses. However, despite repeated calls to the third roundtable no representative from the businesses sector participated. Main findings:

Quality and market relevance of research results

The results of public research and the form of its protection are – especially for industry – not attractive and in practice applicable.

Motivation for the application of research results in practice

There is a low focus on applicability of the research results in practice.

Research results with high commercial potential tend to "escape" research organization ("gray zone").

Awareness, knowledge and experience in IPR management in ROs

There is low awareness of the value of research results.

The system for the commercialization of ROs

There is no conceptual anchoring of knowledge transfer in the internal system of ROs and underutilization of services provided from TTOs.

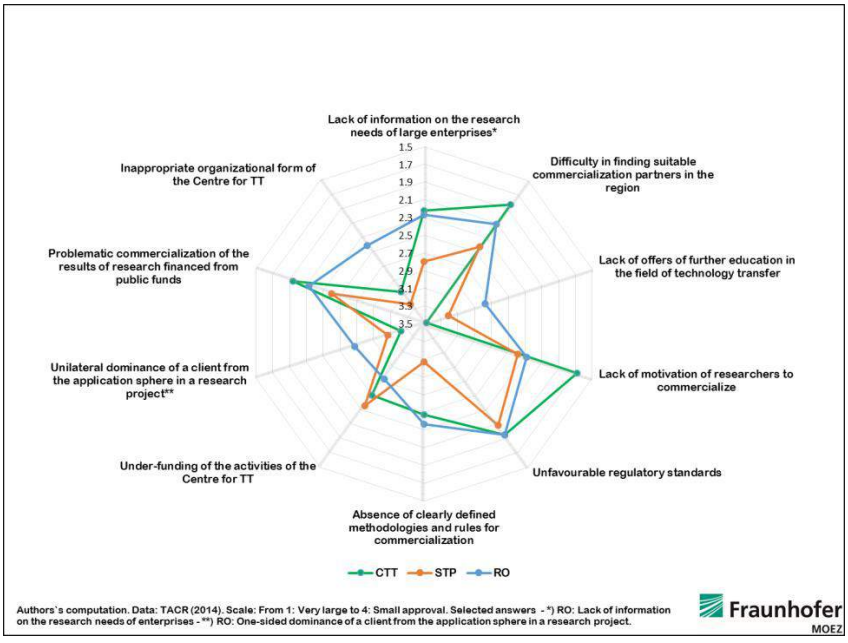
Legislation

There are restrictive legislative conditions for the management of intellectual property and commercialization of the research results supported by public sources.

3.5. Cross-Survey Analysis

Comparison between Research Organizations, TTOs and STPs

Fig. 6: Barriers to Technology Transfer – RO, CTT and STP



Comparison of enterprise waves

While "motivations" of enterprises from wave one and two are very similar, this does not hold regarding wave three. The same can be observed for "needs". Regarding "barriers", enterprises have very similar views compared with Research Organizations and TTOs.

Comparison between Supply (RO, TTO, STP) and Demand (enterprises)

To compare the supply side and demand side of technology transfer services, Fraunhofer MOEZ codified the given data according to the following typology.[7]

Function	Explanation
Transparency	This function includes all services providing transparency, like *identification* (scouting, foresight), *valuation, informing* or *validation*.
Market place	This function includes all services providing a market place, like (1) a *place* for selling and buying technologies or (2) a *platform* for people (congresses, fairs, brokering events) and knowledge and technologies (like the European Enterprise Network), or to provide (3) *governance* for market places or platforms (like clusters or networks).
Competences	This function includes all services providing technology transfer support competences, like (1) start up *coaching*, (2) *consultancy* regarding public support programs, marketing or special transfer processes (e.g. clinical trials), (3) *qualifications* and (4) *trainings*.
Administration	This function includes all services providing administrative support, like *project management, contract management, human resource management,* or *communication*.
Resources	This function includes all services providing resources, like *infrastructure* (office space, technological infrastructure), *financial support,* or *human resources*.

[7] The typology was developed, tested and published in: Lehmann/Preissler: Wissens- und Technologietransfer in der Region Leipzig (2013), p. 14 (http://www.moez.fraunhofer.de/de/publikationen/studien.html).

Fig. 7: Supply vs demand of transfer services

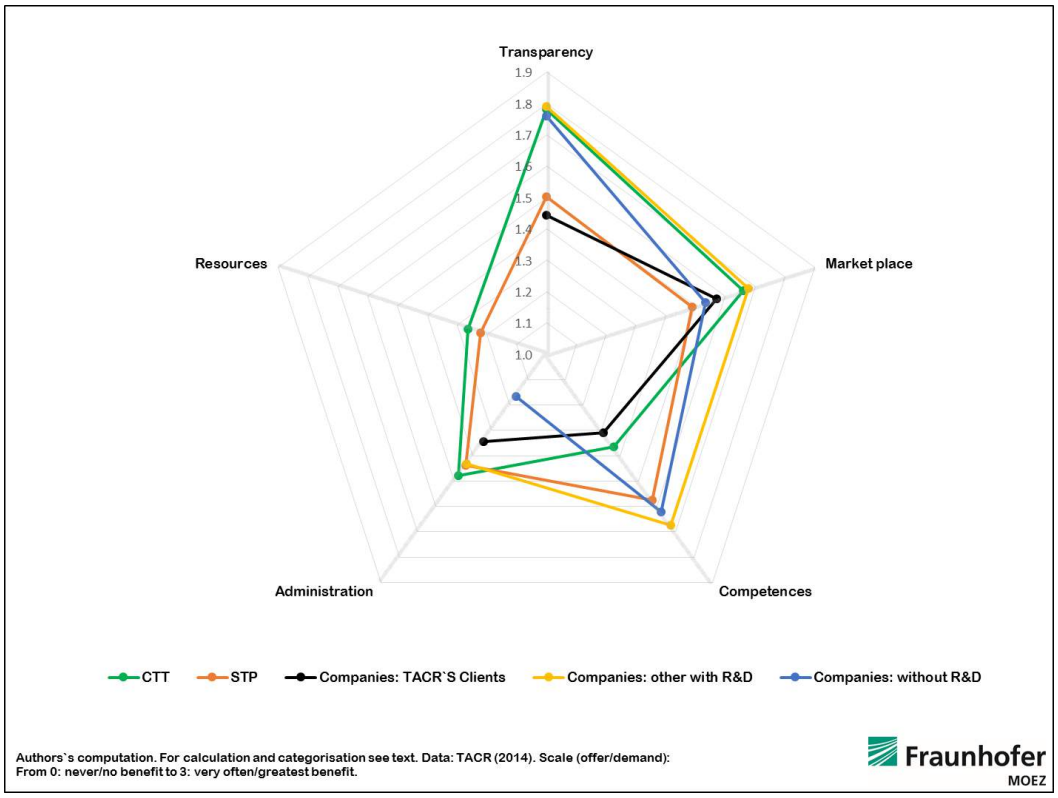


Fig. 7 shows the difference between supply and demand of technology transfer services. The higher the number (0-3) in the radar chart is, the higher is "demand" or "offer", respectively.

In comparison to other companies, TACR's clients express a low interest in technology transfer services. Companies (other with R&D) show the highest interest in technology transfer services.

The offer by CTT and the demand by Companies (other with R&D) is nearly identical in the dimensions of "transparency", "marketplace" and "administration".

CTTs do have a strong focus in the field of "transparency" and STPs do have a strong focus in the field of "competences".

Fig. 7 shows that there is a strong offer of technology transfer services provided by CTTs and STPs. It seems that supply is mostly higher than demand. Considering the companies` perception, it is likely that the quality of supply does not meet the quality of demand.

The Boxplots in Annex B focus on the "demand of the RO and companies" and "the supply side (CTT and STP)". The comparison of the needs of RO and the supply side (CTT/STP) shows the following picture: all RO expressed a high demand for technology transfer service "informing", but the offer of CTT/STP seems to be quite moderate. All RO expressed a high demand for technology transfer services "searching" and "commercialization". The offers of CTT vary a lot, the offer of STP is seen as quite moderate.

Special questions

What could be improved to foster the TT between RO and enterprises?

Please have a look at Annex B. tables A.1.2 and A.4.5, A.5.5 and A.6.5.

Why do universities and RO not collaborate with companies? Does it mean that those activities could be abolished?

Please have a look at Annex B. tables A.4.4, A.5.4 and A.6.4.

What does it mean for RO, if innovating enterprises address markets for their innovations? How should TTOs react?

Please have a look at Annex B. tables A.4.1, A.5.1 and A.6.1

4. General findings[8]

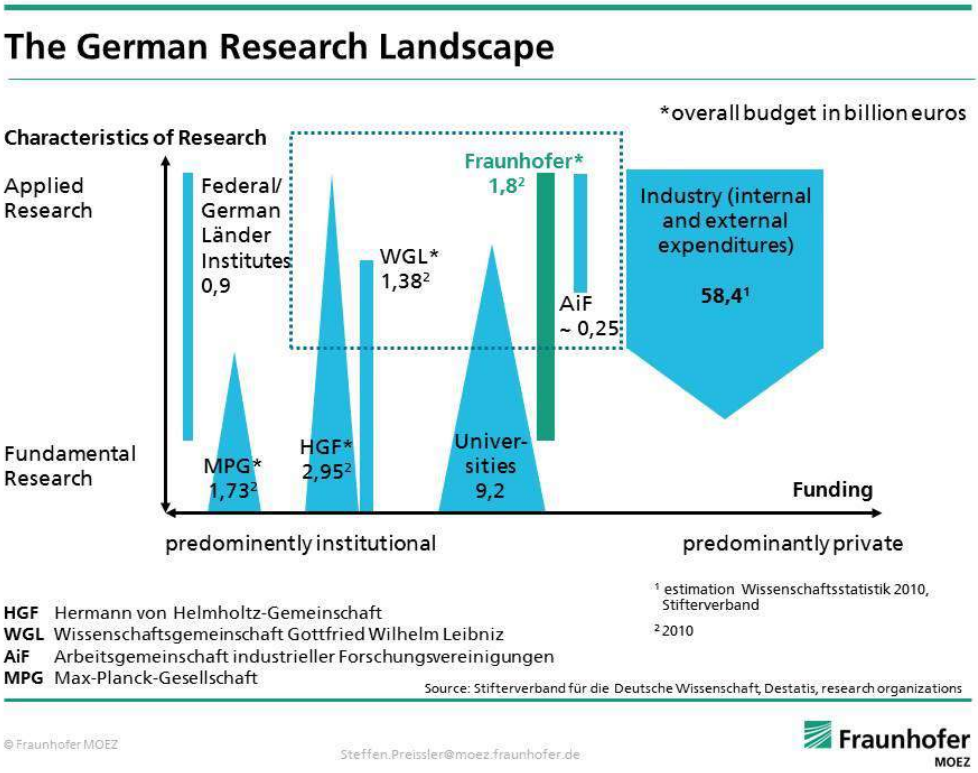
Institutional setting in Czech Republic

Respondents stated an excess burden for institutions with different functions. Universities emphasized that they are responsible not only for education, research but now also technology transfer.

→ In addition to universities and universities of applied sciences, there are specialized federal R&D-organizations in Germany with different functions within the German innovation system. If large R&D infrastructure (e.g. cyclotrons) is involved, usually the Helmholtz Association will be in charge: http://www.helmholtz.de/en/; if demand oriented applied research in technology is sought for, than usually the Fraunhofer Gesellschaft (http://www.fraunhofer.de/en.html) will be addressed. Max-Planck Gesellschaft (http://www.mpg.de/en) and Leibniz Association are further examples of specialized R&D organizations (http://www.leibniz-gemeinschaft.de/en/home/) (see Figure 8).

[8] For a new critical assessment of the creation and absorption of technology, the roles of governance, public administrations and private-sector involvement for the success of innovation policies (in transition countries), see European Bank, Transition Report 2014, http://www.ebrd.com/news/publications/transition-report/transition-report-2014.html.

Fig. 8: The German Research Landscape



All four organizations established their own incentive schemes, culture, processes and "business models". They are financed differently.

<u>Question of "critical mass" and "specialization" of TTOs</u>

The respondents often mentioned the questions of "critical mass" and "need for specialization" of TTOs. Fostering cooperation between Czech TTOs and supporting the specialization of TTOs (professionalization) could be of high value.

→ Cooperation between TTOs: In Germany there are several networks of cooperating TTOs. For example in Saxony-Anhalt there is the KAT-competence network for applied and transfer oriented research, a

network of TTOs of several universities and universities of applied sciences. http://kat-kompetenznetzwerke.de/

→ Specialization of intermediaries: an example could be the Office of Technology Transfer at German Cancer Research Center: http://www.dkfz.de/en/techtrans/index.html

Realistic expectations of outcomes/outreach of TTOs

Enterprises and Politicians might not have a clear understanding of tasks and realistic outcomes/outreach of the TTOs (some questions suggest very ambitious expectations). As a consequence, lots of companies seem to be very much disappointed.

→ There are lots of experienced partners within Europe like TAFTIE[9], Pt Jülich[10], ASTP-Proton[11] or EU Technology Transfer Office Circle[12].

Information regarding the service portfolio of TTOs

Czech enterprises expressed much dissatisfactions with the current situation. There is a lack of information regarding the service portfolio of TTOs. It is not always clear for the enterprises what they can expect from the TTOs.
However time and experience plays a central role and a lot of the TTOs and enterprises are quite young.

→ A good example of TTOs marketing is given by Heriot-Watt University's Research & Enterprise Services (RES): http://www.hw.ac.uk/services/research-enterprise.htm

Incentive schemes for Universities and Researchers

[9] https://taftie.org
[10] https://www.ptj.de/en/start https://.www.ptj.de/en/start
[11] https://ec.europa.eu/jrc/en/tto-circle
[12] https://ec.europa.eu/jrc/en/tto-circle

The data suggest a lack of sustainable incentive schemes for universities and researchers to commercialize their inventions in cooperation with TTOs.

→ A good example of win-win cooperation between universities and TTOs is given by University of Glasgow "Easy Access to IP": http://www.easyaccessip.org.uk/

→ In Germany there is a special law (Arbeitnehmererfindergesetz (ArbNErfG)), which forces professors to disclose their invention to the university.

Further findings

TTOs should be aware of the numerous contacts Czech companies have already established with universities and research organizations. It seems that Czech companies have a good feeling of where and how to get marketable knowledge. TTOs should learn from that.

There is much potential for extensive collaboration with (international) companies as technology providers and buyers.

There is the need for further collaboration with foreign R&D organizations.

ANNEX A: List of Figures

ANNEX B. Basic Figures and Tables

- Annex B. Basic Figures and Tables.pdf (Pages 1-112).

ANNEX C. Open Questions

- Annex C. Open_Questions.pdf (Pages 1-39).

ANNEX B. Basic Figures and Tables

1) List of tables

2) List of figures

A1. Research Organization

A1.0 Characteristics:

Statistics

		Please indicate the type of institute.	Select the region based on the registered office of your institute.
N	Valid	223	222
	Missing	0	1

Table A1.0.1: Please indicate the type of institute.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University / higher education institute	133	59.6	59.6	59.6
	Public research institute (v.v.i.)	67	30.0	30.0	89.7
	Private research institute (s.r.o., a.s.)	23	10.3	10.3	100.0
	Total	223	100.0	100.0	

Table A1.0.2: Select the region based on the registered office of your institute.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Capital City of Prague	115	51.6	51.8	51.8
	South Bohemia region	9	4.0	4.1	55.9
	Moravia-Silesia region	4	1.8	1.8	57.7
	Central Bohemia region	9	4.0	4.1	61.7
	South Moravia region	52	23.3	23.4	85.1
	Olomouc region	3	1.3	1.4	86.5
	Ústí region	2	.9	.9	87.4
	Hradec Králové region	3	1.3	1.4	88.7
	Liberec region	9	4.0	4.1	92.8
	Zlín region	1	.4	.5	93.2
	Pardubice region	8	3.6	3.6	96.8
	Plzeň region	7	3.1	3.2	100.0
	Total	222	99.6	100.0	
Missing	Empty	1	.4		
Total		223	100.0		

Table A1.0.3: Crosstabel position/type.

Current position			Please indicate the type of institute.				
			University / higher education institute	Public research institute (v.v.i.)	Private research institute (s.r.o., a.s.)	Empty	Total
Head of the institute	Head of the institute	Count	8	19	7	0	34
Head of a section / division/ department	Head of a section / division/ departmen	Count	30	17	5	0	52
Head of a research team	Head of a research team	Count	50	23	8	0	81
Research worker	Research worker	Count	37	20	6	0	63
Academic worker	Academic worker	Count	65	6	0	0	71
Other	business development manager	Count	1	0	0	0	1
	employee	Count	0	1	0	0	1
	head	Count	0	0	1	0	1
	head of department	Count	0	1	0	0	1
	lecturer	Count	1	0	0	0	1
	pedagogue	Count	1	0	0	0	1
	Ph.D. student	Count	2	0	0	0	2
	professor emeritus	Count	1	0	0	0	1
	project manager	Count	0	0	1	0	1
	zástupce vedoucího útvaru	Count	0	1	0	0	1

A1.1 Motives:

Table A1.1.1: Please indicate the importance of the following motives for performing the transfer of technology and knowledge at your institute.

Motives for TT		Count	Column Valid N %	Column N %
Possibility of using special technical instruments and equipment from practice	Very Large	33	16.2%	14.8%
	Rather Large	66	32.4%	29.6%
	Rather small	58	28.4%	26.0%
	Small	47	23.0%	21.1%
	No Answer	19	0.0%	8.5%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Obtaining strategic information on research challenges from practice to further research work	Very Large	66	30.6%	29.6%
	Rather Large	92	42.6%	41.3%
	Rather small	44	20.4%	19.7%
	Small	14	6.5%	6.3%
	No Answer	7	0.0%	3.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Possibility of ongoing testing of research results in practice	Very Large	79	36.7%	35.4%
	Rather Large	94	43.7%	42.2%
	Rather small	30	14.0%	13.5%
	Small	12	5.6%	5.4%
	No Answer	8	0.0%	3.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Access to larger projects and more complex technological fields	Very Large	63	30.1%	28.3%
	Rather Large	86	41.1%	38.6%
	Rather small	48	23.0%	21.5%
	Small	12	5.7%	5.4%
	No Answer	14	0.0%	6.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Increasing the number of published results of the institute	Very Large	36	16.7%	16.1%
	Rather Large	71	33.0%	31.8%
	Rather small	74	34.4%	33.2%
	Small	34	15.8%	15.2%
	No Answer	8	0.0%	3.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Improving the quality of publication activity	Very Large	43	20.0%	19.3%
	Rather Large	70	32.6%	31.4%
	Rather small	63	29.3%	28.3%
	Small	39	18.1%	17.5%
	No Answer	8	0.0%	3.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Involving students / doctoral students in research collaboration in order to increase their chances on the labour market	Very Large	61	28.9%	27.4%
	Rather Large	83	39.3%	37.2%
	Rather small	45	21.3%	20.2%
	Small	22	10.4%	9.9%
	No Answer	12	0.0%	5.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Involving students / doctoral students in research collaboration in order to enhance a culture of cooperation between research / academia and the application sphere	Very Large	44	21.3%	19.7%
	Rather Large	92	44.4%	41.3%
	Rather small	53	25.6%	23.8%
	Small	18	8.7%	8.1%
	No Answer	16	0.0%	7.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Increasing the reputation (image) of your institute through collaboration with partners from the application spher	Very Large	68	31.8%	30.5%
	Rather Large	105	49.1%	47.1%
	Rather small	29	13.6%	13.0%
	Small	12	5.6%	5.4%
	No Answer	9	0.0%	4.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.1.1: Please indicate the importance of the following motives for performing the transfer of technology and knowledge at your institute.

Motives for TT		Count	Column Valid N %	Column N %
Obtaining quality students / doctoral students / leading workers based on interesting research themes from the application sphere	Very Large	61	28.9%	27.4%
	Rather Large	76	36.0%	34.1%
	Rather small	56	26.5%	25.1%
	Small	18	8.5%	8.1%
	No Answer	12	0.0%	5.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Generation of third sources for the financing of leading research workers	Very Large	51	25.2%	22.9%
	Rather Large	80	39.6%	35.9%
	Rather small	45	22.3%	20.2%
	Small	26	12.9%	11.7%
	No Answer	21	0.0%	9.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Developing technologies and knowledge to the applicability stage in the framework of joint research	Very Large	90	41.7%	40.4%
	Rather Large	94	43.5%	42.2%
	Rather small	24	11.1%	10.8%
	Small	8	3.7%	3.6%
	No Answer	7	0.0%	3.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Generation of third sources from the commercialization of the research and development results	Very Large	64	30.3%	28.7%
	Rather Large	78	37.0%	35.0%
	Rather small	45	21.3%	20.2%
	Small	24	11.4%	10.8%
	No Answer	12	0.0%	5.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Other_ranked	Very Large	7	58.3%	3.1%
	Rather Large	4	33.3%	1.8%
	Rather small	0	0.0%	0.0%
	Small	1	8.3%	.4%
	No Answer	211	0.0%	94.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

A1.2 Form and collaboration:

Table A1.2.1: Please indicate the forms of technology transfer at your institute in terms of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Research collaboration with partners from other scientific / academic institutes (joint research)	Very often	78	35.9%	35.0%
	Rather often	98	45.2%	43.9%
	Not often	37	17.1%	16.6%
	Never	4	1.8%	1.8%
	No answer	6	0.0%	2.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Application of research results through academic activities (organization of scientific colloquia, symposia, workshops, conferences, etc.)	Very often	126	57.5%	56.5%
	Rather often	59	26.9%	26.5%
	Not often	28	12.8%	12.6%
	Never	6	2.7%	2.7%
	No answer	4	0.0%	1.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Patent applications; Utility model applications; Industrial design applications	Very often	31	14.7%	13.9%
	Rather often	81	38.4%	36.3%
	Not often	84	39.8%	37.7%
	Never	15	7.1%	6.7%
	No answer	12	0.0%	5.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Sale of licenses	Very often	4	2.1%	1.8%
	Rather often	17	8.9%	7.6%
	Not often	92	48.2%	41.3%
	Never	78	40.8%	35.0%
	No answer	32	0.0%	14.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Providing advisory and consultancy services	Very often	43	19.7%	19.3%
	Rather often	93	42.7%	41.7%
	Not often	76	34.9%	34.1%
	Never	6	2.8%	2.7%
	No answer	5	0.0%	2.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Providing services relating to instrumentation	Very often	20	10.0%	9.0%
	Rather often	67	33.3%	30.0%
	Not often	87	43.3%	39.0%
	Never	27	13.4%	12.1%
	No answer	22	0.0%	9.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Contractual research	Very often	31	14.8%	13.9%
	Rather often	86	41.1%	38.6%
	Not often	82	39.2%	36.8%
	Never	10	4.8%	4.5%
	No answer	14	0.0%	6.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Establishment and operation of a spinoff company	Very often	0	0.0%	0.0%
	Rather often	7	4.1%	3.1%
	Not often	51	30.0%	22.9%
	Never	112	65.9%	50.2%
	No answer	53	0.0%	23.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Operation of a business incubator/science/technology park	Very often	2	1.1%	.9%
	Rather often	19	10.6%	8.5%
	Not often	39	21.8%	17.5%
	Never	119	66.5%	53.4%
	No answer	44	0.0%	19.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.2.1: Please indicate the forms of technology transfer at your institute in terms of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Application of research results through publication activities	Very often	135	61.9%	60.5%
	Rather often	55	25.2%	24.7%
	Not often	25	11.5%	11.2%
	Never	3	1.4%	1.3%
	No answer	5	0.0%	2.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Direct transfer of technology between the researcher and the enterprise	Very often	22	10.6%	9.9%
	Rather often	61	29.3%	27.4%
	Not often	103	49.5%	46.2%
	Never	22	10.6%	9.9%
	No answer	15	0.0%	6.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Other	Very often	1	5.9%	.4%
	Rather often	1	5.9%	.4%
	Not often	2	11.8%	.9%
	Never	13	76.5%	5.8%
	No answer	206	0.0%	92.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Table A1.2.2: What methods of establishing contacts with partners from the application sphere is the most effective for your institute?

Effectiveness of establishing contacts		Count	Column Valid N %	Column N %
Through an external mediator of technology transfer (regional development agencies, innovation centres, CzechInvest, etc.)	Very effective	3	2.3%	1.3%
	Rather effective	20	15.4%	9.0%
	Rather ineffective	56	43.1%	25.1%
	Ineffectiv	51	39.2%	22.9%
	No answer	93	0.0%	41.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through former students/doctoral students now working in the application sphere	Very effective	47	25.4%	21.1%
	Rather effective	90	48.6%	40.4%
	Rather ineffective	39	21.1%	17.5%
	Ineffectiv	9	4.9%	4.0%
	No answer	38	0.0%	17.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through fairs and exhibitions	Very effective	3	1.8%	1.3%
	Rather effective	51	31.3%	22.9%
	Rather ineffective	76	46.6%	34.1%
	Ineffectiv	33	20.2%	14.8%
	No answer	60	0.0%	26.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through direct contact of the scientific collaborators of your institute with partners from the application sphere	Very effective	134	64.1%	60.1%
	Rather effective	65	31.1%	29.1%
	Rather ineffective	8	3.8%	3.6%
	Ineffectiv	2	1.0%	.9%
	No answer	14	0.0%	6.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through the initiative of a partner from the application sphere	Very effective	53	25.9%	23.8%
	Rather effective	99	48.3%	44.4%
	Rather ineffective	39	19.0%	17.5%
	Ineffectiv	14	6.8%	6.3%
	No answer	18	0.0%	8.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through a centre (or section) for technology transfer at your institute	Very effective	6	4.6%	2.7%
	Rather effective	30	23.1%	13.5%
	Rather ineffective	43	33.1%	19.3%
	Ineffectiv	51	39.2%	22.9%
	No answer	93	0.0%	41.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Through a centre (or section) for technology transfer at another institute	Very effective	5	4.1%	2.2%
	Rather effective	12	9.9%	5.4%
	Rather ineffective	43	35.5%	19.3%
	Ineffectiv	61	50.4%	27.4%
	No answer	102	0.0%	45.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Other	Very effective	2	33.3%	.9%
	Rather effective	3	50.0%	1.3%
	Rather ineffective	0	0.0%	0.0%
	Ineffectiv	1	16.7%	.4%
	No answer	217	0.0%	97.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Table A1.2.3: Please rate the staff of the centre for technology transfer you collaborate with the most.

Collaborate		Count	Column Valid N %	Column N %
Availability of staff	Very Good	22	31.0%	9.9%
	Rather Good	34	47.9%	15.2%
	Less satisfactory	8	11.3%	3.6%
	Unsatisfactory	7	9.9%	3.1%
	No answer	11	0.0%	4.9%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Involvement of staff	Very Good	19	26.8%	8.5%
	Rather Good	29	40.8%	13.0%
	Less satisfactory	14	19.7%	6.3%
	Unsatisfactory	9	12.7%	4.0%
	No answer	11	0.0%	4.9%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Professional competence of staff	Very Good	14	20.9%	6.3%
	Rather Good	26	38.8%	11.7%
	Less satisfactory	16	23.9%	7.2%
	Unsatisfactory	11	16.4%	4.9%
	No answer	15	0.0%	6.7%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Understanding the issue	Very Good	12	17.6%	5.4%
	Rather Good	28	41.2%	12.6%
	Less satisfactory	18	26.5%	8.1%
	Unsatisfactory	10	14.7%	4.5%
	No answer	14	0.0%	6.3%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Course of the discussion	Very Good	15	24.2%	6.7%
	Rather Good	29	46.8%	13.0%
	Less satisfactory	11	17.7%	4.9%
	Unsatisfactory	7	11.3%	3.1%
	No answer	20	0.0%	9.0%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Time flexibility and adherence to the time schedule	Very Good	14	23.7%	6.3%
	Rather Good	31	52.5%	13.9%
	Less satisfactory	8	13.6%	3.6%
	Unsatisfactory	6	10.2%	2.7%
	No answer	23	0.0%	10.3%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Reliance on oral agreements	Very Good	24	40.0%	10.8%
	Rather Good	24	40.0%	10.8%
	Less satisfactory	8	13.3%	3.6%
	Unsatisfactory	4	6.7%	1.8%
	No answer	22	0.0%	9.9%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Continuous upgrading of qualifications of staff of CTT	Very Good	10	25.6%	4.5%
	Rather Good	15	38.5%	6.7%
	Less satisfactory	6	15.4%	2.7%
	Unsatisfactory	8	20.5%	3.6%
	No answer	43	0.0%	19.3%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%

Table A1.2.4: Please rate your satisfaction with the main benefits of the centre for technology transfer whom you have worked with the most.

Satisfaction main benefits		Count	Column Valid N %	Column N %
Providing professional communication and collaboration with the application sphere	Very satisfied	7	12.1%	3.1%
	Rather satisfied	17	29.3%	7.6%
	Rather unsatisfied	19	32.8%	8.5%
	Unsatisfied	15	25.9%	6.7%
	No answer	24	0.0%	10.8%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Providing information on the market with technologies and knowledge to increase the commercial potential of your institute (technology pull)	Very satisfied	6	10.5%	2.7%
	Rather satisfied	19	33.3%	8.5%
	Rather unsatisfied	12	21.1%	5.4%
	Unsatisfied	20	35.1%	9.0%
	No answer	25	0.0%	11.2%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Analysis of the commercial potential of your institute (technology push)	Very satisfied	6	10.9%	2.7%
	Rather satisfied	19	34.5%	8.5%
	Rather unsatisfied	13	23.6%	5.8%
	Unsatisfied	17	30.9%	7.6%
	No answer	27	0.0%	12.1%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Effective promotion of the skills and knowledge of your organization - improving image	Very satisfied	6	10.7%	2.7%
	Rather satisfied	24	42.9%	10.8%
	Rather unsatisfied	13	23.2%	5.8%
	Unsatisfied	13	23.2%	5.8%
	No answer	26	0.0%	11.7%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Increasing commercial revenue and supporting the long-term financial sustainability of your institute	Very satisfied	4	7.5%	1.8%
	Rather satisfied	11	20.8%	4.9%
	Rather unsatisfied	14	26.4%	6.3%
	Unsatisfied	24	45.3%	10.8%
	No answer	29	0.0%	13.0%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Creation, operation and development of organization, processes and guidelines for the commercialization of the results of your institute	Very satisfied	8	14.3%	3.6%
	Rather satisfied	13	23.2%	5.8%
	Rather unsatisfied	16	28.6%	7.2%
	Unsatisfied	19	33.9%	8.5%
	No answer	26	0.0%	11.7%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%
Accepting the administrative burden of research / academic staff in terms of intellectual property protection and commercialization	Very satisfied	9	14.1%	4.0%
	Rather satisfied	18	28.1%	8.1%
	Rather unsatisfied	13	20.3%	5.8%
	Unsatisfied	24	37.5%	10.8%
	No answer	18	0.0%	8.1%
	Empty	141	0.0%	63.2%
	Total	223	100.0%	100.0%

Table A1.2.5: I have not used the services of the centre for technology transfer for the following reasons.

Reasons not used services		Count	Column Valid N %	Column N %
I do not need them	Very important	32	29.1%	14.3%
	Rather important	28	25.5%	12.6%
	Less important	19	17.3%	8.5%
	Unimportant	31	28.2%	13.9%
	No answer	36	0.0%	16.1%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
I have no information on how the centre for technology transfer center can help me	Very important	42	33.1%	18.8%
	Rather important	52	40.9%	23.3%
	Less important	15	11.8%	6.7%
	Unimportant	18	14.2%	8.1%
	No answer	19	0.0%	8.5%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
The centre for technology transfer does not provide services that I could use	Very important	17	19.5%	7.6%
	Rather important	31	35.6%	13.9%
	Less important	17	19.5%	7.6%
	Unimportant	22	25.3%	9.9%
	No answer	59	0.0%	26.5%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
Commercialization distracts me from publishing activities	Very important	18	15.4%	8.1%
	Rather important	39	33.3%	17.5%
	Less important	22	18.8%	9.9%
	Unimportant	38	32.5%	17.0%
	No answer	29	0.0%	13.0%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
Commercialization distracts me from research	Very important	19	16.0%	8.5%
	Rather important	40	33.6%	17.9%
	Less important	26	21.8%	11.7%
	Unimportant	34	28.6%	15.2%
	No answer	27	0.0%	12.1%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
Commercialization is an administrative burden for me	Very important	30	25.0%	13.5%
	Rather important	48	40.0%	21.5%
	Less important	19	15.8%	8.5%
	Unimportant	23	19.2%	10.3%
	No answer	26	0.0%	11.7%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
The results of my research are (despite their undeniable value) unsuitable for commercialization	Very important	14	11.5%	6.3%
	Rather important	19	15.6%	8.5%
	Less important	32	26.2%	14.3%
	Unimportant	57	46.7%	25.6%
	No answer	24	0.0%	10.8%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
I have no confidence in the competence of staff of CTT	Very important	11	13.6%	4.9%
	Rather important	22	27.2%	9.9%
	Less important	17	21.0%	7.6%
	Unimportant	31	38.3%	13.9%
	No answer	65	0.0%	29.1%
	Empty	77	0.0%	34.5%
	Total	223	100.0%	100.0%
Other	Very important	6	60.0%	2.7%
	Rather important	0	0.0%	0.0%
	Less important	0	0.0%	0.0%
	Unimportant	4	40.0%	1.8%
	No answer	135	0.0%	60.5%
	Empty	78	0.0%	35.0%
	Total	223	100.0%	100.0%

A1.3 Barriers:

Table A1.3.1: Please indicate the significance of the following barriers to succesful technology transfer at your institute.

Barriers for TT		Count	Column Valid N %	Column N %
Lack of information on the research needs of enterprises	Very Large	35	16.6%	15.7%
	Rather Large	104	49.3%	46.6%
	Rather small	52	24.6%	23.3%
	Small	20	9.5%	9.0%
	No Answer	12	0.0%	5.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Difficulty in finding suitable commercialization partners in the region	Very Large	54	25.5%	24.2%
	Rather Large	98	46.2%	43.9%
	Rather small	43	20.3%	19.3%
	Small	17	8.0%	7.6%
	No Answer	11	0.0%	4.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Inappropriate staffing of the CTT (e.g. co-workers without adequate commercialization experience, authority, etc.)	Very Large	33	22.3%	14.8%
	Rather Large	42	28.4%	18.8%
	Rather small	38	25.7%	17.0%
	Small	35	23.6%	15.7%
	No Answer	75	0.0%	33.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Lack of offers of further education in the field of technology transfer (spin off creation, protection of intellectual property, contract proposals, evaluating technologies, etc.)	Very Large	24	13.0%	10.8%
	Rather Large	44	23.9%	19.7%
	Rather small	66	35.9%	29.6%
	Small	50	27.2%	22.4%
	No Answer	39	0.0%	17.5%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Lack of motivation of researchers to commercialize	Very Large	48	23.2%	21.5%
	Rather Large	76	36.7%	34.1%
	Rather small	59	28.5%	26.5%
	Small	24	11.6%	10.8%
	No Answer	16	0.0%	7.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Unfavourable regulatory standards (e.g. funding for research and higher education)	Very Large	73	37.4%	32.7%
	Rather Large	74	37.9%	33.2%
	Rather small	33	16.9%	14.8%
	Small	15	7.7%	6.7%
	No Answer	28	0.0%	12.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Absence of clearly defined methodologies and rules for commercialization	Very Large	38	19.1%	17.0%
	Rather Large	79	39.7%	35.4%
	Rather small	54	27.1%	24.2%
	Small	28	14.1%	12.6%
	No Answer	24	0.0%	10.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Under-funding of activities of the centre for technology transfer	Very Large	20	14.2%	9.0%
	Rather Large	33	23.4%	14.8%
	Rather small	53	37.6%	23.8%
	Small	35	24.8%	15.7%
	No Answer	82	0.0%	36.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
One-sided dominance of a client from the application sphere in a research project	Very Large	22	11.9%	9.9%
	Rather Large	58	31.4%	26.0%
	Rather small	63	34.1%	28.3%
	Small	42	22.7%	18.8%
	No Answer	38	0.0%	17.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.3.1: Please indicate the significance of the following barriers to succesful technology transfer at your institute.

Barriers for TT		Count	Column Valid N %	Column N %
Lack of time of researchers to commercialize	Very Large	75	35.7%	33.6%
	Rather Large	84	40.0%	37.7%
	Rather small	32	15.2%	14.3%
	Small	19	9.0%	8.5%
	No Answer	13	0.0%	5.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Administrative burden on researchers due commercialization activities	Very Large	91	44.8%	40.8%
	Rather Large	63	31.0%	28.3%
	Rather small	32	15.8%	14.3%
	Small	17	8.4%	7.6%
	No Answer	20	0.0%	9.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Focus of the activities of the CTT only on the needs of the institute to which they belong - but not the needs of partners from the application sphere	Very Large	17	11.3%	7.6%
	Rather Large	52	34.4%	23.3%
	Rather small	53	35.1%	23.8%
	Small	29	19.2%	13.0%
	No Answer	72	0.0%	32.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Problematic commercialization of the results of research financed from public funds (conflict of interest)	Very Large	58	29.0%	26.0%
	Rather Large	82	41.0%	36.8%
	Rather small	36	18.0%	16.1%
	Small	24	12.0%	10.8%
	No Answer	23	0.0%	10.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Inappropriate organizational form of the CTT (lack of independence, inflexible decision-making sovereignty, existence of CTT only “pro forma” etc.)	Very Large	36	24.2%	16.1%
	Rather Large	45	30.2%	20.2%
	Rather small	39	26.2%	17.5%
	Small	29	19.5%	13.0%
	No Answer	74	0.0%	33.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Other	Very Large	1	100.0%	.4%
	Rather Large	0	0.0%	0.0%
	Rather small	0	0.0%	0.0%
	Small	0	0.0%	0.0%
	No Answer	222	0.0%	99.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

A1.4 Needs and Evaluation

Table A1.4.1: Please evaluate the activities of the centre for technology transfer in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?

a) Informing		Count	Column Valid N %	Column N %
Presentation of the research results / services of your institute (creation of brochures, leaflets, running a website, communication with the media, etc.)	Yes	61	36.1%	27.4%
	Rather yes	61	36.1%	27.4%
	Rather no	33	19.5%	14.8%
	No	14	8.3%	6.3%
	No answer	54	0.0%	24.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Presentation of the research results / services of your institute at trade fairs and exhibitions	Yes	46	27.7%	20.6%
	Rather yes	54	32.5%	24.2%
	Rather no	46	27.7%	20.6%
	No	20	12.0%	9.0%
	No answer	57	0.0%	25.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Collaboration on publication activities on the side of the institute (professional articles in scientific journals, annual reports, etc.)	Yes	45	27.1%	20.2%
	Rather yes	46	27.7%	20.6%
	Rather no	36	21.7%	16.1%
	No	39	23.5%	17.5%
	No answer	57	0.0%	25.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Creating and providing databases (research competition, consulting agencies, international collaboration, the application sphere, regional agencies, etc.)	Yes	45	28.5%	20.2%
	Rather yes	56	35.4%	25.1%
	Rather no	35	22.2%	15.7%
	No	22	13.9%	9.9%
	No answer	65	0.0%	29.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes	Yes	95	56.2%	42.6%
	Rather yes	42	24.9%	18.8%
	Rather no	21	12.4%	9.4%
	No	11	6.5%	4.9%
	No answer	54	0.0%	24.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Informing researchers on the results of monitoring of market opportunities and trends	Yes	69	40.8%	30.9%
	Rather yes	52	30.8%	23.3%
	Rather no	27	16.0%	12.1%
	No	21	12.4%	9.4%
	No answer	54	0.0%	24.2%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.4.1: Please evaluate the activities of the centre for technology transfer in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?

b) Searching		Count	Column Valid N %	Column N %
Active marketing activities (searching for investors, holding "open days" for partners from the application sphere, searching for partners for joint ventures, etc.)	Yes	69	42.1%	30.9%
	Rather yes	51	31.1%	22.9%
	Rather no	29	17.7%	13.0%
	No	15	9.1%	6.7%
	No answer	59	0.0%	26.5%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Mediating direct contacts with partners from the application sphere (workshops, seminars, workshops, round tables)	Yes	69	41.8%	30.9%
	Rather yes	59	35.8%	26.5%
	Rather no	23	13.9%	10.3%
	No	14	8.5%	6.3%
	No answer	58	0.0%	26.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Mediating contractual research projects with the application sphere	Yes	75	46.0%	33.6%
	Rather yes	46	28.2%	20.6%
	Rather no	25	15.3%	11.2%
	No	17	10.4%	7.6%
	No answer	60	0.0%	26.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Mediating joint research projects with other institutes	Yes	66	40.0%	29.6%
	Rather yes	59	35.8%	26.5%
	Rather no	20	12.1%	9.0%
	No	20	12.1%	9.0%
	No answer	58	0.0%	26.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Comprehensive mapping of resources of the university suitable for commercialization (technology, equipment, expert focus of researchers, etc.)	Yes	54	34.6%	24.2%
	Rather yes	56	35.9%	25.1%
	Rather no	32	20.5%	14.3%
	No	14	9.0%	6.3%
	No answer	67	0.0%	30.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Searching, analysis and monitoring of market opportunities and trends	Yes	57	36.1%	25.6%
	Rather yes	49	31.0%	22.0%
	Rather no	35	22.2%	15.7%
	No	17	10.8%	7.6%
	No answer	65	0.0%	29.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Searching and implementation of external tech4logies and k4wledge to meet the needs of your institute (spin in)	Yes	36	23.5%	16.1%
	Rather yes	51	33.3%	22.9%
	Rather no	38	24.8%	17.0%
	No	28	18.3%	12.6%
	No answer	70	0.0%	31.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.4.1: Please evaluate the activities of the centre for technology transfer in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?

c) Commercialization		Count	Column Valid N %	Column N %
Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy (valuation, IP protection)	Yes	84	51.9%	37.7%
	Rather yes	44	27.2%	19.7%
	Rather no	16	9.9%	7.2%
	No	18	11.1%	8.1%
	No answer	61	0.0%	27.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Development and supervision of transfer agreements	Yes	78	49.7%	35.0%
	Rather yes	43	27.4%	19.3%
	Rather no	20	12.7%	9.0%
	No	16	10.2%	7.2%
	No answer	66	0.0%	29.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Project management during joint or contractual research	Yes	39	25.3%	17.5%
	Rather yes	52	33.8%	23.3%
	Rather no	39	25.3%	17.5%
	No	24	15.6%	10.8%
	No answer	69	0.0%	30.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Conception of a marketing strategy (customer specifications, users, market potential	Yes	47	31.3%	21.1%
	Rather yes	47	31.3%	21.1%
	Rather no	28	18.7%	12.6%
	No	28	18.7%	12.6%
	No answer	73	0.0%	32.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Preparation of plans for the commercialization of positively evaluated projects	Yes	63	40.9%	28.3%
	Rather yes	50	32.5%	22.4%
	Rather no	23	14.9%	10.3%
	No	18	11.7%	8.1%
	No answer	69	0.0%	30.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Commercial and legal security of orders and offers, including negotiating and securing contracts	Yes	79	50.0%	35.4%
	Rather yes	38	24.1%	17.0%
	Rather no	24	15.2%	10.8%
	No	17	10.8%	7.6%
	No answer	65	0.0%	29.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Supporting incubation of spin-off companies	Yes	41	30.6%	18.4%
	Rather yes	39	29.1%	17.5%
	Rather no	27	20.1%	12.1%
	No	27	20.1%	12.1%
	No answer	89	0.0%	39.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.4.1: Please evaluate the activities of the centre for technology transfer in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?

d) Network		Count	Column Valid N %	Column N %
Mediating internships of colleagues of the institute at partners from the application sphere	Yes	42	26.9%	18.8%
	Rather yes	55	35.3%	24.7%
	Rather no	39	25.0%	17.5%
	No	20	12.8%	9.0%
	No answer	67	0.0%	30.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Involvement of partners from the application sphere in the teaching / further education (guest lectures, etc.)	Yes	46	29.3%	20.6%
	Rather yes	56	35.7%	25.1%
	Rather no	33	21.0%	14.8%
	No	22	14.0%	9.9%
	No answer	66	0.0%	29.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Networking activities directed at partners from the application sphere	Yes	28	19.7%	12.6%
	Rather yes	61	43.0%	27.4%
	Rather no	31	21.8%	13.9%
	No	22	15.5%	9.9%
	No answer	81	0.0%	36.3%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Networking activities directed at partners from other CTT)	Yes	21	15.8%	9.4%
	Rather yes	48	36.1%	21.5%
	Rather no	43	32.3%	19.3%
	No	21	15.8%	9.4%
	No answer	90	0.0%	40.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Monitoring the satisfaction of customers and the development of commercial collaboration	Yes	32	22.4%	14.3%
	Rather yes	54	37.8%	24.2%
	Rather no	35	24.5%	15.7%
	No	22	15.4%	9.9%
	No answer	80	0.0%	35.9%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Mediating practice / theses for students / doctoral students at partners from the application sphere	Yes	44	28.8%	19.7%
	Rather yes	50	32.7%	22.4%
	Rather no	37	24.2%	16.6%
	No	22	14.4%	9.9%
	No answer	70	0.0%	31.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Activities to promote collaboration between research and academic institutes	Yes	50	31.6%	22.4%
	Rather yes	62	39.2%	27.8%
	Rather no	26	16.5%	11.7%
	No	20	12.7%	9.0%
	No answer	65	0.0%	29.1%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

Cont. Table A1.4.1: Please evaluate the activities of the centre for technology transfer in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?

e) Culture		Count	%	Column N %
Increasing qualifications in technology transfer for interested parties from the application sphere	Yes	25	18.2%	11.2%
	Rather yes	60	43.8%	26.9%
	Rather no	34	24.8%	15.2%
	No	18	13.1%	8.1%
	No answer	86	0.0%	38.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Providing information and advice to university staff in relation to intellectual property and technology transfer	Yes	53	34.6%	23.8%
	Rather yes	62	40.5%	27.8%
	Rather no	24	15.7%	10.8%
	No	14	9.2%	6.3%
	No answer	70	0.0%	31.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Draft methodologies, guidelines and strategies related to technology transfer	Yes	47	29.9%	21.1%
	Rather yes	54	34.4%	24.2%
	Rather no	34	21.7%	15.2%
	No	22	14.0%	9.9%
	No answer	66	0.0%	29.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Draft standardized contracts for effective interaction with application sphere	Yes	56	35.7%	25.1%
	Rather yes	58	36.9%	26.0%
	Rather no	27	17.2%	12.1%
	No	16	10.2%	7.2%
	No answer	66	0.0%	29.6%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Assistance in transferring experience from the transfer projects to teaching	Yes	26	17.9%	11.7%
	Rather yes	47	32.4%	21.1%
	Rather no	44	30.3%	19.7%
	No	28	19.3%	12.6%
	No answer	78	0.0%	35.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Increasing qualifications in technology transfer for research workers	Yes	31	20.3%	13.9%
	Rather yes	64	41.8%	28.7%
	Rather no	38	24.8%	17.0%
	No	20	13.1%	9.0%
	No answer	70	0.0%	31.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Advising partners from the application sphere in defining the terms of reference for research and development - especially SME	Yes	49	32.7%	22.0%
	Rather yes	52	34.7%	23.3%
	Rather no	27	18.0%	12.1%
	No	22	14.7%	9.9%
	No answer	73	0.0%	32.7%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Advising partners from the application sphere in the implementation of the results of research into practice - especially SME	Yes	47	30.9%	21.1%
	Rather yes	54	35.5%	24.2%
	Rather no	28	18.4%	12.6%
	No	23	15.1%	10.3%
	No answer	71	0.0%	31.8%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Support of a client and flexible approach of research / academic institutes towards partners from the application sphere	Yes	47	30.7%	21.1%
	Rather yes	56	36.6%	25.1%
	Rather no	31	20.3%	13.9%
	No	19	12.4%	8.5%
	No answer	70	0.0%	31.4%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%
Engaging the top management of the institute in commercialization activities	Yes	36	23.1%	16.1%
	Rather yes	58	37.2%	26.0%
	Rather no	38	24.4%	17.0%
	No	24	15.4%	10.8%
	No answer	67	0.0%	30.0%
	Empty	0	0.0%	0.0%
	Total	223	100.0%	100.0%

A2. CTT

A2.0 Characteristics:

Statistics

		Please indicate the type of institute your Centre for TT belongs to.	What form does your Centre for TT have?	What year was your centre for TT established?	Does your Centre for TT work for other institutes than the one it belongs to?	Does your research/academic institute operate a technology park or incubator?	Does your institute have experience with the establishment and operation of a spin-off company?	Please state the size of the annual budget for the activities of your Centre for TT.
N	Valid	19	19	18	19	19	19	19
	Missing	0	0	1	0	0	0	0

Table A2.0.1: Please indicate the type of institute your Centre for TT belongs to.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	university/higher education institute	14	73.7	73.7	73.7
	research institute (v.v.i., s.r.o., a.s.)	4	21.1	21.1	94.7
	other	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

Table A2.0.2: What form does your Centre for TT have?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	independent body of the institute	1	5.3	5.3	5.3
	dependant body of the institute	14	73.7	73.7	78.9
	responsibility for technology transfer is delegated to the existing structure of the institute	4	21.1	21.1	100.0
	Total	19	100.0	100.0	

Table A2.0.3: What year was your centre for TT established?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1999	3	15.8	16.7	16.7
	2000	1	5.3	5.6	22.2
	2003	1	5.3	5.6	27.8
	2006	1	5.3	5.6	33.3
	2007	1	5.3	5.6	38.9
	2008	2	10.5	11.1	50.0
	2009	1	5.3	5.6	55.6
	2010	1	5.3	5.6	61.1
	2012	6	31.6	33.3	94.4
	2013	1	5.3	5.6	100.0
	Total	18	94.7	100.0	
Missing	Empty	1	5.3		
Total		19	100.0		

Table A2.0.4: Does your Centre for TT work for other institutes than the one it belongs to?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes, we also provide services to	5	26.3	26.3	26.3
	no, we only provide services to the institute to which we belong	13	68.4	68.4	94.7
	no, but we intend to offer our services to other institutes within the next five years	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

Table A2.0.5: Does your research/academic institute operate a technology park or incubator?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	57.9	57.9	57.9
	Yes, it operates a technical park	1	5.3	5.3	63.2
	Yes, it operates an incubator	4	21.1	21.1	84.2
	Yes, it operates both facilities	2	10.5	10.5	94.7
	No, but it has a contractual partner from among these facilities	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

Table A2.0.6: Does your institute have experience with the establishment and operation of a spin-off company?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	8	42.1	42.1	42.1
	No	9	47.4	47.4	89.5
	Don`t know	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

Table A2.0.7: Please state the size of the annual budget for the activities of your Centre for TT.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 0.5 mil.	2	10.5	10.5	10.5
	0.5 - 1 mil.	2	10.5	10.5	21.1
	1 - 2 mil.	1	5.3	5.3	26.3
	2 - 3 mil.	3	15.8	15.8	42.1
	3 - 5 mil.	2	10.5	10.5	52.6
	5 - 10 mil.	4	21.1	21.1	73.7
	10 mil. and above	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

Table A2.0.8: Please provide an estimate of what sources will fund the operation of your Centre for TT this year (in %).

Please provide an estimate of what sources will fund the operation of your Centre for TT this year (in %)	N	Minimum	Maximum	Mean	Std. Deviation
from the budget of the institute	18	0	100	36.44	42.819
share of licensing revenue	13	0	80	6.8	2202.6%
State funding for the establishment and operation of CTT	16	0	100	59.8	3976.5%
share from other commercializing activity	13	0	40	5.6	1189.9%
other	6	0	100	20.8	3955.0%

A 2.1 Form and Frequency:

Table A2.1.1: % of work time spent on following activities.

% of work time spent on following activities_	N	Minimum	Maximum	Mean	Std. Deviation
Providing information on the market with technologies and knowledge to increase the commercial potential of your institute	19	0	30	10.00	8.781
Analysis of the commercial potential of your institute	19	0	40	12.1	919.8%
Management of contracts	19	0	30	14.1	776.0%
Evaluation, protection and management of IP	19	5	75	24.2	1765.9%
Commercialisation of IP	19	1	30	14.1	734.0%
Financial administration of research projects	19	0	30	10.1	1044.8%
Activities related to the creation of spin-off companies	19	0	40	4.1	907.3%
Strategic and networking activities	19	3	40	11.9	880.6%
Other_ranked	3	0	0	.0	0.0%

Table A2.1.2: Please indicate the forms of technology transfer at your centre for TT in terms of of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Research collaboration with partners from other scientific/academic institutes	Very often	4	21.1%	21.1%
	Rather often	4	21.1%	21.1%
	Not often	10	52.6%	52.6%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Application of research results through academic activities	Very often	1	5.3%	5.3%
	Rather often	11	57.9%	57.9%
	Not often	5	26.3%	26.3%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Patent applications	Very often	12	63.2%	63.2%
	Rather often	5	26.3%	26.3%
	Not often	2	10.5%	10.5%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Sale of licenses	Very often	2	11.1%	10.5%
	Rather often	5	27.8%	26.3%
	Not often	10	55.6%	52.6%
	Never	1	5.6%	5.3%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Providing advisory and consultancy services	Very often	5	26.3%	26.3%
	Rather often	11	57.9%	57.9%
	Not often	3	15.8%	15.8%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Providing services relating to instrumentation	Very often	1	5.3%	5.3%
	Rather often	3	15.8%	15.8%
	Not often	11	57.9%	57.9%
	Never	4	21.1%	21.1%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Contractual research with partners from small and medium-sized enterprises	Very often	3	16.7%	15.8%
	Rather often	6	33.3%	31.6%
	Not often	9	50.0%	47.4%
	Never	0	0.0%	0.0%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Contractual research with partners from large enterprises	Very often	1	5.9%	5.3%
	Rather often	6	35.3%	31.6%
	Not often	8	47.1%	42.1%
	Never	2	11.8%	10.5%
	No answer	2	0.0%	10.5%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Contractual research with partners from the public sector	Very often	0	0.0%	0.0%
	Rather often	3	17.6%	15.8%
	Not often	7	41.2%	36.8%
	Never	7	41.2%	36.8%
	No answer	2	0.0%	10.5%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.1.2: Please indicate the forms of technology transfer at your centre for TT in terms of of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Establishment and operation of spin-offs	Very often	1	5.6%	5.3%
	Rather often	0	0.0%	0.0%
	Not often	9	50.0%	47.4%
	Never	8	44.4%	42.1%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Operation/use of a business incubator	Very often	3	17.6%	15.8%
	Rather often	3	17.6%	15.8%
	Not often	1	5.9%	5.3%
	Never	10	58.8%	52.6%
	No answer	2	0.0%	10.5%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Operation/use of a science/technology park	Very often	1	6.7%	5.3%
	Rather often	1	6.7%	5.3%
	Not often	2	13.3%	10.5%
	Never	11	73.3%	57.9%
	No answer	4	0.0%	21.1%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Application of research results through publication activities	Very often	4	21.1%	21.1%
	Rather often	4	21.1%	21.1%
	Not often	3	15.8%	15.8%
	Never	8	42.1%	42.1%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Utility model applications	Very often	9	47.4%	47.4%
	Rather often	8	42.1%	42.1%
	Not often	2	10.5%	10.5%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Industrial designs	Very often	3	15.8%	15.8%
	Rather often	7	36.8%	36.8%
	Not often	3	15.8%	15.8%
	Never	6	31.6%	31.6%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediation of direct technology transfer between researchers and enterprises	Very often	3	15.8%	15.8%
	Rather often	10	52.6%	52.6%
	Not often	5	26.3%	26.3%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Arranging internships with partners from the application sphere for researchers/ academics	Very often	0	0.0%	0.0%
	Rather often	3	16.7%	15.8%
	Not often	8	44.4%	42.1%
	Never	7	38.9%	36.8%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Arranging internships with partners from the application sphere for PhD/students	Very often	0	0.0%	0.0%
	Rather often	4	22.2%	21.1%
	Not often	5	27.8%	26.3%
	Never	9	50.0%	47.4%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Table A2.1.3: Please indicate the frequency of the following activities of your centre.

a) Informing		Count	Column Valid N %	Column N %
Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes	Very often	7	36.8%	36.8%
	Rather often	7	36.8%	36.8%
	Occasionally	5	26.3%	26.3%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Informing researchers on the results of monitoring of market opportunities and trends	Very often	2	10.5%	10.5%
	Rather often	7	36.8%	36.8%
	Occasionally	8	42.1%	42.1%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Presentation of the research results / services of your institute	Very often	9	47.4%	47.4%
	Rather often	6	31.6%	31.6%
	Occasionally	4	21.1%	21.1%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Presentation of the research results / services of your institute at trade fairs and exhibitions	Very often	2	10.5%	10.5%
	Rather often	4	21.1%	21.1%
	Occasionally	12	63.2%	63.2%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Collaboration on publication activities on the part of the institute	Very often	2	10.5%	10.5%
	Rather often	4	21.1%	21.1%
	Occasionally	10	52.6%	52.6%
	Never	3	15.8%	15.8%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Creating and providing databases	Very often	1	5.3%	5.3%
	Rather often	6	31.6%	31.6%
	Occasionally	9	47.4%	47.4%
	Never	3	15.8%	15.8%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.1.3: Please indicate the frequency of the following activities of your centre.

b) searching		Count	Column Valid N %	Column N %
Comprehensive mapping of university resources suitable for commercialization	Very often	8	42.1%	42.1%
	Rather often	7	36.8%	36.8%
	Occasionally	4	21.1%	21.1%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Searching, analysis and monitoring of market opportunities and trends	Very often	3	15.8%	15.8%
	Rather often	6	31.6%	31.6%
	Occasionally	8	42.1%	42.1%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Active marketing activities	Very often	6	31.6%	31.6%
	Rather often	7	36.8%	36.8%
	Occasionally	4	21.1%	21.1%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediating direct contacts with partners from the application sphere	Very often	6	31.6%	31.6%
	Rather often	6	31.6%	31.6%
	Occasionally	6	31.6%	31.6%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediating contractual research projects with the application sphere	Very often	4	22.2%	21.1%
	Rather often	6	33.3%	31.6%
	Occasionally	6	33.3%	31.6%
	Never	2	11.1%	10.5%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediating joint research projects with other institutes::	Very often	2	10.5%	10.5%
	Rather often	3	15.8%	15.8%
	Occasionally	12	63.2%	63.2%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Searching and implementation of external technologies and knowledge to meet the needs of your institute	Very often	0	0.0%	0.0%
	Rather often	1	5.3%	5.3%
	Occasionally	6	31.6%	31.6%
	Never	12	63.2%	63.2%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.1.3: Please indicate the frequency of the following activities of your centre.

c) commercialization		Count	Column Valid N %	Column N %
Preparation of plans for the commercialization of positively evaluated projects	Very often	4	22.2%	21.1%
	Rather often	4	22.2%	21.1%
	Occasionally	7	38.9%	36.8%
	Never	3	16.7%	15.8%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Commercial and legal security of orders and offers, including negotiating and securing contracts	Very often	4	22.2%	21.1%
	Rather often	12	66.7%	63.2%
	Occasionally	2	11.1%	10.5%
	Never	0	0.0%	0.0%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy	Very often	10	55.6%	52.6%
	Rather often	6	33.3%	31.6%
	Occasionally	2	11.1%	10.5%
	Never	0	0.0%	0.0%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Development and supervision of transfer agreements	Very often	7	38.9%	36.8%
	Rather often	7	38.9%	36.8%
	Occasionally	3	16.7%	15.8%
	Never	1	5.6%	5.3%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Project management during joint or contractual research	Very often	1	5.6%	5.3%
	Rather often	4	22.2%	21.1%
	Occasionally	10	55.6%	52.6%
	Never	3	16.7%	15.8%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Conception of a marketing strategy	Very often	1	5.6%	5.3%
	Rather often	6	33.3%	31.6%
	Occasionally	8	44.4%	42.1%
	Never	3	16.7%	15.8%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Support for the establishment and operation of spin-off companies	Very often	1	5.6%	5.3%
	Rather often	2	11.1%	10.5%
	Occasionally	8	44.4%	42.1%
	Never	7	38.9%	36.8%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.1.3: Please indicate the frequency of the following activities of your centre.

d) Network		Count	Column Valid N %	Column N %
Monitoring customer satisfaction and the development of commercial collaboration	Very often	2	10.5%	10.5%
	Rather often	7	36.8%	36.8%
	Occasionally	9	47.4%	47.4%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediating practice / theses for students / PhD students at partners from the application sphere	Very often	1	5.3%	5.3%
	Rather often	0	0.0%	0.0%
	Occasionally	11	57.9%	57.9%
	Never	7	36.8%	36.8%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Mediating internships of colleagues of the institute at partners from the application sphere	Very often	0	0.0%	0.0%
	Rather often	1	5.3%	5.3%
	Occasionally	10	52.6%	52.6%
	Never	8	42.1%	42.1%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Involvement of partners from the application sphere in the teaching / further education	Very often	0	0.0%	0.0%
	Rather often	2	10.5%	10.5%
	Occasionally	13	68.4%	68.4%
	Never	4	21.1%	21.1%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Networking activities directed at partners from the application sphere	Very often	3	15.8%	15.8%
	Rather often	7	36.8%	36.8%
	Occasionally	9	47.4%	47.4%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Networking activities directed at partners from another Centres for TT	Very often	5	26.3%	26.3%
	Rather often	5	26.3%	26.3%
	Occasionally	8	42.1%	42.1%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Activities to promote collaboration between research and academic institutes	Very often	4	21.1%	21.1%
	Rather often	6	31.6%	31.6%
	Occasionally	9	47.4%	47.4%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.1.3: Please indicate the frequency of the following activities of your centre.

e) Culture		Count	Column Valid N %	Column N %
Assistance in transferring experience from the transfer projects to teaching	Very often	0	0.0%	0.0%
	Rather often	5	26.3%	26.3%
	Occasionally	9	47.4%	47.4%
	Never	5	26.3%	26.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Ensuring qualification measures from the area of technology transfer for researchers	Very often	2	10.5%	10.5%
	Rather often	6	31.6%	31.6%
	Occasionally	8	42.1%	42.1%
	Never	3	15.8%	15.8%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Ensuring qualification measures from the area of technology transfer for interested parties from the application sphere	Very often	0	0.0%	0.0%
	Rather often	2	10.5%	10.5%
	Occasionally	11	57.9%	57.9%
	Never	6	31.6%	31.6%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Providing information and advice to university employees in relation to intellectual property and technology transfer	Very often	11	57.9%	57.9%
	Rather often	8	42.1%	42.1%
	Occasionally	0	0.0%	0.0%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Draft methodologies, guidelines and strategies related to technology transfer	Very often	8	42.1%	42.1%
	Rather often	8	42.1%	42.1%
	Occasionally	3	15.8%	15.8%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Draft standardized contracts for effective interaction with the application sphere	Very often	6	31.6%	31.6%
	Rather often	7	36.8%	36.8%
	Occasionally	6	31.6%	31.6%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Advising partners from the application sphere in defining the terms of reference for research and development - especially SME	Very often	0	0.0%	0.0%
	Rather often	5	26.3%	26.3%
	Occasionally	12	63.2%	63.2%
	Never	2	10.5%	10.5%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Advising partners from the application sphere in the implementation of the research and services of your institute into practice - especially SME	Very often	0	0.0%	0.0%
	Rather often	4	22.2%	21.1%
	Occasionally	10	55.6%	52.6%
	Never	4	22.2%	21.1%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Support of a client and flexible approach of research / academic institutes towards partners from the application sphere	Very often	3	15.8%	15.8%
	Rather often	7	36.8%	36.8%
	Occasionally	8	42.1%	42.1%
	Never	1	5.3%	5.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Engaging the top management of the institute in commercialization activities	Very often	3	15.8%	15.8%
	Rather often	8	42.1%	42.1%
	Occasionally	8	42.1%	42.1%
	Never	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

A2.2 Barriers:

Table A2.2.1: Please indicate the significance of the following barriers to succesful TT.

Barriers for TT		Count	Column Valid N %	Column N %
Lack of information on the research needs of large enterprises	Very Large	5	27.8%	26.3%
	Rather Large	5	27.8%	26.3%
	Rather small	7	38.9%	36.8%
	Small	1	5.6%	5.3%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Lack of information on the research needs of SME	Very Large	3	16.7%	15.8%
	Rather Large	8	44.4%	42.1%
	Rather small	6	33.3%	31.6%
	Small	1	5.6%	5.3%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Difficulty in finding suitable commercialization partners in the region	Very Large	7	36.8%	36.8%
	Rather Large	9	47.4%	47.4%
	Rather small	2	10.5%	10.5%
	Small	1	5.3%	5.3%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Lack of offers of further education in the field of technology transfer	Very Large	0	0.0%	0.0%
	Rather Large	0	0.0%	0.0%
	Rather small	10	52.6%	52.6%
	Small	9	47.4%	47.4%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Lack of motivation of researchers to commercialize	Very Large	7	36.8%	36.8%
	Rather Large	11	57.9%	57.9%
	Rather small	1	5.3%	5.3%
	Small	0	0.0%	0.0%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Unfavourable regulatory standards	Very Large	6	31.6%	31.6%
	Rather Large	8	42.1%	42.1%
	Rather small	5	26.3%	26.3%
	Small	0	0.0%	0.0%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Absence of clearly defined methodologies and rules for commercialization	Very Large	4	21.1%	21.1%
	Rather Large	6	31.6%	31.6%
	Rather small	5	26.3%	26.3%
	Small	4	21.1%	21.1%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Under-funding of the activities of the Centre for TT	Very Large	3	16.7%	15.8%
	Rather Large	5	27.8%	26.3%
	Rather small	8	44.4%	42.1%
	Small	2	11.1%	10.5%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Unilateral dominance of a client from the application sphere in a research project	Very Large	0	0.0%	0.0%
	Rather Large	4	22.2%	21.1%
	Rather small	6	33.3%	31.6%
	Small	8	44.4%	42.1%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

Cont. Table A2.2.1: Please indicate the significance of the following barriers to succesful TT.

Barriers for TT		Count	Column Valid N %	Column N %
Problematic commercialization of the results of research financed from public funds	Very Large	7	38.9%	36.8%
	Rather Large	6	33.3%	31.6%
	Rather small	4	22.2%	21.1%
	Small	1	5.6%	5.3%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Inappropriate organizational form of the Centre for TT	Very Large	1	5.6%	5.3%
	Rather Large	4	22.2%	21.1%
	Rather small	6	33.3%	31.6%
	Small	7	38.9%	36.8%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Unfavourable conditions for subsidizing the Centre for TT by the state	Very Large	3	16.7%	15.8%
	Rather Large	7	38.9%	36.8%
	Rather small	6	33.3%	31.6%
	Small	2	11.1%	10.5%
	No Answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Lack of support from the management of the institute	Very Large	5	26.3%	26.3%
	Rather Large	1	5.3%	5.3%
	Rather small	6	31.6%	31.6%
	Small	7	36.8%	36.8%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Research results are in a condition that is very hard to commercialize	Very Large	9	47.4%	47.4%
	Rather Large	7	36.8%	36.8%
	Rather small	3	15.8%	15.8%
	Small	0	0.0%	0.0%
	No Answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%

A2.3 Evaluation/Effectiveness:

Table A2.3.1: What method of establishing contacts with partners from the application sphere is the most effective in your centre for TT?

		Count	Column Valid N %	Column N %
Through the initiative of a partner from the application sphere from the public sector	Very effective	2	12.5%	10.5%
	Rather effective	7	43.8%	36.8%
	Rather ineffective	5	31.3%	26.3%
	Ineffectiv	2	12.5%	10.5%
	No answer	3	0.0%	15.8%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through an external mediator of technology transfer	Very effective	0	0.0%	0.0%
	Rather effective	2	11.8%	10.5%
	Rather ineffective	10	58.8%	52.6%
	Ineffectiv	5	29.4%	26.3%
	No answer	2	0.0%	10.5%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through former students/PhD students now working in the application sphere	Very effective	10	58.8%	52.6%
	Rather effective	5	29.4%	26.3%
	Rather ineffective	2	11.8%	10.5%
	Ineffectiv	0	0.0%	0.0%
	No answer	2	0.0%	10.5%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through fairs and exhibitions	Very effective	2	12.5%	10.5%
	Rather effective	6	37.5%	31.6%
	Rather ineffective	7	43.8%	36.8%
	Ineffectiv	1	6.3%	5.3%
	No answer	3	0.0%	15.8%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through direct contact of the scientific collaborators of your institute with partners from the application sphere	Very effective	16	84.2%	84.2%
	Rather effective	3	15.8%	15.8%
	Rather ineffective	0	0.0%	0.0%
	Ineffectiv	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through the initiative of a partner from the application sphere from the range of SME	Very effective	7	38.9%	36.8%
	Rather effective	10	55.6%	52.6%
	Rather ineffective	1	5.6%	5.3%
	Ineffectiv	0	0.0%	0.0%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Through the initiative of a partner from the application sphere from the range of large enterprises	Very effective	7	38.9%	36.8%
	Rather effective	8	44.4%	42.1%
	Rather ineffective	3	16.7%	15.8%
	Ineffectiv	0	0.0%	0.0%
	No answer	1	0.0%	5.3%
	Empty	0	0.0%	0.0%
	Total	19	100.0%	100.0%
Other	Very effective	1	33.3%	5.3%
	Rather effective	2	66.7%	10.5%
	Rather ineffective	0	0.0%	0.0%
	Ineffectiv	0	0.0%	0.0%
	No answer	15	0.0%	78.9%
	Empty	1	0.0%	5.3%
	Total	19	100.0%	100.0%

A3. STP

A3.0 Characteristics:

Statistics

What year was your organization established?

N	Valid	18
	Missing	0

Table A3.0.1: What year was your organization established?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1999	4	22.2	22.2	22.2
	2000	1	5.6	5.6	27.8
	2002	1	5.6	5.6	33.3
	2005	1	5.6	5.6	38.9
	2006	1	5.6	5.6	44.4
	2007	1	5.6	5.6	50.0
	2008	4	22.2	22.2	72.2
	2009	3	16.7	16.7	88.9
	2012	1	5.6	5.6	94.4
	2013	1	5.6	5.6	100.0
	Total	18	100.0	100.0	

Table A3.0.2: Crosstable Type / services to external clients.

		Does your organization offer (any) services to external clients?					
		Yes			No		
		Count	Column Valid N %	Column N %	Count	Column Valid N %	Column N %
External university/higher education institution	Yes	9	100.0%	60.0%	0	0.0%	0.0%
	Empty	6	0.0%	40.0%	3		100.0%
	Total	15	100.0%	100.0%	3		100.0%
External research organization.	Yes	5	100.0%	33.3%	0	0.0%	0.0%
	Empty	10	0.0%	66.7%	3		100.0%
	Total	15	100.0%	100.0%	3		100.0%
Other external organizations.	Yes	12	100.0%	80.0%	0	0.0%	0.0%
	Empty	3	0.0%	20.0%	3		100.0%
	Total	15	100.0%	100.0%	3		100.0%
Please select for the following options.	No, services are provided exclusively for clients within our organization	0	0.0%	0.0%	0	0.0%	0.0%
	No, but we intend to offer our services to external clients within the next five years.	0	0.0%	0.0%	2	100.0%	66.7%
	Empty	15		100.0%	1	0.0%	33.3%
	Total	15		100.0%	3	100.0%	100.0%

Statistics

		If you provide services to external clients outside your organization do you offer these clients discounts for the services?	Does your organization have experience with the establishment and operation of a start-up company?	Does your organization have experience with the establishment and operation of a spin-off company?	Please state the size of the annual budget for the activities of your organization in 2012 (or 2013).	Please estimate the share of costs (in %) for services related to technology transfer and knowledge from your organizatio n's annual budget for the year 2012 (or 2013).
N	Valid	15	18	18	17	18
	Missing	3	0	0	1	0

Table A3.0.3: If you provide services to external clients outside your organization do you offer these clients discounts for the services?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	50.0	60.0	60.0
	No	6	33.3	40.0	100.0
	Total	15	83.3	100.0	
Missing	Empty	3	16.7		
Total		18	100.0		

Table A3.0.4: Does your organization have experience with the establishment and operation of a start-up company?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	55.6	55.6	55.6
	No	8	44.4	44.4	100.0
	Total	18	100.0	100.0	

Table A3.0.5: Does your organization have experience with the establishment and operation of a spin-off company?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	27.8	27.8	27.8
	No	13	72.2	72.2	100.0
	Total	18	100.0	100.0	

Table A3.0.6: Please state the size of the annual budget for the activities of your organization in 2012 (or 2013).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 0.5 mil.	2	11.1	11.8	11.8
	0.5 - 1 mil.	1	5.6	5.9	17.6
	1 - 2 mil.	3	16.7	17.6	35.3
	2 - 3 mil.	1	5.6	5.9	41.2
	3 - 5 mil.	2	11.1	11.8	52.9
	5 - 10 mil.	2	11.1	11.8	64.7
	10 mil. and above	6	33.3	35.3	100.0
	Total	17	94.4	100.0	
Missing	Empty	1	5.6		
Total		18	100.0		

Table A3.0.7: Please estimate the share of costs (in %) for services related to technology transfer and knowledge from your organization's annual budget for the year 2012 (or 2013).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	3	16.7	16.7	16.7
	up to 5	5	27.8	27.8	44.4
	5 - 10	2	11.1	11.1	55.6
	10 - 20	2	11.1	11.1	66.7
	more than 30	6	33.3	33.3	100.0
	Total	18	100.0	100.0	

Table A3.0.8: Please provide an estimate of what sources will fund the operation of your Centre for TT this year (in %).

Please provide an estimate of what sources will fund the operation of your Centre for TT this year (in %)	N	Minimum	Maximum	Mean	Std. Deviation
from the budget of the founding institution	15	0	100	33.73	48.519
share of licensing revenue	9	0	0	0.00	0.000
State funding for the establishment and operation of your organization	12	0	80	34.58	32.854
share from other commercializing activity	9	0	70	20.00	25.495
other	9	0	100	44.44	41.866

A3.1 Form and Frequency:

Table A3.1.1: % of work time spent on following activities.

% of work time spent on following activities_	N	Minimum	Maximum	Mean	Std. Deviation
Analysis of the potential of the market with technologies and knowledge to increase the commercial potential of your clients	16	0	75	10.88	18.471
Analysis of the commercial potential of your clients for success on the market with technologies and knowledge	16	0	25	7.25	7.681
Management of contracts of your clients	16	0	25	6.25	6.638
Evaluation, protection and management of the IP of your clients	16	0	75	9.69	18.481
Commercialization of the IP of your clients	16	0	40	6.81	10.061
Financial administration of research projects for your clients	16	0	25	4.69	7.578
Activities related to the creation of spin off companies	16	0	15	3.00	4.761
Strategic and networking activities	16	0	100	20.81	25.857
Activities related to the creation of start-up companies	15	0	50	8.87	14.081
Other	6	0	48	13.83	21.821

Table A3.1.2: Please indicate the forms of technology transfer at your centre for TT in terms of of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Application of research results through publication activities	Very often	2	14.3%	11.1%
	Rather often	3	21.4%	16.7%
	Not often	5	35.7%	27.8%
	Never	4	28.6%	22.2%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Application of research results through academic activities (organization of scientific colloquia, symposia, workshops, conferences, etc.)	Very often	2	14.3%	11.1%
	Rather often	5	35.7%	27.8%
	Not often	4	28.6%	22.2%
	Never	3	21.4%	16.7%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Providing advisory and consultancy services	Very often	6	37.5%	33.3%
	Rather often	6	37.5%	33.3%
	Not often	2	12.5%	11.1%
	Never	2	12.5%	11.1%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Providing services relating to instrumentation	Very often	3	18.8%	16.7%
	Rather often	1	6.3%	5.6%
	Not often	6	37.5%	33.3%
	Never	6	37.5%	33.3%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Collaborative Research: mediation projects between your clients and other partners in the joint research	Very often	0	0.0%	0.0%
	Rather often	8	50.0%	44.4%
	Not often	4	25.0%	22.2%
	Never	4	25.0%	22.2%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediation of direct technology transfer between the researcher and the company	Very often	1	6.3%	5.6%
	Rather often	7	43.8%	38.9%
	Not often	4	25.0%	22.2%
	Never	4	25.0%	22.2%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Contractual research: mediation of projects between your clients and partners of small and medium-sized enterprises	Very often	1	6.3%	5.6%
	Rather often	7	43.8%	38.9%
	Not often	6	37.5%	33.3%
	Never	2	12.5%	11.1%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Contractual research: mediation of projects between your clients and partners from large companies	Very often	0	0.0%	0.0%
	Rather often	7	43.8%	38.9%
	Not often	6	37.5%	33.3%
	Never	3	18.8%	16.7%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Contractual research: mediation of projects between your clients and partners from the public sphere	Very often	0	0.0%	0.0%
	Rather often	2	12.5%	11.1%
	Not often	8	50.0%	44.4%
	Never	6	37.5%	33.3%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Arranging internships at a partner from the application sphere for your clients / researchers / academics	Very often	0	0.0%	0.0%
	Rather often	3	20.0%	16.7%
	Not often	8	53.3%	44.4%
	Never	4	26.7%	22.2%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.1.2: Please indicate the forms of technology transfer at your centre for TT in terms of of their frequency.

Form and Frequency of TT		Count	Column Valid N %	Column N %
Arranging internships at a partner from the application sphere for PhDs / students	Very often	0	0.0%	0.0%
	Rather often	5	33.3%	27.8%
	Not often	5	33.3%	27.8%
	Never	5	33.3%	27.8%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Patent applications	Very often	2	13.3%	11.1%
	Rather often	3	20.0%	16.7%
	Not often	6	40.0%	33.3%
	Never	4	26.7%	22.2%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Utility model applications	Very often	3	20.0%	16.7%
	Rather often	3	20.0%	16.7%
	Not often	6	40.0%	33.3%
	Never	3	20.0%	16.7%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Industrial designs	Very often	2	13.3%	11.1%
	Rather often	1	6.7%	5.6%
	Not often	7	46.7%	38.9%
	Never	5	33.3%	27.8%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Sale of licenses	Very often	1	6.7%	5.6%
	Rather often	2	13.3%	11.1%
	Not often	5	33.3%	27.8%
	Never	7	46.7%	38.9%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Incubation and operation of spin off companies	Very often	1	7.1%	5.6%
	Rather often	1	7.1%	5.6%
	Not often	6	42.9%	33.3%
	Never	6	42.9%	33.3%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Incubation and operation of start-up companies	Very often	5	31.3%	27.8%
	Rather often	1	6.3%	5.6%
	Not often	7	43.8%	38.9%
	Never	3	18.8%	16.7%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Table A3.1.3: Please indicate the frequency of the following activities of your centre.

a) Informing		Count	Column Valid N %	Column N %
Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes	Very often	5	27.8%	27.8%
	Rather often	7	38.9%	38.9%
	Occasionally	5	27.8%	27.8%
	Never	1	5.6%	5.6%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Informing researchers on the results of monitoring of market opportunities and trends:Frequency of provision	Very often	2	11.1%	11.1%
	Rather often	5	27.8%	27.8%
	Occasionally	7	38.9%	38.9%
	Never	4	22.2%	22.2%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Presentation of the research results / services of your organization	Very often	5	27.8%	27.8%
	Rather often	7	38.9%	38.9%
	Occasionally	2	11.1%	11.1%
	Never	4	22.2%	22.2%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Presentation of the research results / services of your organization at trade fairs and exhibitions	Very often	1	5.6%	5.6%
	Rather often	3	16.7%	16.7%
	Occasionally	8	44.4%	44.4%
	Never	6	33.3%	33.3%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Collaboration on publication activities of the organization	Very often	2	11.1%	11.1%
	Rather often	3	16.7%	16.7%
	Occasionally	8	44.4%	44.4%
	Never	5	27.8%	27.8%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Creating and providing databases	Very often	1	5.6%	5.6%
	Rather often	4	22.2%	22.2%
	Occasionally	11	61.1%	61.1%
	Never	2	11.1%	11.1%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.1.3: Please indicate the frequency of the following activities of your centre.

b) searching		Count	Column Valid N %	Column N %
Comprehensive mapping of resources of the founding institution / partner research organization suitable for commercialization	Very often	3	18.8%	16.7%
	Rather often	2	12.5%	11.1%
	Occasionally	9	56.3%	50.0%
	Never	2	12.5%	11.1%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Searching, analysis and monitoring of market opportunities and trends	Very often	3	18.8%	16.7%
	Rather often	7	43.8%	38.9%
	Occasionally	6	37.5%	33.3%
	Never	0	0.0%	0.0%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Active marketing activities	Very often	3	17.6%	16.7%
	Rather often	3	17.6%	16.7%
	Occasionally	7	41.2%	38.9%
	Never	4	23.5%	22.2%
	No answer	1	0.0%	5.6%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediating direct contacts with partners from the application sphere	Very often	2	12.5%	11.1%
	Rather often	7	43.8%	38.9%
	Occasionally	7	43.8%	38.9%
	Never	0	0.0%	0.0%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediating contractual research projects with the application sphere	Very often	2	12.5%	11.1%
	Rather often	5	31.3%	27.8%
	Occasionally	4	25.0%	22.2%
	Never	5	31.3%	27.8%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediating joint research projects with other institutes:Frequency of provision	Very often	1	6.3%	5.6%
	Rather often	6	37.5%	33.3%
	Occasionally	7	43.8%	38.9%
	Never	2	12.5%	11.1%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Searching and implementation of external technologies and knowledge to meet the needs of your organization or founding institution	Very often	0	0.0%	0.0%
	Rather often	3	18.8%	16.7%
	Occasionally	7	43.8%	38.9%
	Never	6	37.5%	33.3%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.1.3: Please indicate the frequency of the following activities of your centre.

c) commercialization		Count	Column Valid N %	Column N %
Preparation of plans for the commercialization of positively evaluated projects	Very often	2	16.7%	11.1%
	Rather often	6	50.0%	33.3%
	Occasionally	4	33.3%	22.2%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Commercial and legal security of orders and offers, including negotiating and securing contracts	Very often	2	14.3%	11.1%
	Rather often	5	35.7%	27.8%
	Occasionally	7	50.0%	38.9%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy	Very often	2	14.3%	11.1%
	Rather often	4	28.6%	22.2%
	Occasionally	8	57.1%	44.4%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Development and supervision of transfer agreements	Very often	1	9.1%	5.6%
	Rather often	3	27.3%	16.7%
	Occasionally	7	63.6%	38.9%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Project management during joint or contractual research	Very often	2	18.2%	11.1%
	Rather often	5	45.5%	27.8%
	Occasionally	4	36.4%	22.2%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Conception of a marketing strategy (customer specifications, users, market potential	Very often	1	7.1%	5.6%
	Rather often	8	57.1%	44.4%
	Occasionally	5	35.7%	27.8%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Supporting the incubation of spin-off companies	Very often	2	20.0%	11.1%
	Rather often	3	30.0%	16.7%
	Occasionally	5	50.0%	27.8%
	Never	0	0.0%	0.0%
	No answer	8	0.0%	44.4%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Supporting the incubation of start-up companies	Very often	5	35.7%	27.8%
	Rather often	4	28.6%	22.2%
	Occasionally	5	35.7%	27.8%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.1.3: Please indicate the frequency of the following activities of your centre.

d) network/trust		Count	Column Valid N %	Column N %
Monitoring the satisfaction of customer form the application sphere and the development of commercial collaboration	Very often	0	0.0%	0.0%
	Rather often	8	50.0%	44.4%
	Occasionally	8	50.0%	44.4%
	Never	0	0.0%	0.0%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediating practice / theses for students / doctoral students at partners from the application sphere	Very often	0	0.0%	0.0%
	Rather often	4	25.0%	22.2%
	Occasionally	12	75.0%	66.7%
	Never	0	0.0%	0.0%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Mediating internships of researchers / professors s at partners from the application sphere	Very often	0	0.0%	0.0%
	Rather often	2	18.2%	11.1%
	Occasionally	9	81.8%	50.0%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Involvement of partners from the application sphere in the teaching / further education	Very often	0	0.0%	0.0%
	Rather often	8	57.1%	44.4%
	Occasionally	6	42.9%	33.3%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Networking activities directed at partners from the application sphere	Very often	1	6.3%	5.6%
	Rather often	9	56.3%	50.0%
	Occasionally	6	37.5%	33.3%
	Never	0	0.0%	0.0%
	No answer	2	0.0%	11.1%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Networking activities directed at partners from other mediators of technologies and knowledge	Very often	0	0.0%	0.0%
	Rather often	9	64.3%	50.0%
	Occasionally	5	35.7%	27.8%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Activities to promote collaboration between research and academic institutes	Very often	0	0.0%	0.0%
	Rather often	8	53.3%	44.4%
	Occasionally	7	46.7%	38.9%
	Never	0	0.0%	0.0%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.1.3: Please indicate the frequency of the following activities of your centre.

e) Culture		Count	Column Valid N %	Column N %
Assistance in transferring experience from the transfer projects to teaching	Very often	0	0.0%	0.0%
	Rather often	3	25.0%	16.7%
	Occasionally	9	75.0%	50.0%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Increasing qualifications in technology transfer for researchers / professors	Very often	1	8.3%	5.6%
	Rather often	5	41.7%	27.8%
	Occasionally	6	50.0%	33.3%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Increasing qualifications in technology transfer for interested parties from the application sphere	Very often	0	0.0%	0.0%
	Rather often	5	45.5%	27.8%
	Occasionally	6	54.5%	33.3%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Providing information and advice to clients of your organization in relation to intellectual property and technology transfer	Very often	3	21.4%	16.7%
	Rather often	7	50.0%	38.9%
	Occasionally	4	28.6%	22.2%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Draft methodologies, guidelines and strategies related to technology transfer	Very often	2	16.7%	11.1%
	Rather often	1	8.3%	5.6%
	Occasionally	9	75.0%	50.0%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Draft standardized contracts for effective interaction with application sphere	Very often	2	18.2%	11.1%
	Rather often	3	27.3%	16.7%
	Occasionally	6	54.5%	33.3%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Advising partners from the application sphere in defining the terms of reference for research and development - especially SME	Very often	1	7.1%	5.6%
	Rather often	6	42.9%	33.3%
	Occasionally	7	50.0%	38.9%
	Never	0	0.0%	0.0%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Advising partners from the application sphere in the implementation of the results of research into practice - especially SME	Very often	0	0.0%	0.0%
	Rather often	6	50.0%	33.3%
	Occasionally	6	50.0%	33.3%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Support of a client and flexible approach of research / academic institutes towards partners from the application sphere	Very often	0	0.0%	0.0%
	Rather often	3	25.0%	16.7%
	Occasionally	9	75.0%	50.0%
	Never	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Engaging the top management of founding institution in commercialization activities	Very often	0	0.0%	0.0%
	Rather often	6	54.5%	33.3%
	Occasionally	5	45.5%	27.8%
	Never	0	0.0%	0.0%
	No answer	7	0.0%	38.9%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

A3.2 Barriers:

Table A3.2.1: Please indicate the significance of the following barriers to succesful TT.

Barriers for TT		Count	Column Valid N %	Column N %
Lack of information on the research needs of large enterprises	Very Large	0	0.0%	0.0%
	Rather Large	6	40.0%	33.3%
	Rather small	6	40.0%	33.3%
	Small	3	20.0%	16.7%
	No Answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Lack of information on the research needs of SME	Very Large	1	6.7%	5.6%
	Rather Large	5	33.3%	27.8%
	Rather small	5	33.3%	27.8%
	Small	4	26.7%	22.2%
	No Answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Difficulty in finding suitable commercialization partners in the region	Very Large	1	7.1%	5.6%
	Rather Large	7	50.0%	38.9%
	Rather small	5	35.7%	27.8%
	Small	1	7.1%	5.6%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Lack of offers of further education in the field of technology transfer	Very Large	0	0.0%	0.0%
	Rather Large	3	21.4%	16.7%
	Rather small	5	35.7%	27.8%
	Small	6	42.9%	33.3%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Lack of motivation of researchers to commercialize	Very Large	3	23.1%	16.7%
	Rather Large	4	30.8%	22.2%
	Rather small	4	30.8%	22.2%
	Small	2	15.4%	11.1%
	No Answer	5	0.0%	27.8%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Unfavourable regulatory standards	Very Large	5	38.5%	27.8%
	Rather Large	3	23.1%	16.7%
	Rather small	4	30.8%	22.2%
	Small	1	7.7%	5.6%
	No Answer	5	0.0%	27.8%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Absence of clearly defined methodologies and rules for commercialization	Very Large	0	0.0%	0.0%
	Rather Large	3	21.4%	16.7%
	Rather small	7	50.0%	38.9%
	Small	4	28.6%	22.2%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Under-funding of the activities of the Centre for TT	Very Large	3	21.4%	16.7%
	Rather Large	5	35.7%	27.8%
	Rather small	4	28.6%	22.2%
	Small	2	14.3%	11.1%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Unilateral dominance of a client from the application sphere in a research project	Very Large	0	0.0%	0.0%
	Rather Large	3	21.4%	16.7%
	Rather small	7	50.0%	38.9%
	Small	4	28.6%	22.2%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

Cont. Table A3.2.1: Please indicate the significance of the following barriers to succesful TT.

Barriers for TT		Count	Column Valid N %	Column N %
Problematic commercialization of the results of research financed from public funds	Very Large	3	20.0%	16.7%
	Rather Large	6	40.0%	33.3%
	Rather small	3	20.0%	16.7%
	Small	3	20.0%	16.7%
	No Answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Inappropriate organizational form of the Centre for TT	Very Large	1	7.7%	5.6%
	Rather Large	2	15.4%	11.1%
	Rather small	3	23.1%	16.7%
	Small	7	53.8%	38.9%
	No Answer	5	0.0%	27.8%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Unfavourable conditions for subsidizing the Centre for TT by the state	Very Large	3	25.0%	16.7%
	Rather Large	5	41.7%	27.8%
	Rather small	4	33.3%	22.2%
	Small	0	0.0%	0.0%
	No Answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Lack of support from the management of the institute	Very Large	1	7.1%	5.6%
	Rather Large	2	14.3%	11.1%
	Rather small	5	35.7%	27.8%
	Small	6	42.9%	33.3%
	No Answer	3	0.0%	16.7%
	Empty	1	0.0%	5.6%
	Total	18	100.0%	100.0%
Research results are in a condition that is very hard to commercialize	Very Large	4	28.6%	22.2%
	Rather Large	6	42.9%	33.3%
	Rather small	3	21.4%	16.7%
	Small	1	7.1%	5.6%
	No Answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

A3.3 Evaluation/Effectiveness:

Table A3.3.1: What method of establishing contacts with partners from the application sphere is the most effective in your centre for TT?

Effectiveness of establishing contacts		Count	Column Valid N %	Column N %
Through former clients of your organization from the application sphere from the public sector	Very effective	1	6.7%	5.6%
	Rather effective	8	53.3%	44.4%
	Rather ineffective	4	26.7%	22.2%
	Ineffectiv	2	13.3%	11.1%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through an external mediator of technology transfer	Very effective	0	0.0%	0.0%
	Rather effective	10	66.7%	55.6%
	Rather ineffective	3	20.0%	16.7%
	Ineffectiv	2	13.3%	11.1%
	No answer	3	0.0%	16.7%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through former clients of your organization from the application sphere	Very effective	1	8.3%	5.6%
	Rather effective	7	58.3%	38.9%
	Rather ineffective	4	33.3%	22.2%
	Ineffectiv	0	0.0%	0.0%
	No answer	6	0.0%	33.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through fairs and exhibitions	Very effective	0	0.0%	0.0%
	Rather effective	5	35.7%	27.8%
	Rather ineffective	7	50.0%	38.9%
	Ineffectiv	2	14.3%	11.1%
	No answer	4	0.0%	22.2%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through direct contact of clients of your organization with partners from the application sphere	Very effective	14	82.4%	77.8%
	Rather effective	3	17.6%	16.7%
	Rather ineffective	0	0.0%	0.0%
	Ineffectiv	0	0.0%	0.0%
	No answer	1	0.0%	5.6%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through the initiative of a partner from the application sphere from the range of small and medium-sized enterprises	Very effective	2	11.8%	11.1%
	Rather effective	14	82.4%	77.8%
	Rather ineffective	1	5.9%	5.6%
	Ineffectiv	0	0.0%	0.0%
	No answer	1	0.0%	5.6%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Through the initiative of a partner from the application sphere from the range of large enterprises	Very effective	1	5.6%	5.6%
	Rather effective	15	83.3%	83.3%
	Rather ineffective	2	11.1%	11.1%
	Ineffectiv	0	0.0%	0.0%
	No answer	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%
Other	Very effective	1	33.3%	5.6%
	Rather effective	1	33.3%	5.6%
	Rather ineffective	0	0.0%	0.0%
	Ineffectiv	1	33.3%	5.6%
	No answer	15	0.0%	83.3%
	Empty	0	0.0%	0.0%
	Total	18	100.0%	100.0%

A4. Companies_1st wave_TACR`S CLIENTS

A4.0 Chraracteristics:

Statistics

		Length of existence	Size	Ownership structure	Region	Sector of company belongs according to the classification of economic activities CZ-NACE
N	Valid	438	437	441	441	447
	Missing	9	10	6	6	0

Table A4.0.1: Length of existence.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-7 years	55	12.3	12.6	12.6
	8-13 years	75	16.8	17.1	29.7
	14-19 years	75	16.8	17.1	46.8
	More than 20 years	233	52.1	53.2	100.0
	Total	438	98.0	100.0	
Missing	Empty	9	2.0		
Total		447	100.0		

Table A4.0.2: Size.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large-sized enterprise (staff headcount ≥ 1000; annual turnover > 50 milionů €)	21	4.7	4.8	4.8
	Large-sized enterprise (staff headcount ≥ 1000; annual turnover ≤ 50 milionů €)	16	3.6	3.7	8.5
	Large-sized enterprise (staff headcount ≥ 250; annual turnover > 50 milionů €)	34	7.6	7.8	16.2
	Large-sized enterprise (staff headcount ≥ 250; annual turnover ≤ 50 milionů €)	30	6.7	6.9	23.1
	Medium-sized enterprise (staff headcount < 250; annual turnover ≤ 50 milionů €)	120	26.8	27.5	50.6
	Small enterprise (staff headcount < 50; annual turnover ≤ 10 milionů €)	147	32.9	33.6	84.2
	Micro enterprise (staff headcount < 10; annual turnover ≤ 2 miliony €)	69	15.4	15.8	100.0
	Total	437	97.8	100.0	
Missing	Empty	10	2.2		
Total		447	100.0		

Table A4.0.3: Ownership structure.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owners from the Czech Republic only	317	70.9	71.9	71.9
	Owners from abroad only	60	13.4	13.6	85.5
	Owners from the Czech Republic and abroad	55	12.3	12.5	98.0
	State company	9	2.0	2.0	100.0
	Total	441	98.7	100.0	
Missing	Empty	6	1.3		
Total		447	100.0		

Table A4.0.4: Region.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Capital City of Prague	132	29.5	29.9	29.9
	Central Bohemia region	50	11.2	11.3	41.3
	South Bohemia region	14	3.1	3.2	44.4
	Plzeň region	27	6.0	6.1	50.6
	Karlovy Vary region	1	.2	.2	50.8
	Ústí region	12	2.7	2.7	53.5
	Liberec region	18	4.0	4.1	57.6
	Hradec Králové region	11	2.5	2.5	60.1
	Pardubice region	19	4.3	4.3	64.4
	Vysočina Region	21	4.7	4.8	69.2
	South Moravia region	65	14.5	14.7	83.9
	Olomouc region	18	4.0	4.1	88.0
	Moravia-Silesia region	27	6.0	6.1	94.1
	Zlín region	26	5.8	5.9	100.0
	Total	441	98.7	100.0	
Missing	Empty	6	1.3		
Total		447	100.0		

Table A4.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
0	8	1.8	1.8	1.8
10 Manufacture of food products	11	2.5	2.5	4.3
11 Manufacture of food products	1	.2	.2	4.5
13 Manufacture of textiles	6	1.3	1.3	5.8
17 Manufacture of paper and paper products	1	.2	.2	6.0
19 Manufacture of coke and refined petroleum products	1	.2	.2	6.3
20 Manufacture of chemicals and chemical products	25	5.6	5.6	11.9
21 Manufacture of basic pharmaceutical products and pharmaceutical preparations	19	4.3	4.3	16.1
22 Manufacture of rubber and plastic products	16	3.6	3.6	19.7
23 Manufacture of other non-metallic mineral products	8	1.8	1.8	21.5
251 Manufacture of structural metal products	7	1.6	1.6	23.0
254 Manufacture of weapons and ammunition	1	.2	.2	23.3
255 Forging, pressing, stampingand roll-forming of metal; powder metallurgy	3	.7	.7	23.9
256 Treatment and coating of metals; machining	3	.7	.7	24.6
261 Manufacture of electronic components and boards	4	.9	.9	25.5
262 Manufacture of computers and peripheral equipment	3	.7	.7	26.2
263 Manufacture of communication equipment	8	1.8	1.8	28.0
264 Manufacture of consumer electronics	4	.9	.9	28.9
265 Manufacture of instruments and appliances for measuring,	15	3.4	3.4	32.2
266 Manufacture of irradiation, electromedical and	2	.4	.4	32.7
267 Manufacture of optical instruments and photographic equipment	7	1.6	1.6	34.2
27 Manufacture of electrical equipment	22	4.9	4.9	39.1
28 Manufacture of machineryand equipment n.e.c.	39	8.7	8.7	47.9
29 Manufacture of motor vehicles, trailers and semi-trailers	4	.9	.9	48.8
302 Manufacture of railway locomotives and rolling stock	1	.2	.2	49.0

Cont. Table A4.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
303 Manufacture of air and spacecraft and related machinery	12	2.7	2.7	51.7
309 Manufacture of transport equipment n.e.c.	7	1.6	1.6	53.2
322 Manufacture of musical instruments	1	.2	.2	53.5
325 Manufacture of medical and dental instruments and supplies	10	2.2	2.2	55.7
329 Manufacturing n.e.c	11	2.5	2.5	58.2
33 Repair and installation of machinery and equipment	7	1.6	1.6	59.7
35 Electricity, gas, steam and air conditioning supply	8	1.8	1.8	61.5
36 Water collection, treatment and supply	5	1.1	1.1	62.6
38 Waste collection, treatment and disposal activities; materials	2	.4	.4	63.1
39 Remediation activities and other waste management services	5	1.1	1.1	64.2
61 Telecommunications	2	.4	.4	64.7
62 Computer programming, consultancy and related activities	21	4.7	4.7	69.4
63 Information service activities	4	.9	.9	70.2
68 Real estate activities	2	.4	.4	70.7
69 Legal and accounting activities	1	.2	.2	70.9
70 Activities of head offices; management consultancy activities	2	.4	.4	71.4
711 Architectural and engineering activities and related technical	12	2.7	2.7	74.0
712 Technical testing and analysis	11	2.5	2.5	76.5
7211 Research and experimental development on biotechnology	6	1.3	1.3	77.9
7219 Other research and experimental development on natural	17	3.8	3.8	81.7
722 Research and experimental development on social sciences and	4	.9	.9	82.6
73 Advertising and market research	1	.2	.2	82.8
74 Other professional, scientific and technical activities	11	2.5	2.5	85.2
75 Veterinary activities	2	.4	.4	85.7
84 Public administration and defence; compulsory social security	1	.2	.2	85.9
85 Education	1	.2	.2	86.1
86 Human health activities	3	.7	.7	86.8
A Agriculture, forestry and fishing	11	2.5	2.5	89.3
B Mining and quarrying	5	1.1	1.1	90.4
F Construction	20	4.5	4.5	94.9
G Wholesale and retail trade; repair of motor vehicles and	3	.7	.7	95.5
H Transportation and storage	4	.9	.9	96.4
S Other service activities	16	3.6	3.6	100.0
Total	447	100.0	100.0	

A4.1 Innovation:

Statistics

Deals with innovation of products, processes or services.

N	Valid	447
	Missing	0

Table A4.1.1: Deals with innovation of products, processes or services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	438	98.0	98.0	98.0
	No	9	2.0	2.0	100.0
	Total	447	100.0	100.0	

Table A4.1.2: Why your company does not deal with innovation of products, processes and services?

No deals because		Count	Column N %
Innovation activities take place at the level of the parent company	Yes	0	0.0%
	Empty	9	100.0%
	Total	9	100.0%
We have yet to consider innovation activities	Yes	2	22.2%
	Empty	7	77.8%
	Total	9	100.0%
Our company does not require innovation of products/processes/services	Yes	3	33.3%
	Empty	6	66.7%
	Total	9	100.0%
We do not have financial resources funds for innovation activity	Yes	5	55.6%
	Empty	4	44.4%
	Total	9	100.0%
We do not have sufficient staffing capacity to perform innovation	Yes	2	22.2%
	Empty	7	77.8%
	Total	9	100.0%
We would like to innovate, but we lack guidance in this area	Yes	1	11.1%
	Empty	8	88.9%
	Total	9	100.0%
We would like to innovate, but we have not found a suitable partner for collaboration	Yes	0	0.0%
	Empty	9	100.0%
	Total	9	100.0%
We have previous negative experience from collaboration with universities / RO	Yes	0	0.0%
	Empty	9	100.0%
	Total	9	100.0%
Other	Yes	1	11.1%
	Empty	8	88.9%
	Total	9	100.0%

Table A4.1.3: What is the level of innovation?

Level of innovation		Count	Column N %
Development of groundbreaking products / processes / services that surpass the current situation (disruptive innovation)	Yes	116	26.0%
	Empty	331	74.0%
	Total	447	100.0%
Development of new products / processes / services (new technology)	Yes	351	78.5%
	Empty	96	21.5%
	Total	447	100.0%
Improvement of existing products / processes / services (improvement of existing solutions)	Yes	307	68.7%
	Empty	140	31.3%
	Total	447	100.0%
Adapting or modifying existing products / processes / services (routine changes)	Yes	168	37.6%
	Empty	279	62.4%
	Total	447	100.0%
Other	Yes	6	1.3%
	Empty	441	98.7%
	Total	447	100.0%

Table A4.1.4: Specify the market for which groundbreaking product is intended.

Market		Count	Column N %
Local market	Yes	15	3.4%
	Empty	432	96.6%
	Total	447	100.0%
Domestic market	Yes	69	15.4%
	Empty	378	84.6%
	Total	447	100.0%
European market	Yes	94	21.0%
	Empty	353	79.0%
	Total	447	100.0%
Worldwide market	Yes	87	19.5%
	Empty	360	80.5%
	Total	447	100.0%

Table A4.1.5: Specify the market for which new product/service is intended.

Market		Count	Column N %
Local market	Yes	56	12.5%
	Empty	391	87.5%
	Total	447	100.0%
Domestic market	Yes	235	52.6%
	Empty	212	47.4%
	Total	447	100.0%
European market	Yes	243	54.4%
	Empty	204	45.6%
	Total	447	100.0%
Worldwide market	Yes	181	40.5%
	Empty	266	59.5%
	Total	447	100.0%

A4.2 Motives:

Table A4.2.1: Please select from the following list the motives that led you to collaborate.

Motives to collaborate		Count	Column N %
Enhancing the reputation of the company	Yes	155	34.7%
	Empty	292	65.3%
	Total	447	100.0%
Easier access to the latest know-how/technologies	Yes	209	46.8%
	Empty	238	53.2%
	Total	447	100.0%
Saving costs for research (economically more efficient than internal R&D)	Yes	207	46.3%
	Empty	240	53.7%
	Total	447	100.0%
Gain a competitive advantage through projects funded from public sources (research)	Yes	266	59.5%
	Empty	181	40.5%
	Total	447	100.0%
Activation of further education of employees	Yes	81	18.1%
	Empty	366	81.9%
	Total	447	100.0%
Utilization of student capacity (especially with regard to access to a qualified labour force)	Yes	133	29.8%
	Empty	314	70.2%
	Total	447	100.0%
Other	Yes	47	10.5%
	Empty	400	89.5%
	Total	447	100.0%

A4.3 Barriers:

Table A4.3.1: Where do you see the greatest barriers in collaboration with universities / RO?

Barriers in collaboration		Count	Column N %
Absence of clearly defined methodologies and guidelines for research collaboration	Yes	100	22.4%
	Empty	347	77.6%
	Total	447	100.0%
Failure of university / RO to comply with agreements in research collaboration	Yes	34	7.6%
	Empty	413	92.4%
	Total	447	100.0%
Premature publication of the results of joint research by university / RO	Yes	30	6.7%
	Empty	417	93.3%
	Total	447	100.0%
Reluctance of university / RO to modify the research carried out based on relevant information	Yes	72	16.1%
	Empty	375	83.9%
	Total	447	100.0%
Insufficient quality of research / services of the university/ RO	Yes	112	25.1%
	Empty	335	74.9%
	Total	447	100.0%
Unusable instrumentation of the university / RO	Yes	20	4.5%
	Empty	427	95.5%
	Total	447	100.0%
Personal antipathy	Yes	21	4.7%
	Empty	426	95.3%
	Total	447	100.0%
High administrative burden on the company	Yes	161	36.0%
	Empty	286	64.0%
	Total	447	100.0%
Slowness and inflexibility of the university system	Yes	194	43.4%
	Empty	253	56.6%
	Total	447	100.0%
Other	Yes	54	12.1%
	Empty	393	87.9%
	Total	447	100.0%

A4.4 Companies and universities/RO:

Statistics

Experience of collaboration with a university/RO in the last 3 years.

N	Valid	447
	Missing	0

Table A4.4.1: Experience of collaboration with a university/RO in the last 3 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	422	94.4	94.4	94.4
	No	25	5.6	5.6	100.0
	Total	447	100.0	100.0	

Table A4.4.2: Collaboration in the last 3 years - What specific form of collaboration took place?

Form of collaboration		Count	Column N %
Performance of contractual research	Yes	150	35.5%
	Empty	272	64.5%
	Total	422	100.0%
Performance of joint research	Yes	344	81.5%
	Empty	78	18.5%
	Total	422	100.0%
Purchase of know-how/technology	Yes	19	4.5%
	Empty	403	95.5%
	Total	422	100.0%
Purchase of consultation and advice	Yes	112	26.5%
	Empty	310	73.5%
	Total	422	100.0%
Employees of the company lecturing at a university of	Yes	113	26.8%
	Empty	309	73.2%
	Total	422	100.0%
Engaging students and postdocs in practice	Yes	202	47.9%
	Empty	220	52.1%
	Total	422	100.0%
Further training of employees	Yes	54	12.8%
	Empty	368	87.2%
	Total	422	100.0%
Use of laboratories and instrumentation	Yes	172	40.8%
	Empty	250	59.2%
	Total	422	100.0%
Other	Yes	13	3.1%
	Empty	409	96.9%
	Total	422	100.0%

Table A4.4.3: Crosstable Collaboration/Type of institute.

Form of collaboration			With what type were worked			
			University / higher education	Public research organization	Private research organization	Total
Performance of contractual research	Yes	Count	110	27	13	150
		Row N %	73.3%	18.0%	8.7%	100.0%
		Row Valid N %	73.3%	18.0%	8.7%	100.0%
	Empty	Count	226	36	10	272
		Row N %	83.1%	13.2%	3.7%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	73.3%	18.0%	8.7%	100.0%
Performance of joint research	Yes	Count	278	53	13	344
		Row N %	80.8%	15.4%	3.8%	100.0%
		Row Valid N %	80.8%	15.4%	3.8%	100.0%
	Empty	Count	58	10	10	78
		Row N %	74.4%	12.8%	12.8%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	80.8%	15.4%	3.8%	100.0%
Purchase of know-how/technology	Yes	Count	14	4	1	19
		Row N %	73.7%	21.1%	5.3%	100.0%
		Row Valid N %	73.7%	21.1%	5.3%	100.0%
	Empty	Count	322	59	22	403
		Row N %	79.9%	14.6%	5.5%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	73.7%	21.1%	5.3%	100.0%
Purchase of consultation and advice	Yes	Count	87	14	11	112
		Row N %	77.7%	12.5%	9.8%	100.0%
		Row Valid N %	77.7%	12.5%	9.8%	100.0%
	Empty	Count	249	49	12	310
		Row N %	80.3%	15.8%	3.9%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	77.7%	12.5%	9.8%	100.0%
Employees of the company lecturing at a university of	Yes	Count	100	10	3	113
		Row N %	88.5%	8.8%	2.7%	100.0%
		Row Valid N %	88.5%	8.8%	2.7%	100.0%
	Empty	Count	236	53	20	309
		Row N %	76.4%	17.2%	6.5%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	88.5%	8.8%	2.7%	100.0%
Engaging students and postdocs in practice	Yes	Count	182	16	4	202
		Row N %	90.1%	7.9%	2.0%	100.0%
		Row Valid N %	90.1%	7.9%	2.0%	100.0%
	Empty	Count	154	47	19	220
		Row N %	70.0%	21.4%	8.6%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	90.1%	7.9%	2.0%	100.0%
Further training of employees	Yes	Count	46	7	1	54
		Row N %	85.2%	13.0%	1.9%	100.0%
		Row Valid N %	85.2%	13.0%	1.9%	100.0%
	Empty	Count	290	56	22	368
		Row N %	78.8%	15.2%	6.0%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	85.2%	13.0%	1.9%	100.0%

Cont. Table A4.4.3: Crosstable Collaboration/Type of institute.

Form of collaboration			With what type were worked			
			University / higher education	Public research organization	Private research organization	Total
Use of laboratories and instrumentation	Yes	Count	129	29	14	172
		Row N %	75.0%	16.9%	8.1%	100.0%
		Row Valid N %	75.0%	16.9%	8.1%	100.0%
	Empty	Count	207	34	9	250
		Row N %	82.8%	13.6%	3.6%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	75.0%	16.9%	8.1%	100.0%
Other	Yes	Count	10	0	3	13
		Row N %	76.9%	0.0%	23.1%	100.0%
		Row Valid N %	76.9%	0.0%	23.1%	100.0%
	Empty	Count	326	63	20	409
		Row N %	79.7%	15.4%	4.9%	100.0%
		Row Valid N %				
	Total	Count	336	63	23	422
		Row N %	79.6%	14.9%	5.5%	100.0%
		Row Valid N %	76.9%	0.0%	23.1%	100.0%

Table A4.4.4: If no, please state why.

		Count	Column N %
If no, because_Our own centre for research and development in the CZ	Yes	10	40.0%
	Empty	15	60.0%
	Total	25	100.0%
If no, because_Own centre for research and development in the country where the parent company is	Yes	0	0.0%
	Empty	25	100.0%
	Total	25	100.0%
If no, because_Own centre for research and development outside the CZ	Yes	1	4.0%
	Empty	24	96.0%
	Total	25	100.0%
If no, because_Czech universities / RO do not have the appropriate results / focus	Yes	0	0.0%
	Empty	25	100.0%
	Total	25	100.0%
If no, because_Previous negative experience with the purchase of know-how/technology from universities / RO	Yes	0	0.0%
	Empty	25	100.0%
	Total	25	100.0%
If no, because_Insufficient conditions / opportunities for “networking” and meetings	Yes	4	16.0%
	Empty	21	84.0%
	Total	25	100.0%
If no, because_Insufficient supply of services by universities / RO	Yes	4	16.0%
	Empty	21	84.0%
	Total	25	100.0%
If no, because_Universities/RO pursue their own interests in research collaboration	Yes	10	40.0%
	Empty	15	60.0%
	Total	25	100.0%
If no, because_Personal antipathy	Yes	0	0.0%
	Empty	25	100.0%
	Total	25	100.0%
If no, because_Slowness and inflexibility of the university system	Yes	11	44.0%
	Empty	14	56.0%
	Total	25	100.0%
If no, because_Collaborate with organizations / institutions other than universities / RO	Yes	3	12.0%
	Empty	22	88.0%
	Total	25	100.0%
If no, because_Other_ranked	Yes	9	36.0%
	Empty	16	64.0%
	Total	25	100.0%

A4.5 Companies and CTT/STP

Statistics

Experience with the services of one of the CTT at the universities / RO or STP.

N	Valid	422
	Missing	25

Table A4.5.1: Experience with the services of one of the CTT at the universities / RO or STP.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, only with CTT	33	7.4	7.8	7.8
	Yes, only with STP	56	12.5	13.3	21.1
	Yes, with CTT and STP	43	9.6	10.2	31.3
	No	290	64.9	68.7	100.0
	Total	422	94.4	100.0	
Missing	Empty	25	5.6		
Total		447	100.0		

Table A4.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	43	22.2%	9.6%
	Less benefit	56	28.9%	12.5%
	Rather benefit	58	29.9%	13.0%
	Greatest benefit	37	19.1%	8.3%
	Empty	253	0.0%	56.6%
	Total	447	100.0%	100.0%
Informing about the services of R&D	No benefit	35	17.8%	7.8%
	Less benefit	62	31.5%	13.9%
	Rather benefit	56	28.4%	12.5%
	Greatest benefit	44	22.3%	9.8%
	Empty	250	0.0%	55.9%
	Total	447	100.0%	100.0%
Information on further education	No benefit	60	32.1%	13.4%
	Less benefit	70	37.4%	15.7%
	Rather benefit	50	26.7%	11.2%
	Greatest benefit	7	3.7%	1.6%
	Empty	260	0.0%	58.2%
	Total	447	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	106	56.7%	23.7%
	Less benefit	55	29.4%	12.3%
	Rather benefit	19	10.2%	4.3%
	Greatest benefit	7	3.7%	1.6%
	Empty	260	0.0%	58.2%
	Total	447	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	69	36.3%	15.4%
	Less benefit	72	37.9%	16.1%
	Rather benefit	30	15.8%	6.7%
	Greatest benefit	19	10.0%	4.3%
	Empty	257	0.0%	57.5%
	Total	447	100.0%	100.0%
Performance of patent search	No benefit	72	38.1%	16.1%
	Less benefit	44	23.3%	9.8%
	Rather benefit	52	27.5%	11.6%
	Greatest benefit	21	11.1%	4.7%
	Empty	258	0.0%	57.7%
	Total	447	100.0%	100.0%
Market analysis	No benefit	78	41.7%	17.4%
	Less benefit	61	32.6%	13.6%
	Rather benefit	34	18.2%	7.6%
	Greatest benefit	14	7.5%	3.1%
	Empty	260	0.0%	58.2%
	Total	447	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	90	47.6%	20.1%
	Less benefit	71	37.6%	15.9%
	Rather benefit	23	12.2%	5.1%
	Greatest benefit	5	2.6%	1.1%
	Empty	258	0.0%	57.7%
	Total	447	100.0%	100.0%

Cont. Table A4.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Mediating joint research projects	No benefit	44	21.6%	9.8%
	Less benefit	47	23.0%	10.5%
	Rather benefit	68	33.3%	15.2%
	Greatest benefit	45	22.1%	10.1%
	Empty	243	0.0%	54.4%
	Total	447	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	77	40.7%	17.2%
	Less benefit	63	33.3%	14.1%
	Rather benefit	36	19.0%	8.1%
	Greatest benefit	13	6.9%	2.9%
	Empty	258	0.0%	57.7%
	Total	447	100.0%	100.0%
Mediating practice / doctoral work in your company	No benefit	61	28.6%	13.6%
	Less benefit	73	34.3%	16.3%
	Rather benefit	41	19.2%	9.2%
	Greatest benefit	38	17.8%	8.5%
	Empty	234	0.0%	52.3%
	Total	447	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	94	47.7%	21.0%
	Less benefit	54	27.4%	12.1%
	Rather benefit	31	15.7%	6.9%
	Greatest benefit	18	9.1%	4.0%
	Empty	250	0.0%	55.9%
	Total	447	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	78	37.3%	17.4%
	Less benefit	64	30.6%	14.3%
	Rather benefit	34	16.3%	7.6%
	Greatest benefit	33	15.8%	7.4%
	Empty	238	0.0%	53.2%
	Total	447	100.0%	100.0%

Table A4.5.3: Please state the reason why your company has yet to use the services of a CTT/STP?

If no, because		Count	Column N %
Never heard of CTT/STP	Yes	48	16.6%
	Empty	242	83.4%
	Total	290	100.0%
No idea what advice CTT / STP could offer us	Yes	115	39.7%
	Empty	175	60.3%
	Total	290	100.0%
No idea what advice CTT / STP could offer us in the framework of further education	Yes	49	16.9%
	Empty	241	83.1%
	Total	290	100.0%
Negotiation of a collaboration agreement with a university / RO through CTT / STP is too lengthy	Yes	40	13.8%
	Empty	250	86.2%
	Total	290	100.0%
CTT/STP does not provide the services that we could use	Yes	82	28.3%
	Empty	208	71.7%
	Total	290	100.0%
Confidence in the expertise of the staff of CTT/STP	Yes	43	14.8%
	Empty	247	85.2%
	Total	290	100.0%
Other	Yes	38	13.1%
	Empty	252	86.9%
	Total	290	100.0%

Table A4.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	unsatisfactory	14	17.1%	10.6%
	Less satisfactory	19	23.2%	14.4%
	Rather satisfactory	30	36.6%	22.7%
	very satisfactory	19	23.2%	14.4%
	Not used / not offered	25	0.0%	18.9%
	Empty	25	0.0%	18.9%
	Total	132	100.0%	100.0%
Informing about the services of R&D	unsatisfactory	10	11.5%	7.6%
	Less satisfactory	19	21.8%	14.4%
	Rather satisfactory	36	41.4%	27.3%
	very satisfactory	22	25.3%	16.7%
	Not used / not offered	22	0.0%	16.7%
	Empty	23	0.0%	17.4%
	Total	132	100.0%	100.0%
Information on further education	unsatisfactory	15	20.8%	11.4%
	Less satisfactory	27	37.5%	20.5%
	Rather satisfactory	22	30.6%	16.7%
	very satisfactory	8	11.1%	6.1%
	Not used / not offered	32	0.0%	24.2%
	Empty	28	0.0%	21.2%
	Total	132	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	unsatisfactory	24	41.4%	18.2%
	Less satisfactory	15	25.9%	11.4%
	Rather satisfactory	14	24.1%	10.6%
	very satisfactory	5	8.6%	3.8%
	Not used / not offered	47	0.0%	35.6%
	Empty	27	0.0%	20.5%
	Total	132	100.0%	100.0%
Mediating opportunities for “networking” and meetings	unsatisfactory	13	16.3%	9.8%
	Less satisfactory	22	27.5%	16.7%
	Rather satisfactory	27	33.8%	20.5%
	very satisfactory	18	22.5%	13.6%
	Not used / not offered	25	0.0%	18.9%
	Empty	27	0.0%	20.5%
	Total	132	100.0%	100.0%
Performance of patent search	unsatisfactory	18	29.0%	13.6%
	Less satisfactory	18	29.0%	13.6%
	Rather satisfactory	19	30.6%	14.4%
	very satisfactory	7	11.3%	5.3%
	Not used / not offered	43	0.0%	32.6%
	Empty	27	0.0%	20.5%
	Total	132	100.0%	100.0%
Market analysis	unsatisfactory	25	43.1%	18.9%
	Less satisfactory	19	32.8%	14.4%
	Rather satisfactory	9	15.5%	6.8%
	very satisfactory	5	8.6%	3.8%
	Not used / not offered	50	0.0%	37.9%
	Empty	24	0.0%	18.2%
	Total	132	100.0%	100.0%
Mapping the innovation potential of your business	unsatisfactory	24	45.3%	18.2%
	Less satisfactory	20	37.7%	15.2%
	Rather satisfactory	6	11.3%	4.5%
	very satisfactory	3	5.7%	2.3%
	Not used / not offered	52	0.0%	39.4%
	Empty	27	0.0%	20.5%
	Total	132	100.0%	100.0%
Mediating joint research projects	unsatisfactory	14	14.4%	10.6%
	Less satisfactory	8	8.2%	6.1%
	Rather satisfactory	39	40.2%	29.5%
	very satisfactory	36	37.1%	27.3%
	Not used / not offered	12	0.0%	9.1%
	Empty	23	0.0%	17.4%
	Total	132	100.0%	100.0%
Advice on the introduction of new technologies into operation	unsatisfactory	15	22.7%	11.4%
	Less satisfactory	22	33.3%	16.7%
	Rather satisfactory	16	24.2%	12.1%
	very satisfactory	13	19.7%	9.8%
	Not used / not offered	40	0.0%	30.3%
	Empty	26	0.0%	19.7%
	Total	132	100.0%	100.0%

Cont. Table A4.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	unsatisfactory	19	26.4%	14.4%
	Less satisfactory	18	25.0%	13.6%
	Rather satisfactory	27	37.5%	20.5%
	very satisfactory	8	11.1%	6.1%
	Not used / not offered	35	0.0%	26.5%
	Empty	25	0.0%	18.9%
	Total	132	100.0%	100.0%
Arranging work placements of professors / researchers in your company	unsatisfactory	25	43.1%	18.9%
	Less satisfactory	14	24.1%	10.6%
	Rather satisfactory	15	25.9%	11.4%
	very satisfactory	4	6.9%	3.0%
	Not used / not offered	47	0.0%	35.6%
	Empty	27	0.0%	20.5%
	Total	132	100.0%	100.0%
Involvement of your company / employees in teaching at the university	unsatisfactory	22	33.3%	16.7%
	Less satisfactory	19	28.8%	14.4%
	Rather satisfactory	15	22.7%	11.4%
	very satisfactory	10	15.2%	7.6%
	Not used / not offered	40	0.0%	30.3%
	Empty	26	0.0%	19.7%
	Total	132	100.0%	100.0%

Table A4.5.5: Please rate the staff of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction staff of collaboration		Count	Column Valid N %	Column N %
Availability	Completely unsatisfactory factor	2	1.8%	1.5%
	Small rated factor	10	8.8%	7.6%
	Large rated factor	55	48.7%	41.7%
	Highest rated factor	46	40.7%	34.8%
	Empty	19	0.0%	14.4%
	Total	132	100.0%	100.0%
Involvement	Completely unsatisfactory factor	6	5.2%	4.5%
	Small rated factor	14	12.2%	10.6%
	Large rated factor	54	47.0%	40.9%
	Highest rated factor	41	35.7%	31.1%
	Empty	17	0.0%	12.9%
	Total	132	100.0%	100.0%
Professional competence	Completely unsatisfactory factor	8	7.0%	6.1%
	Small rated factor	12	10.5%	9.1%
	Large rated factor	34	29.8%	25.8%
	Highest rated factor	60	52.6%	45.5%
	Empty	18	0.0%	13.6%
	Total	132	100.0%	100.0%
Understanding the issue of transfer	Completely unsatisfactory factor	7	6.3%	5.3%
	Small rated factor	18	16.1%	13.6%
	Large rated factor	54	48.2%	40.9%
	Highest rated factor	33	29.5%	25.0%
	Empty	20	0.0%	15.2%
	Total	132	100.0%	100.0%
Course of the discussion	Completely unsatisfactory factor	5	4.4%	3.8%
	Small rated factor	11	9.7%	8.3%
	Large rated factor	52	46.0%	39.4%
	Highest rated factor	45	39.8%	34.1%
	Empty	19	0.0%	14.4%
	Total	132	100.0%	100.0%
Time flexibility and adherence to the time schedule	Completely unsatisfactory factor	6	5.4%	4.5%
	Small rated factor	22	19.8%	16.7%
	Large rated factor	52	46.8%	39.4%
	Highest rated factor	31	27.9%	23.5%
	Empty	21	0.0%	15.9%
	Total	132	100.0%	100.0%
Reliance on oral agreements	Completely unsatisfactory factor	3	2.7%	2.3%
	Small rated factor	10	9.1%	7.6%
	Large rated factor	46	41.8%	34.8%
	Highest rated factor	51	46.4%	38.6%
	Empty	22	0.0%	16.7%
	Total	132	100.0%	100.0%

Table A4.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	14	12.1%	10.6%
	Less benefit	26	22.4%	19.7%
	Rather benefit	39	33.6%	29.5%
	Greatest benefit	37	31.9%	28.0%
	Empty	16	0.0%	12.1%
	Total	132	100.0%	100.0%
Informing about the services of R&D	No benefit	8	7.0%	6.1%
	Less benefit	17	14.9%	12.9%
	Rather benefit	53	46.5%	40.2%
	Greatest benefit	36	31.6%	27.3%
	Empty	18	0.0%	13.6%
	Total	132	100.0%	100.0%
Information on further education	No benefit	21	18.6%	15.9%
	Less benefit	44	38.9%	33.3%
	Rather benefit	38	33.6%	28.8%
	Greatest benefit	10	8.8%	7.6%
	Empty	19	0.0%	14.4%
	Total	132	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	34	30.6%	25.8%
	Less benefit	56	50.5%	42.4%
	Rather benefit	14	12.6%	10.6%
	Greatest benefit	7	6.3%	5.3%
	Empty	21	0.0%	15.9%
	Total	132	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	12	10.6%	9.1%
	Less benefit	30	26.5%	22.7%
	Rather benefit	52	46.0%	39.4%
	Greatest benefit	19	16.8%	14.4%
	Empty	19	0.0%	14.4%
	Total	132	100.0%	100.0%
Performance of patent search	No benefit	28	25.2%	21.2%
	Less benefit	31	27.9%	23.5%
	Rather benefit	32	28.8%	24.2%
	Greatest benefit	20	18.0%	15.2%
	Empty	21	0.0%	15.9%
	Total	132	100.0%	100.0%
Market analysis	No benefit	36	31.6%	27.3%
	Less benefit	40	35.1%	30.3%
	Rather benefit	24	21.1%	18.2%
	Greatest benefit	14	12.3%	10.6%
	Empty	18	0.0%	13.6%
	Total	132	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	50	45.0%	37.9%
	Less benefit	37	33.3%	28.0%
	Rather benefit	18	16.2%	13.6%
	Greatest benefit	6	5.4%	4.5%
	Empty	21	0.0%	15.9%
	Total	132	100.0%	100.0%
Mediating joint research projects	No benefit	8	6.5%	6.1%
	Less benefit	19	15.3%	14.4%
	Rather benefit	47	37.9%	35.6%
	Greatest benefit	50	40.3%	37.9%
	Empty	8	0.0%	6.1%
	Total	132	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	27	23.7%	20.5%
	Less benefit	34	29.8%	25.8%
	Rather benefit	37	32.5%	28.0%
	Greatest benefit	16	14.0%	12.1%
	Empty	18	0.0%	13.6%
	Total	132	100.0%	100.0%

Cont. Table A4.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	No benefit	11	9.4%	8.3%
	Less benefit	47	40.2%	35.6%
	Rather benefit	44	37.6%	33.3%
	Greatest benefit	15	12.8%	11.4%
	Empty	15	0.0%	11.4%
	Total	132	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	26	23.2%	19.7%
	Less benefit	48	42.9%	36.4%
	Rather benefit	31	27.7%	23.5%
	Greatest benefit	7	6.3%	5.3%
	Empty	20	0.0%	15.2%
	Total	132	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	26	22.8%	19.7%
	Less benefit	47	41.2%	35.6%
	Rather benefit	28	24.6%	21.2%
	Greatest benefit	13	11.4%	9.8%
	Empty	18	0.0%	13.6%
	Total	132	100.0%	100.0%

A5. Companies_2nd wave_Other companies with R&D

A5.0 Characteristics

Statistics

		Length of existence	Size	Ownership structure	Region	Sector of company belongs according to the classification of economic activities CZ-NACE
N	Valid	93	91	96	98	98
	Missing	5	7	2	0	0

Table A5.0.1: Length of existence.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-7 years	2	2.0	2.2	2.2
	8-13 years	10	10.2	10.8	12.9
	14-19 years	18	18.4	19.4	32.3
	More than 20 years	63	64.3	67.7	100.0
	Total	93	94.9	100.0	
Missing	Empty	5	5.1		
Total		98	100.0		

Table A5.0.2: Size.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large-sized enterprise (staff headcount ≥ 1000; annual turnover > 50 milionů €)	1	1.0	1.1	1.1
	Large-sized enterprise (staff headcount ≥ 1000; annual turnover ≤ 50 milionů €)	3	3.1	3.3	4.4
	Large-sized enterprise (staff headcount ≥ 250; annual turnover > 50 milionů €)	9	9.2	9.9	14.3
	Large-sized enterprise (staff headcount ≥ 250; annual turnover ≤ 50 milionů €)	6	6.1	6.6	20.9
	Medium-sized enterprise (staff headcount < 250; annual turnover ≤ 50 milionů €)	33	33.7	36.3	57.1
	Small enterprise (staff headcount < 50; annual turnover ≤ 10 milionů €)	29	29.6	31.9	89.0
	Micro enterprise (staff headcount < 10; annual turnover ≤ 2 miliony €)	10	10.2	11.0	100.0
	Total	91	92.9	100.0	
Missing	Empty	7	7.1		
Total		98	100.0		

Table A5.0.3: Ownership structure.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owners from the Czech Republic only	63	64.3	65.6	65.6
	Owners from abroad only	15	15.3	15.6	81.3
	Owners from the Czech Republic and abroad	15	15.3	15.6	96.9
	State company	3	3.1	3.1	100.0
	Total	96	98.0	100.0	
Missing	Empty	2	2.0		
Total		98	100.0		

Table A5.0.4: Region.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Capital City of Prague	23	23.5	23.5	23.5
	Central Bohemia region	7	7.1	7.1	30.6
	South Bohemia region	1	1.0	1.0	31.6
	Plzeň region	6	6.1	6.1	37.8
	Karlovy Vary region	2	2.0	2.0	39.8
	Ústí region	3	3.1	3.1	42.9
	Hradec Králové region	3	3.1	3.1	45.9
	Pardubice region	11	11.2	11.2	57.1
	Vysočina Region	2	2.0	2.0	59.2
	South Moravia region	17	17.3	17.3	76.5
	Olomouc region	7	7.1	7.1	83.7
	Moravia-Silesia region	10	10.2	10.2	93.9
	Zlín region	6	6.1	6.1	100.0
	Total	98	100.0	100.0	

Table A5.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
-	1	1.0	1.0	1.0
10 Manufacture of food products	1	1.0	1.0	2.0
11 Manufacture of beverages	1	1.0	1.0	3.1
13 Manufacture of textiles	2	2.0	2.0	5.1
19 Manufacture of coke and refined petroleum products	1	1.0	1.0	6.1
20 Manufacture of chemicals and chemical products	3	3.1	3.1	9.2
22 Manufacture of rubber and plastic products	2	2.0	2.0	11.2
23 Manufacture of other non-metallic mineral products	1	1.0	1.0	12.2
24 Manufacture of basic metals	2	2.0	2.0	14.3
251 Manufacture of structural metal products	5	5.1	5.1	19.4
254 Manufacture of weapons and ammunition	1	1.0	1.0	20.4
255 Forging, pressing, stampingand roll-forming of metal; powder	1	1.0	1.0	21.4
256 Treatment and coating of metals; machining	1	1.0	1.0	22.4
257 Manufacture of cutlery, tools and general hardware	1	1.0	1.0	23.5
259 Manufacture of other fabricated metal products	1	1.0	1.0	24.5
261 Manufacture of electronic components and boards	2	2.0	2.0	26.5
263 Manufacture of communication equipment	2	2.0	2.0	28.6
265 Manufacture of instruments and appliances for measuring,	3	3.1	3.1	31.6
27 Manufacture of electrical equipment	10	10.2	10.2	41.8
28 Manufacture of machineryand equipment n.e.c.	14	14.3	14.3	56.1
29 Manufacture of motor vehicles, trailers and semi-trailers	2	2.0	2.0	58.2
302 Manufacture of railway locomotives and rolling stock	1	1.0	1.0	59.2
303 Manufacture of air and spacecraft and related machinery	1	1.0	1.0	60.2
33 Repair and installation of machinery and equipment	1	1.0	1.0	61.2
35 Electricity, gas, steam and air conditioning supply	1	1.0	1.0	62.2

Cont. Table A5.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
62 Computer programming, consultancy and related activities	5	5.1	5.1	67.3
63 Information service activities	1	1.0	1.0	68.4
711 Architectural and engineering activities and related technical	1	1.0	1.0	69.4
712 Technical testing and analysis	1	1.0	1.0	70.4
7219 Other research and experimental development on natural	8	8.2	8.2	78.6
722 Research and experimental development on social sciences and	1	1.0	1.0	79.6
74 Other professional, scientific and technical activities	3	3.1	3.1	82.7
86 Human health activities	1	1.0	1.0	83.7
A Agriculture, forestry and fishing	5	5.1	5.1	88.8
F Construction	2	2.0	2.0	90.8
G Wholesale and retail trade; repair of motor vehicles and	4	4.1	4.1	94.9
H Transportation and storage	1	1.0	1.0	95.9
K Financial and insurance activities	2	2.0	2.0	98.0
S Other service activities	2	2.0	2.0	100.0
Total	98	100.0	100.0	

A5.1 Innovation

Statistics

Deals with innovation of products, processes or services.

N	Valid	98
	Missing	0

Table A5.1.1: Deals with innovation of products, processes or services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	97	99.0	99.0	99.0
	No	1	1.0	1.0	100.0
	Total	98	100.0	100.0	

Table A5.1.2: Why your company does not deal with innovation of products, processes and services?

No deals because		Count	Column N %
Innovation activities take place at the level of the parent company	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We have yet to consider innovation activities	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
Our company does not require innovation of products/processes/services	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We do not have financial resources funds for innovation activity	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We do not have sufficient staffing capacity to perform innovation	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We would like to innovate, but we lack guidance in this area	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We would like to innovate, but we have not found a suitable partner for collaboration	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
We have previous negative experience from collaboration with universities / RO	Yes	0	0.0%
	Empty	1	100.0%
	Total	1	100.0%
Other	Yes	1	100.0%
	Empty	0	0.0%
	Total	1	100.0%

Table A5.1.3: What is the level of innovation?

Level of innovation		Count	Column N %
Development of groundbreaking products / processes / services that surpass the current situation (disruptive innovation)	Yes	14	14.3%
	Empty	84	85.7%
	Total	98	100.0%
Development of new products / processes / services (new technology)	Yes	69	70.4%
	Empty	29	29.6%
	Total	98	100.0%
Improvement of existing products / processes / services (improvement of existing solutions)	Yes	77	78.6%
	Empty	21	21.4%
	Total	98	100.0%
Adapting or modifying existing products / processes / services (routine changes)	Yes	37	37.8%
	Empty	61	62.2%
	Total	98	100.0%
Other	Yes	2	2.0%
	Empty	96	98.0%
	Total	98	100.0%

Table A5.1.4: Specify the market for which groundbreaking product is intended.

Market		Count	Column N %
Local market	Yes	3	3.1%
	Empty	95	96.9%
	Total	98	100.0%
Domestic market	Yes	9	9.2%
	Empty	89	90.8%
	Total	98	100.0%
European market	Yes	9	9.2%
	Empty	89	90.8%
	Total	98	100.0%
Worldwide market	Yes	10	10.2%
	Empty	88	89.8%
	Total	98	100.0%

Table A5.1.5: Specify the market for which new product/service is intended.

Market		Count	Column N %
Local market	Yes	9	9.2%
	Empty	89	90.8%
	Total	98	100.0%
Domestic market	Yes	40	40.8%
	Empty	58	59.2%
	Total	98	100.0%
European market	Yes	41	41.8%
	Empty	57	58.2%
	Total	98	100.0%
Worldwide market	Yes	40	40.8%
	Empty	58	59.2%
	Total	98	100.0%

A5.2 Motives

Table A5.2.1: Please select from the following list the motives that led you to collaborate.

Motives to collaborate		Count	Column N %
Enhancing the reputation of the company	Yes	34	34.7%
	Empty	64	65.3%
	Total	98	100.0%
Easier access to the latest know-how/technologies	Yes	38	38.8%
	Empty	60	61.2%
	Total	98	100.0%
Saving costs for research (economically more efficient than internal R&D)	Yes	34	34.7%
	Empty	64	65.3%
	Total	98	100.0%
Gain a competitive advantage through projects funded from public sources (research)	Yes	35	35.7%
	Empty	63	64.3%
	Total	98	100.0%
Activation of further education of employees	Yes	13	13.3%
	Empty	85	86.7%
	Total	98	100.0%
Utilization of student capacity (especially with regard to access to a qualified labour force)	Yes	22	22.4%
	Empty	76	77.6%
	Total	98	100.0%
Other	Yes	7	7.1%
	Empty	91	92.9%
	Total	98	100.0%

A5.3 Barriers

Table A5.2.1: Where do you see the greatest barriers in collaboration with universities / RO?

Barriers in colaboration		Count	Column N %
Absence of clearly defined methodologies and guidelines for research collaboration	Yes	20	20.4%
	Empty	78	79.6%
	Total	98	100.0%
Failure of university / RO to comply with agreements in research collaboration	Yes	5	5.1%
	Empty	93	94.9%
	Total	98	100.0%
Premature publication of the results of joint research by university / RO	Yes	5	5.1%
	Empty	93	94.9%
	Total	98	100.0%
Reluctance of university / RO to modify the research carried out based on relevant information	Yes	10	10.2%
	Empty	88	89.8%
	Total	98	100.0%
Insufficient quality of research / services of the university/ RO	Yes	9	9.2%
	Empty	89	90.8%
	Total	98	100.0%
Unusable instrumentation of the university / RO	Yes	4	4.1%
	Empty	94	95.9%
	Total	98	100.0%
Personal antipathy	Yes	4	4.1%
	Empty	94	95.9%
	Total	98	100.0%
High administrative burden on the company	Yes	26	26.5%
	Empty	72	73.5%
	Total	98	100.0%
Slowness and inflexibility of the university system	Yes	30	30.6%
	Empty	68	69.4%
	Total	98	100.0%
Other	Yes	11	11.2%
	Empty	87	88.8%
	Total	98	100.0%

A5.4 Companies and universities/RO

Statistics

Experience of collaboration with a university/RO in the last 3 years.

N	Valid	98
	Missing	0

Table A5.4.1: Experience of collaboration with a university/RO in the last 3 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	80	81.6	81.6	81.6
	No	18	18.4	18.4	100.0
	Total	98	100.0	100.0	

Table A5.4.2: Collaboration in the last 3 years - What specific form of collaboration took place?

Form of collaboration		Count	Column N %
Performance of contractual research	Yes	33	41.3%
	Empty	47	58.8%
	Total	80	100.0%
Performance of joint research	Yes	56	70.0%
	Empty	24	30.0%
	Total	80	100.0%
Purchase of know-how/technology	Yes	4	5.0%
	Empty	76	95.0%
	Total	80	100.0%
Purchase of consultation and advice	Yes	21	26.3%
	Empty	59	73.8%
	Total	80	100.0%
Employees of the company lecturing at a university of	Yes	18	22.5%
	Empty	62	77.5%
	Total	80	100.0%
Engaging students and postdocs in practice	Yes	32	40.0%
	Empty	48	60.0%
	Total	80	100.0%
Further training of employees	Yes	8	10.0%
	Empty	72	90.0%
	Total	80	100.0%
Use of laboratories and instrumentation	Yes	25	31.3%
	Empty	55	68.8%
	Total	80	100.0%
Other	Yes	5	6.3%
	Empty	75	93.8%
	Total	80	100.0%

Table A5.4.3: Crosstable Collaboration / Type of institute.

Form of collaboration			With what type were worked			
			University / higher education	Public research organization	Private research organization	Total
Performance of contractual research	Yes	Count	23	3	7	33
		Row N %	69.7%	9.1%	21.2%	100.0%
		Row Valid N %	69.7%	9.1%	21.2%	100.0%
	Empty	Count	37	6	4	47
		Row N %	78.7%	12.8%	8.5%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	69.7%	9.1%	21.2%	100.0%
Performance of joint research	Yes	Count	39	8	9	56
		Row N %	69.6%	14.3%	16.1%	100.0%
		Row Valid N %	69.6%	14.3%	16.1%	100.0%
	Empty	Count	21	1	2	24
		Row N %	87.5%	4.2%	8.3%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	69.6%	14.3%	16.1%	100.0%
Purchase of know-how/technology	Yes	Count	4	0	0	4
		Row N %	100.0%	0.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	0.0%	100.0%
	Empty	Count	56	9	11	76
		Row N %	73.7%	11.8%	14.5%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	100.0%	0.0%	0.0%	100.0%
Purchase of consultation and advice	Yes	Count	19	0	2	21
		Row N %	90.5%	0.0%	9.5%	100.0%
		Row Valid N %	90.5%	0.0%	9.5%	100.0%
	Empty	Count	41	9	9	59
		Row N %	69.5%	15.3%	15.3%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	90.5%	0.0%	9.5%	100.0%
Employees of the company lecturing at a university of	Yes	Count	14	1	3	18
		Row N %	77.8%	5.6%	16.7%	100.0%
		Row Valid N %	77.8%	5.6%	16.7%	100.0%
	Empty	Count	46	8	8	62
		Row N %	74.2%	12.9%	12.9%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	77.8%	5.6%	16.7%	100.0%
Engaging students and postdocs in practice	Yes	Count	26	4	2	32
		Row N %	81.3%	12.5%	6.3%	100.0%
		Row Valid N %	81.3%	12.5%	6.3%	100.0%
	Empty	Count	34	5	9	48
		Row N %	70.8%	10.4%	18.8%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	81.3%	12.5%	6.3%	100.0%

Cont. Table A5.4.3: Crosstable Collaboration / Type of institute.

Form of collaboration			With what type were worked			
			University / higher education	Public research organization	Private research organization	Total
Further training of employees	Yes	Count	7	1	0	8
		Row N %	87.5%	12.5%	0.0%	100.0%
		Row Valid N %	87.5%	12.5%	0.0%	100.0%
	Empty	Count	53	8	11	72
		Row N %	73.6%	11.1%	15.3%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	87.5%	12.5%	0.0%	100.0%
Use of laboratories and instrumentation	Yes	Count	20	4	1	25
		Row N %	80.0%	16.0%	4.0%	100.0%
		Row Valid N %	80.0%	16.0%	4.0%	100.0%
	Empty	Count	40	5	10	55
		Row N %	72.7%	9.1%	18.2%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	80.0%	16.0%	4.0%	100.0%
Other	Yes	Count	2	2	1	5
		Row N %	40.0%	40.0%	20.0%	100.0%
		Row Valid N %	40.0%	40.0%	20.0%	100.0%
	Empty	Count	58	7	10	75
		Row N %	77.3%	9.3%	13.3%	100.0%
		Row Valid N %				
	Total	Count	60	9	11	80
		Row N %	75.0%	11.3%	13.8%	100.0%
		Row Valid N %	40.0%	40.0%	20.0%	100.0%

Table A5.4.4: If no, please state why.

If no, because		Count	Column N %
Our own centre for research and development in the CZ	Yes	13	72.2%
	Empty	5	27.8%
	Total	18	100.0%
Own centre for research and development in the country where the parent company is	Yes	1	5.6%
	Empty	17	94.4%
	Total	18	100.0%
Own centre for research and development outside the CZ	Yes	0	0.0%
	Empty	18	100.0%
	Total	18	100.0%
Czech universities / RO do not have the appropriate results / focus	Yes	1	5.6%
	Empty	17	94.4%
	Total	18	100.0%
Previous negative experience with the purchase of know-how/technology from universities / RO	Yes	0	0.0%
	Empty	18	100.0%
	Total	18	100.0%
Insufficient conditions / opportunities for “networking” and meetings	Yes	0	0.0%
	Empty	18	100.0%
	Total	18	100.0%
Insufficient supply of services by universities / RO	Yes	3	16.7%
	Empty	15	83.3%
	Total	18	100.0%
Universities/RO pursue their own interests in research collaboration	Yes	2	11.1%
	Empty	16	88.9%
	Total	18	100.0%
Personal antipathy	Yes	1	5.6%
	Empty	17	94.4%
	Total	18	100.0%
Slowness and inflexibility of the university system	Yes	2	11.1%
	Empty	16	88.9%
	Total	18	100.0%
Collaborate with organizations / institutions other than universities / RO	Yes	1	5.6%
	Empty	17	94.4%
	Total	18	100.0%
Other	Yes	2	11.1%
	Empty	16	88.9%
	Total	18	100.0%

A5.5 Companies and CTT/STP

Statistics

Experience with the services of one of the CTT at the universities / RO or STP.

N	Valid	80
	Missing	18

Table A5.5.1: Experience with the services of one of the CTT at the universities / RO or STP.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, only with CTT	5	5.1	6.3	6.3
	Yes, only with STP	13	13.3	16.3	22.5
	Yes, with CTT and STP	5	5.1	6.3	28.8
	No	57	58.2	71.3	100.0
	Total	80	81.6	100.0	
Missing	Empty	18	18.4		
Total		98	100.0		

Table A5.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	11	29.7%	11.2%
	Less benefit	14	37.8%	14.3%
	Rather benefit	6	16.2%	6.1%
	Greatest benefit	6	16.2%	6.1%
	Empty	61	0.0%	62.2%
	Total	98	100.0%	100.0%
Informing about the services of R&D	No benefit	10	24.4%	10.2%
	Less benefit	11	26.8%	11.2%
	Rather benefit	11	26.8%	11.2%
	Greatest benefit	9	22.0%	9.2%
	Empty	57	0.0%	58.2%
	Total	98	100.0%	100.0%
Information on further education	No benefit	12	33.3%	12.2%
	Less benefit	17	47.2%	17.3%
	Rather benefit	7	19.4%	7.1%
	Greatest benefit	0	0.0%	0.0%
	Empty	62	0.0%	63.3%
	Total	98	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	18	50.0%	18.4%
	Less benefit	11	30.6%	11.2%
	Rather benefit	6	16.7%	6.1%
	Greatest benefit	1	2.8%	1.0%
	Empty	62	0.0%	63.3%
	Total	98	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	14	40.0%	14.3%
	Less benefit	13	37.1%	13.3%
	Rather benefit	6	17.1%	6.1%
	Greatest benefit	2	5.7%	2.0%
	Empty	63	0.0%	64.3%
	Total	98	100.0%	100.0%
Performance of patent search	No benefit	16	43.2%	16.3%
	Less benefit	8	21.6%	8.2%
	Rather benefit	11	29.7%	11.2%
	Greatest benefit	2	5.4%	2.0%
	Empty	61	0.0%	62.2%
	Total	98	100.0%	100.0%
Market analysis	No benefit	21	58.3%	21.4%
	Less benefit	5	13.9%	5.1%
	Rather benefit	8	22.2%	8.2%
	Greatest benefit	2	5.6%	2.0%
	Empty	62	0.0%	63.3%
	Total	98	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	23	65.7%	23.5%
	Less benefit	9	25.7%	9.2%
	Rather benefit	3	8.6%	3.1%
	Greatest benefit	0	0.0%	0.0%
	Empty	63	0.0%	64.3%
	Total	98	100.0%	100.0%

Cont. Table A5.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Mediating joint research projects	No benefit	7	18.4%	7.1%
	Less benefit	10	26.3%	10.2%
	Rather benefit	10	26.3%	10.2%
	Greatest benefit	11	28.9%	11.2%
	Empty	60	0.0%	61.2%
	Total	98	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	13	32.5%	13.3%
	Less benefit	13	32.5%	13.3%
	Rather benefit	8	20.0%	8.2%
	Greatest benefit	6	15.0%	6.1%
	Empty	58	0.0%	59.2%
	Total	98	100.0%	100.0%
Mediating practice / doctoral work in your company	No benefit	8	23.5%	8.2%
	Less benefit	15	44.1%	15.3%
	Rather benefit	7	20.6%	7.1%
	Greatest benefit	4	11.8%	4.1%
	Empty	64	0.0%	65.3%
	Total	98	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	16	44.4%	16.3%
	Less benefit	10	27.8%	10.2%
	Rather benefit	6	16.7%	6.1%
	Greatest benefit	4	11.1%	4.1%
	Empty	62	0.0%	63.3%
	Total	98	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	16	43.2%	16.3%
	Less benefit	15	40.5%	15.3%
	Rather benefit	4	10.8%	4.1%
	Greatest benefit	2	5.4%	2.0%
	Empty	61	0.0%	62.2%
	Total	98	100.0%	100.0%

Table A5.5.3: Please state the reason why your company has yet to use the services of a CTT/STP?

If no, because		Count	Column N %
Never heard of CTT/STP	Yes	10	17.5%
	Empty	47	82.5%
	Total	57	100.0%
No idea what advice CTT / STP could offer us	Yes	26	45.6%
	Empty	31	54.4%
	Total	57	100.0%
No idea what advice CTT / STP could offer us in the framework of further education	Yes	7	12.3%
	Empty	50	87.7%
	Total	57	100.0%
Negotiation of a collaboration agreement with a university / RO through CTT / STP is too lengthy	Yes	6	10.5%
	Empty	51	89.5%
	Total	57	100.0%
CTT/STP does not provide the services that we could use	Yes	12	21.1%
	Empty	45	78.9%
	Total	57	100.0%
Confidence in the expertise of the staff of CTT/STP	Yes	7	12.3%
	Empty	50	87.7%
	Total	57	100.0%
Other_ranked	Yes	6	10.5%
	Empty	51	89.5%
	Total	57	100.0%

Table A5.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	2	14.3%	8.7%
	Rather satisfactory	9	64.3%	39.1%
	very satisfactory	3	21.4%	13.0%
	Not used / not offered	5	0.0%	21.7%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%
Informing about the services of R&D	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	2	11.1%	8.7%
	Rather satisfactory	9	50.0%	39.1%
	very satisfactory	7	38.9%	30.4%
	Not used / not offered	3	0.0%	13.0%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Information on further education	unsatisfactory	2	16.7%	8.7%
	Less satisfactory	3	25.0%	13.0%
	Rather satisfactory	6	50.0%	26.1%
	very satisfactory	1	8.3%	4.3%
	Not used / not offered	5	0.0%	21.7%
	Empty	6	0.0%	26.1%
	Total	23	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	unsatisfactory	2	20.0%	8.7%
	Less satisfactory	5	50.0%	21.7%
	Rather satisfactory	3	30.0%	13.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	7	0.0%	30.4%
	Empty	6	0.0%	26.1%
	Total	23	100.0%	100.0%
Mediating opportunities for “networking” and meetings	unsatisfactory	1	7.1%	4.3%
	Less satisfactory	1	7.1%	4.3%
	Rather satisfactory	8	57.1%	34.8%
	very satisfactory	4	28.6%	17.4%
	Not used / not offered	4	0.0%	17.4%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Performance of patent search	unsatisfactory	3	23.1%	13.0%
	Less satisfactory	3	23.1%	13.0%
	Rather satisfactory	5	38.5%	21.7%
	very satisfactory	2	15.4%	8.7%
	Not used / not offered	5	0.0%	21.7%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Market analysis	unsatisfactory	3	23.1%	13.0%
	Less satisfactory	2	15.4%	8.7%
	Rather satisfactory	6	46.2%	26.1%
	very satisfactory	2	15.4%	8.7%
	Not used / not offered	6	0.0%	26.1%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%
Mapping the innovation potential of your business	unsatisfactory	2	16.7%	8.7%
	Less satisfactory	4	33.3%	17.4%
	Rather satisfactory	4	33.3%	17.4%
	very satisfactory	2	16.7%	8.7%
	Not used / not offered	6	0.0%	26.1%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Mediating joint research projects	unsatisfactory	1	6.3%	4.3%
	Less satisfactory	1	6.3%	4.3%
	Rather satisfactory	7	43.8%	30.4%
	very satisfactory	7	43.8%	30.4%
	Not used / not offered	4	0.0%	17.4%
	Empty	3	0.0%	13.0%
	Total	23	100.0%	100.0%
Advice on the introduction of new technologies into operation	unsatisfactory	2	12.5%	8.7%
	Less satisfactory	1	6.3%	4.3%
	Rather satisfactory	9	56.3%	39.1%
	very satisfactory	4	25.0%	17.4%
	Not used / not offered	4	0.0%	17.4%
	Empty	3	0.0%	13.0%
	Total	23	100.0%	100.0%

Cont. Table A5.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	4	44.4%	17.4%
	Rather satisfactory	5	55.6%	21.7%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	8	0.0%	34.8%
	Empty	6	0.0%	26.1%
	Total	23	100.0%	100.0%
Arranging work placements of professors / researchers in your company	unsatisfactory	2	22.2%	8.7%
	Less satisfactory	4	44.4%	17.4%
	Rather satisfactory	3	33.3%	13.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	8	0.0%	34.8%
	Empty	6	0.0%	26.1%
	Total	23	100.0%	100.0%
Involvement of your company / employees in teaching at the university	unsatisfactory	2	16.7%	8.7%
	Less satisfactory	4	33.3%	17.4%
	Rather satisfactory	3	25.0%	13.0%
	very satisfactory	3	25.0%	13.0%
	Not used / not offered	7	0.0%	30.4%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%

Table A5.5.5: Please rate the staff of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction staff of collaboration		Count	Column Valid N %	Column N %
Availability	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	9.5%	8.7%
	Large rated factor	7	33.3%	30.4%
	Highest rated factor	12	57.1%	52.2%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Involvement	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	3	14.3%	13.0%
	Large rated factor	9	42.9%	39.1%
	Highest rated factor	9	42.9%	39.1%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Professional competence	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	9.5%	8.7%
	Large rated factor	6	28.6%	26.1%
	Highest rated factor	13	61.9%	56.5%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Understanding the issue of transfer	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	3	15.0%	13.0%
	Large rated factor	7	35.0%	30.4%
	Highest rated factor	10	50.0%	43.5%
	Empty	3	0.0%	13.0%
	Total	23	100.0%	100.0%
Course of the discussion	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	9.5%	8.7%
	Large rated factor	6	28.6%	26.1%
	Highest rated factor	13	61.9%	56.5%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Time flexibility and adherence to the time schedule	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	9.5%	8.7%
	Large rated factor	9	42.9%	39.1%
	Highest rated factor	10	47.6%	43.5%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Reliance on oral agreements	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	9.5%	8.7%
	Large rated factor	4	19.0%	17.4%
	Highest rated factor	15	71.4%	65.2%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%

Table A5.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	1	4.8%	4.3%
	Less benefit	3	14.3%	13.0%
	Rather benefit	11	52.4%	47.8%
	Greatest benefit	6	28.6%	26.1%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Informing about the services of R&D	No benefit	1	5.3%	4.3%
	Less benefit	2	10.5%	8.7%
	Rather benefit	9	47.4%	39.1%
	Greatest benefit	7	36.8%	30.4%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%
Information on further education	No benefit	1	5.6%	4.3%
	Less benefit	6	33.3%	26.1%
	Rather benefit	8	44.4%	34.8%
	Greatest benefit	3	16.7%	13.0%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	5	27.8%	21.7%
	Less benefit	5	27.8%	21.7%
	Rather benefit	5	27.8%	21.7%
	Greatest benefit	3	16.7%	13.0%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	3	16.7%	13.0%
	Less benefit	4	22.2%	17.4%
	Rather benefit	8	44.4%	34.8%
	Greatest benefit	3	16.7%	13.0%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Performance of patent search	No benefit	3	16.7%	13.0%
	Less benefit	4	22.2%	17.4%
	Rather benefit	8	44.4%	34.8%
	Greatest benefit	3	16.7%	13.0%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Market analysis	No benefit	3	15.0%	13.0%
	Less benefit	4	20.0%	17.4%
	Rather benefit	8	40.0%	34.8%
	Greatest benefit	5	25.0%	21.7%
	Empty	3	0.0%	13.0%
	Total	23	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	5	27.8%	21.7%
	Less benefit	5	27.8%	21.7%
	Rather benefit	6	33.3%	26.1%
	Greatest benefit	2	11.1%	8.7%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Mediating joint research projects	No benefit	2	9.5%	8.7%
	Less benefit	2	9.5%	8.7%
	Rather benefit	7	33.3%	30.4%
	Greatest benefit	10	47.6%	43.5%
	Empty	2	0.0%	8.7%
	Total	23	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	3	15.0%	13.0%
	Less benefit	4	20.0%	17.4%
	Rather benefit	7	35.0%	30.4%
	Greatest benefit	6	30.0%	26.1%
	Empty	3	0.0%	13.0%
	Total	23	100.0%	100.0%

Cont. Table A5.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	No benefit	2	10.5%	8.7%
	Less benefit	6	31.6%	26.1%
	Rather benefit	10	52.6%	43.5%
	Greatest benefit	1	5.3%	4.3%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	5	27.8%	21.7%
	Less benefit	6	33.3%	26.1%
	Rather benefit	4	22.2%	17.4%
	Greatest benefit	3	16.7%	13.0%
	Empty	5	0.0%	21.7%
	Total	23	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	2	10.5%	8.7%
	Less benefit	5	26.3%	21.7%
	Rather benefit	9	47.4%	39.1%
	Greatest benefit	3	15.8%	13.0%
	Empty	4	0.0%	17.4%
	Total	23	100.0%	100.0%

A6. Companies_3rd wave_Companies without R&D

A6.0 Characteristics:

Statistics

		Length of existence	Size	Ownership structure	Region	Sector of company belongs according to the classification of economic activities CZ-NACE
N	Valid	83	82	83	82	84
	Missing	2	3	2	3	1

Table A6.0.1: Length of existence.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	1	1.2	1.2	1.2
	2-7 years	26	30.6	31.3	32.5
	8-13 years	8	9.4	9.6	42.2
	14-19 years	20	23.5	24.1	66.3
	More than 20 years	28	32.9	33.7	100.0
	Total	83	97.6	100.0	
Missing	Empty	2	2.4		
Total		85	100.0		

Table A6.0.2: Size.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large-sized enterprise (staff headcount ≥ 1000; annual turnover ≤ 50 milionů €)	1	1.2	1.2	1.2
	Large-sized enterprise (staff headcount ≥ 250; annual turnover > 50 milionů €)	3	3.5	3.7	4.9
	Large-sized enterprise (staff headcount ≥ 250; annual turnover ≤ 50 milionů €)	2	2.4	2.4	7.3
	Medium-sized enterprise (staff headcount < 250; annual turnover ≤ 50 milionů €)	4	4.7	4.9	12.2
	Small enterprise (staff headcount < 50; annual turnover ≤ 10 milionů €)	18	21.2	22.0	34.1
	Micro enterprise (staff headcount < 10; annual turnover ≤ 2 miliony €)	54	63.5	65.9	100.0
	Total	82	96.5	100.0	
Missing	Empty	3	3.5		
Total		85	100.0		

Table A6.0.3: Ownership structure.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owners from the Czech Republic only	69	81.2	83.1	83.1
	Owners from abroad only	6	7.1	7.2	90.4
	Owners from the Czech Republic and abroad	7	8.2	8.4	98.8
	State company	1	1.2	1.2	100.0
	Total	83	97.6	100.0	
Missing	Empty	2	2.4		
Total		85	100.0		

Table A6.0.4: Region.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Capital City of Prague	21	24.7	25.6	25.6
	Central Bohemia region	9	10.6	11.0	36.6
	South Bohemia region	4	4.7	4.9	41.5
	Plzeň region	2	2.4	2.4	43.9
	Ústí region	3	3.5	3.7	47.6
	Liberec region	3	3.5	3.7	51.2
	Hradec Králové region	4	4.7	4.9	56.1
	Pardubice region	2	2.4	2.4	58.5
	Vysočina Region	4	4.7	4.9	63.4
	South Moravia region	8	9.4	9.8	73.2
	Olomouc region	5	5.9	6.1	79.3
	Moravia-Silesia region	7	8.2	8.5	87.8
	Zlín region	10	11.8	12.2	100.0
	Total	82	96.5	100.0	
Missing	Empty	3	3.5		
Total		85	100.0		

Table A6.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
10 Manufacture of food products	1	1.2	1.2	1.2
14 Manufacture of wearing apparel	2	2.4	2.4	3.6
16 Manufacture of wood and of products of wood and cork, except	3	3.5	3.6	7.1
18 Printing and reproduction of recorded media	1	1.2	1.2	8.3
23 Manufacture of other non-metallic mineral products	1	1.2	1.2	9.5
24 Manufacture of basic metals	1	1.2	1.2	10.7
251 Manufacture of structural metal products	3	3.5	3.6	14.3
256 Treatment and coating of metals; machining	2	2.4	2.4	16.7
259 Manufacture of other fabricated metal products	1	1.2	1.2	17.9
261 Manufacture of electronic components and boards	1	1.2	1.2	19.0
262 Manufacture of computers and peripheral equipment	1	1.2	1.2	20.2
263 Manufacture of communication equipment	1	1.2	1.2	21.4
265 Manufacture of instruments and appliances for measuring,	1	1.2	1.2	22.6
27 Manufacture of electrical equipment	2	2.4	2.4	25.0
28 Manufacture of machineryand equipment n.e.c.	3	3.5	3.6	28.6
29 Manufacture of motor vehicles, trailers and semi-trailers	1	1.2	1.2	29.8
303 Manufacture of air and spacecraft and related machinery	1	1.2	1.2	31.0
309 Manufacture of transport equipment n.e.c.	1	1.2	1.2	32.1
31 Manufacture of furniture	1	1.2	1.2	33.3
325 Manufacture of medical and dental instruments and supplies	1	1.2	1.2	34.5
33 Repair and installation of machinery and equipment	4	4.7	4.8	39.3
35 Electricity, gas, steam and air conditioning supply	2	2.4	2.4	41.7
38 Waste collection, treatment and disposal activities; materials	1	1.2	1.2	42.9

Cont. Table A6.0.5: Sector of company belongs according to the classification of economic activities CZ-NACE.

	Frequency	Percent	Valid Percent	Cumulative Percent
58 Publishing activities	2	2.4	2.4	45.2
62 Computer programming, consultancy and related activities	1	1.2	1.2	46.4
68 Real estate activities	1	1.2	1.2	47.6
69 Legal and accounting activities	7	8.2	8.3	56.0
70 Activities of head offices; management consultancy activities	1	1.2	1.2	57.1
711 Architectural and engineering activities and related technical	2	2.4	2.4	59.5
7219 Other research and experimental development on natural	1	1.2	1.2	60.7
73 Advertising and market research	3	3.5	3.6	64.3
74 Other professional, scientific and technical activities	3	3.5	3.6	67.9
85 Education	2	2.4	2.4	70.2
86 Human health activities	2	2.4	2.4	72.6
A Agriculture, forestry and fishing	1	1.2	1.2	73.8
B Mining and quarrying	1	1.2	1.2	75.0
F Construction	5	5.9	6.0	81.0
G Wholesale and retail trade; repair of motor vehicles and	6	7.1	7.1	88.1
H Transportation and storage	3	3.5	3.6	91.7
S Other service activities	7	8.2	8.3	100.0
Total	84	98.8	100.0	
Missing Empty	1	1.2		
Total	85	100.0		

A6.1 Innovation:

Statistics

Deals with innovation of products, processes or services.

N	Valid	85
	Missing	0

Table A6.1.1: Deals with innovation of products, processes or services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	58	68.2	68.2	68.2
	No	27	31.8	31.8	100.0
	Total	85	100.0	100.0	

Table A6.1.2: Why your company does not deal with innovation of products, processes and services?

No deals because		Count	Column N %
Innovation activities take place at the level of the parent company	Yes	3	11.1%
	Empty	24	88.9%
	Total	27	100.0%
We have yet to consider innovation activities	Yes	4	14.8%
	Empty	23	85.2%
	Total	27	100.0%
Our company does not require innovation of products/processes/services	Yes	10	37.0%
	Empty	17	63.0%
	Total	27	100.0%
We do not have financial resources funds for innovation activity	Yes	8	29.6%
	Empty	19	70.4%
	Total	27	100.0%
We do not have sufficient staffing capacity to perform innovation	Yes	6	22.2%
	Empty	21	77.8%
	Total	27	100.0%
We would like to innovate, but we lack guidance in this area	Yes	0	0.0%
	Empty	27	100.0%
	Total	27	100.0%
We would like to innovate, but we have not found a suitable partner for collaboration	Yes	1	3.7%
	Empty	26	96.3%
	Total	27	100.0%
We have previous negative experience from collaboration with universities / RO	Yes	0	0.0%
	Empty	27	100.0%
	Total	27	100.0%
Other	Yes	3	11.1%
	Empty	24	88.9%
	Total	27	100.0%

Table A6.1.3: What is the level of innovation?

		Count	Column N %
Development of groundbreaking products / processes / services that surpass the current situation (disruptive innovation)	Yes	5	5.9%
	Empty	80	94.1%
	Total	85	100.0%
Development of new products / processes / services (new technology)	Yes	21	24.7%
	Empty	64	75.3%
	Total	85	100.0%
Improvement of existing products / processes / services (improvement of existing solutions)	Yes	42	49.4%
	Empty	43	50.6%
	Total	85	100.0%
Adapting or modifying existing products / processes / services (routine changes)	Yes	27	31.8%
	Empty	58	68.2%
	Total	85	100.0%
Other	Yes	2	2.4%
	Empty	83	97.6%
	Total	85	100.0%

Table A6.1.4: Specify the market for which groundbreaking product is intended.

Market		Count	Column N %
Local market	Yes	0	0.0%
	Empty	85	100.0%
	Total	85	100.0%
Domestic market	Yes	1	1.2%
	Empty	84	98.8%
	Total	85	100.0%
European market	Yes	4	4.7%
	Empty	81	95.3%
	Total	85	100.0%
Worldwide market	Yes	0	0.0%
	Empty	85	100.0%
	Total	85	100.0%

Table A6.1.5: Specify the market for which new product/service is intended.

Market		Count	Column N %
Local market	Yes	6	7.1%
	Empty	79	92.9%
	Total	85	100.0%
Domestic market	Yes	12	14.1%
	Empty	73	85.9%
	Total	85	100.0%
European market	Yes	8	9.4%
	Empty	77	90.6%
	Total	85	100.0%
Worldwide market	Yes	3	3.5%
	Empty	82	96.5%
	Total	85	100.0%

A6.2 Motives:

Table A6.2.1: Please select from the following list the motives that led you to collaborate.

Motives to collaborate		Count	Column N %
Enhancing the reputation of the company	Yes	8	9.4%
	Empty	77	90.6%
	Total	85	100.0%
Easier access to the latest know-how/technologies	Yes	4	4.7%
	Empty	81	95.3%
	Total	85	100.0%
Saving costs for research (economically more efficient than internal R&D)	Yes	7	8.2%
	Empty	78	91.8%
	Total	85	100.0%
Gain a competitive advantage through projects funded from public sources (research)	Yes	4	4.7%
	Empty	81	95.3%
	Total	85	100.0%
Activation of further education of employees	Yes	3	3.5%
	Empty	82	96.5%
	Total	85	100.0%
Utilization of student capacity (especially with regard to access to a qualified labour force)	Yes	8	9.4%
	Empty	77	90.6%
	Total	85	100.0%
Other	Yes	5	5.9%
	Empty	80	94.1%
	Total	85	100.0%

A6.3 Barriers:

Table A6.3.1: Where do you see the greatest barriers in collaboration with universities / RO?

Barriers for TT		Count	Column N %
Absence of clearly defined methodologies and guidelines for research collaboration	Yes	4	4.7%
	Empty	81	95.3%
	Total	85	100.0%
Failure of university / RO to comply with agreements in research collaboration	Yes	1	1.2%
	Empty	84	98.8%
	Total	85	100.0%
Premature publication of the results of joint research by university / RO	Yes	1	1.2%
	Empty	84	98.8%
	Total	85	100.0%
Reluctance of university / RO to modify the research carried out based on relevant information	Yes	1	1.2%
	Empty	84	98.8%
	Total	85	100.0%
Insufficient quality of research / services of the university/ RO	Yes	4	4.7%
	Empty	81	95.3%
	Total	85	100.0%
Unusable instrumentation of the university / RO	Yes	5	5.9%
	Empty	80	94.1%
	Total	85	100.0%
Personal antipathy	Yes	1	1.2%
	Empty	84	98.8%
	Total	85	100.0%
High administrative burden on the company	Yes	5	5.9%
	Empty	80	94.1%
	Total	85	100.0%
Slowness and inflexibility of the university system	Yes	10	11.8%
	Empty	75	88.2%
	Total	85	100.0%
Other	Yes	3	3.5%
	Empty	82	96.5%
	Total	85	100.0%

A6.4 Companies and universities/RO:

Statistics

Experience of collaboration with a university/RO in the last 3 years.

N	Valid	85
	Missing	0

Table A6.4.1: Experience of collaboration with a university/RO in the last 3 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	24.7	24.7	24.7
	No	64	75.3	75.3	100.0
	Total	85	100.0	100.0	

Table A6.4.2: Collaboration in the last 3 years - What specific form of collaboration took place?

Form of collaboration		Count	Column N %
Performance of contractual research	Yes	6	28.6%
	Empty	15	71.4%
	Total	21	100.0%
Performance of joint research	Yes	5	23.8%
	Empty	16	76.2%
	Total	21	100.0%
Purchase of know-how/technology	Yes	0	0.0%
	Empty	21	100.0%
	Total	21	100.0%
Purchase of consultation and advice	Yes	8	38.1%
	Empty	13	61.9%
	Total	21	100.0%
Employees of the company lecturing at a university of	Yes	6	28.6%
	Empty	15	71.4%
	Total	21	100.0%
Engaging students and postdocs in practice	Yes	9	42.9%
	Empty	12	57.1%
	Total	21	100.0%
Further training of employees	Yes	2	9.5%
	Empty	19	90.5%
	Total	21	100.0%
Use of laboratories and instrumentation	Yes	5	23.8%
	Empty	16	76.2%
	Total	21	100.0%
Other_ranked	Yes	1	4.8%
	Empty	20	95.2%
	Total	21	100.0%

Table A6.4.3: Crosstable Collaboration/Type of institute.

Form of collaboration			With what type were worked		
			University / higher education	Private research organization	Total
Performance of contractual research	Yes	Count	4	2	6
		Row N %	66.7%	33.3%	100.0%
		Row Valid N %	66.7%	33.3%	100.0%
	Empty	Count	14	1	15
		Row N %	93.3%	6.7%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	66.7%	33.3%	100.0%
Performance of joint research	Yes	Count	5	0	5
		Row N %	100.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
	Empty	Count	13	3	16
		Row N %	81.3%	18.8%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
Purchase of know-how/technology	Yes	Count	0	0	0
		Row N %	0.0%	0.0%	0.0%
		Row Valid N %	0.0%	0.0%	0.0%
	Empty	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %			
Purchase of consultation and advice	Yes	Count	7	1	8
		Row N %	87.5%	12.5%	100.0%
		Row Valid N %	87.5%	12.5%	100.0%
	Empty	Count	11	2	13
		Row N %	84.6%	15.4%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	87.5%	12.5%	100.0%

Cont. Table A6.4.3: Crosstable Collaboration/Type of institute.

Form of collaboration			With what type were worked: University / higher education	Private research organization	Total
Employees of the company lecturing at a university of	Yes	Count	6	0	6
		Row N %	100.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
	Empty	Count	12	3	15
		Row N %	80.0%	20.0%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
Engaging students and postdocs in practice	Yes	Count	9	0	9
		Row N %	100.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
	Empty	Count	9	3	12
		Row N %	75.0%	25.0%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
Further training of employees	Yes	Count	1	1	2
		Row N %	50.0%	50.0%	100.0%
		Row Valid N %	50.0%	50.0%	100.0%
	Empty	Count	17	2	19
		Row N %	89.5%	10.5%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	50.0%	50.0%	100.0%
Use of laboratories and instrumentation	Yes	Count	5	0	5
		Row N %	100.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
	Empty	Count	13	3	16
		Row N %	81.3%	18.8%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
Other	Yes	Count	1	0	1
		Row N %	100.0%	0.0%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%
	Empty	Count	17	3	20
		Row N %	85.0%	15.0%	100.0%
		Row Valid N %			
	Total	Count	18	3	21
		Row N %	85.7%	14.3%	100.0%
		Row Valid N %	100.0%	0.0%	100.0%

Table A6.4.4: If no, please state why.

If no, because		Count	Column N %
Our own centre for research and development in the CZ	Yes	9	14.1%
	Empty	55	85.9%
	Total	64	100.0%
Own centre for research and development in the country where the parent company is	Yes	4	6.3%
	Empty	60	93.8%
	Total	64	100.0%
Own centre for research and development outside the CZ	Yes	2	3.1%
	Empty	62	96.9%
	Total	64	100.0%
Czech universities / RO do not have the appropriate results / focus	Yes	4	6.3%
	Empty	60	93.8%
	Total	64	100.0%
Previous negative experience with the purchase of know-how/technology from universities / RO	Yes	0	0.0%
	Empty	64	100.0%
	Total	64	100.0%
Insufficient conditions / opportunities for “networking” and meetings	Yes	6	9.4%
	Empty	58	90.6%
	Total	64	100.0%
Insufficient supply of services by universities / RO	Yes	6	9.4%
	Empty	58	90.6%
	Total	64	100.0%
Universities/RO pursue their own interests in research collaboration	Yes	2	3.1%
	Empty	62	96.9%
	Total	64	100.0%
Personal antipathy	Yes	0	0.0%
	Empty	64	100.0%
	Total	64	100.0%
Slowness and inflexibility of the university system	Yes	7	10.9%
	Empty	57	89.1%
	Total	64	100.0%
Collaborate with organizations / institutions other than universities / RO	Yes	4	6.3%
	Empty	60	93.8%
	Total	64	100.0%
Other	Yes	11	17.2%
	Empty	53	82.8%
	Total	64	100.0%

A6.5 Companies and CTT/STP

Statistics

Experience with the services of one of the CTT at the universities / RO or STP.

N	Valid	21
	Missing	64

Table A6.5.1: Experience with the services of one of the CTT at the universities / RO or STP.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, only with CTT	2	2.4	9.5	9.5
	Yes, only with STP	2	2.4	9.5	19.0
	Yes, with CTT and STP	1	1.2	4.8	23.8
	No	16	18.8	76.2	100.0
	Total	21	24.7	100.0	
Missing	Empty	64	75.3		
Total		85	100.0		

Table A6.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	0	0.0%	0.0%
	Less benefit	3	27.3%	3.5%
	Rather benefit	6	54.5%	7.1%
	Greatest benefit	2	18.2%	2.4%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Informing about the services of R&D	No benefit	1	9.1%	1.2%
	Less benefit	6	54.5%	7.1%
	Rather benefit	2	18.2%	2.4%
	Greatest benefit	2	18.2%	2.4%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Information on further education	No benefit	2	18.2%	2.4%
	Less benefit	4	36.4%	4.7%
	Rather benefit	5	45.5%	5.9%
	Greatest benefit	0	0.0%	0.0%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	7	63.6%	8.2%
	Less benefit	1	9.1%	1.2%
	Rather benefit	2	18.2%	2.4%
	Greatest benefit	1	9.1%	1.2%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	1	9.1%	1.2%
	Less benefit	5	45.5%	5.9%
	Rather benefit	4	36.4%	4.7%
	Greatest benefit	1	9.1%	1.2%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Performance of patent search	No benefit	6	54.5%	7.1%
	Less benefit	4	36.4%	4.7%
	Rather benefit	1	9.1%	1.2%
	Greatest benefit	0	0.0%	0.0%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Market analysis	No benefit	2	18.2%	2.4%
	Less benefit	2	18.2%	2.4%
	Rather benefit	4	36.4%	4.7%
	Greatest benefit	3	27.3%	3.5%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	2	18.2%	2.4%
	Less benefit	5	45.5%	5.9%
	Rather benefit	3	27.3%	3.5%
	Greatest benefit	1	9.1%	1.2%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%

Cont. Table A6.5.2: CTT/STP offer companies a wide range of services - Rate in general these services in terms of the benefit for your company.

Benefit of services, in general		Count	Column Valid N %	Column N %
Mediating joint research projects	No benefit	3	27.3%	3.5%
	Less benefit	5	45.5%	5.9%
	Rather benefit	2	18.2%	2.4%
	Greatest benefit	1	9.1%	1.2%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	3	33.3%	3.5%
	Less benefit	5	55.6%	5.9%
	Rather benefit	1	11.1%	1.2%
	Greatest benefit	0	0.0%	0.0%
	Empty	76	0.0%	89.4%
	Total	85	100.0%	100.0%
Mediating practice / doctoral work in your company	No benefit	3	27.3%	3.5%
	Less benefit	2	18.2%	2.4%
	Rather benefit	2	18.2%	2.4%
	Greatest benefit	4	36.4%	4.7%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	8	72.7%	9.4%
	Less benefit	0	0.0%	0.0%
	Rather benefit	0	0.0%	0.0%
	Greatest benefit	3	27.3%	3.5%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	4	36.4%	4.7%
	Less benefit	3	27.3%	3.5%
	Rather benefit	1	9.1%	1.2%
	Greatest benefit	3	27.3%	3.5%
	Empty	74	0.0%	87.1%
	Total	85	100.0%	100.0%

Table A6.5.3: Please state the reason why your company has yet to use the services of a CTT/STP?

If no, because		Count	Column N %
Never heard of CTT/STP	Yes	6	37.5%
	Empty	10	62.5%
	Total	16	100.0%
No idea what advice CTT / STP could offer us	Yes	6	37.5%
	Empty	10	62.5%
	Total	16	100.0%
No idea what advice CTT / STP could offer us in the framework of further education	Yes	1	6.3%
	Empty	15	93.8%
	Total	16	100.0%
Negotiation of a collaboration agreement with a university / RO through CTT / STP is too lengthy	Yes	1	6.3%
	Empty	15	93.8%
	Total	16	100.0%
CTT/STP does not provide the services that we could use	Yes	4	25.0%
	Empty	12	75.0%
	Total	16	100.0%
Confidence in the expertise of the staff of CTT/STP	Yes	1	6.3%
	Empty	15	93.8%
	Total	16	100.0%
Other	Yes	3	18.8%
	Empty	13	81.3%
	Total	16	100.0%

Table A6.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	2	100.0%	40.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	3	0.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Informing about the services of R&D	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	1	50.0%	20.0%
	Rather satisfactory	1	50.0%	20.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	3	0.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Information on further education	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	1	100.0%	20.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	4	0.0%	80.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%
Mediating opportunities for “networking” and meetings	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	1	100.0%	20.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	4	0.0%	80.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Performance of patent search	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	1	100.0%	20.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	4	0.0%	80.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Market analysis	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%
Mapping the innovation potential of your business	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%
Mediating joint research projects	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	1	100.0%	20.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	4	0.0%	80.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Advice on the introduction of new technologies into operation	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	1	50.0%	20.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	1	50.0%	20.0%
	Not used / not offered	3	0.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%

Cont. Table A6.5.4: Please rate the services of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction services of collaboration		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%
Arranging work placements of professors / researchers in your company	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%
Involvement of your company / employees in teaching at the university	unsatisfactory	0	0.0%	0.0%
	Less satisfactory	0	0.0%	0.0%
	Rather satisfactory	0	0.0%	0.0%
	very satisfactory	0	0.0%	0.0%
	Not used / not offered	5		100.0%
	Empty	0	0.0%	0.0%
	Total	5		100.0%

A6.5.5: Please rate the staff of the particular CTT/STP you have collaborated with the most from the point of view of your satisfaction.

Satisfaction staff of collaboration		Count	Column Valid N %	Column N %
Availability	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	40.0%	40.0%
	Large rated factor	0	0.0%	0.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Involvement	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	40.0%	40.0%
	Large rated factor	0	0.0%	0.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Professional competence	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	0	0.0%	0.0%
	Large rated factor	2	40.0%	40.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Understanding the issue of transfer	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	1	20.0%	20.0%
	Large rated factor	1	20.0%	20.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Course of the discussion	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	0	0.0%	0.0%
	Large rated factor	2	40.0%	40.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Time flexibility and adherence to the time schedule	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	2	40.0%	40.0%
	Large rated factor	0	0.0%	0.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Reliance on oral agreements	Completely unsatisfactory factor	0	0.0%	0.0%
	Small rated factor	1	20.0%	20.0%
	Large rated factor	1	20.0%	20.0%
	Highest rated factor	3	60.0%	60.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%

A6.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Informing about the offer of know-how/technology	No benefit	0	0.0%	0.0%
	Less benefit	0	0.0%	0.0%
	Rather benefit	3	75.0%	60.0%
	Greatest benefit	1	25.0%	20.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Informing about the services of R&D	No benefit	0	0.0%	0.0%
	Less benefit	1	25.0%	20.0%
	Rather benefit	2	50.0%	40.0%
	Greatest benefit	1	25.0%	20.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Information on further education	No benefit	1	25.0%	20.0%
	Less benefit	2	50.0%	40.0%
	Rather benefit	1	25.0%	20.0%
	Greatest benefit	0	0.0%	0.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Offer of joint participation with the university / RO at trade fairs	No benefit	2	50.0%	40.0%
	Less benefit	0	0.0%	0.0%
	Rather benefit	1	25.0%	20.0%
	Greatest benefit	1	25.0%	20.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Mediating opportunities for “networking” and meetings	No benefit	1	25.0%	20.0%
	Less benefit	0	0.0%	0.0%
	Rather benefit	2	50.0%	40.0%
	Greatest benefit	1	25.0%	20.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Performance of patent search	No benefit	0	0.0%	0.0%
	Less benefit	2	50.0%	40.0%
	Rather benefit	1	25.0%	20.0%
	Greatest benefit	1	25.0%	20.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Market analysis	No benefit	0	0.0%	0.0%
	Less benefit	1	25.0%	20.0%
	Rather benefit	1	25.0%	20.0%
	Greatest benefit	2	50.0%	40.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Mapping the innovation potential of your business	No benefit	1	25.0%	20.0%
	Less benefit	1	25.0%	20.0%
	Rather benefit	2	50.0%	40.0%
	Greatest benefit	0	0.0%	0.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Mediating joint research projects	No benefit	0	0.0%	0.0%
	Less benefit	2	50.0%	40.0%
	Rather benefit	2	50.0%	40.0%
	Greatest benefit	0	0.0%	0.0%
	Empty	1	0.0%	20.0%
	Total	5	100.0%	100.0%
Advice on the introduction of new technologies into operation	No benefit	2	40.0%	40.0%
	Less benefit	0	0.0%	0.0%
	Rather benefit	1	20.0%	20.0%
	Greatest benefit	2	40.0%	40.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%

Cont. A6.5.6: Please state what services of CTT/STP you consider in general to be the least and the most beneficial (what services should generally offer/ PERSPEKTIVELY).

What services should be offered/most beneficial (perspektively)		Count	Column Valid N %	Column N %
Mediating practice / doctoral work in your company	No benefit	2	40.0%	40.0%
	Less benefit	1	20.0%	20.0%
	Rather benefit	1	20.0%	20.0%
	Greatest benefit	1	20.0%	20.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Arranging work placements of professors / researchers in your company	No benefit	2	40.0%	40.0%
	Less benefit	3	60.0%	60.0%
	Rather benefit	0	0.0%	0.0%
	Greatest benefit	0	0.0%	0.0%
	Empty	0	0.0%	0.0%
	Total	5	100.0%	100.0%
Involvement of your company / employees in teaching at the university	No benefit	0	0.0%	0.0%
	Less benefit	1	33.3%	20.0%
	Rather benefit	2	66.7%	40.0%
	Greatest benefit	0	0.0%	0.0%
	Empty	2	0.0%	40.0%
	Total	5	100.0%	100.0%

Figure A1.3.1: Barriers to TT - Research Organization

Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval

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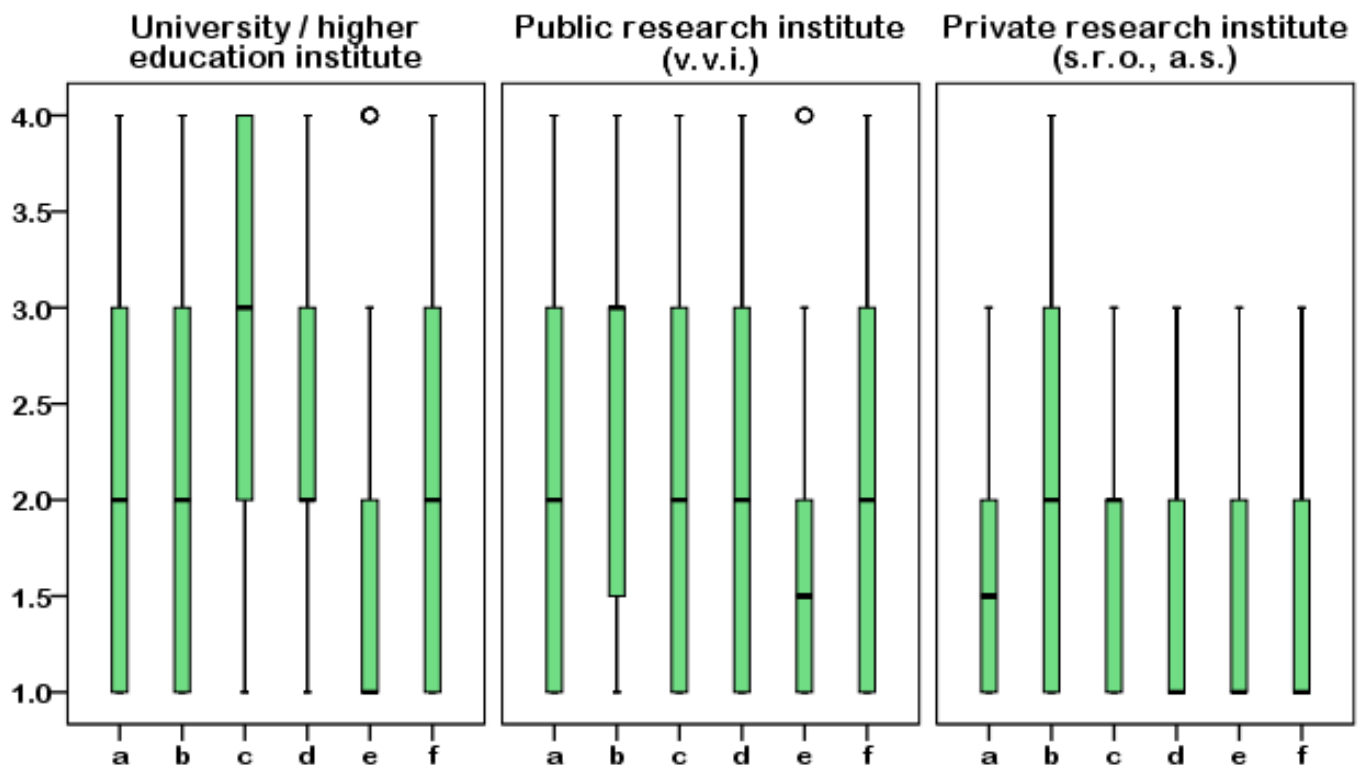
Figure A1.4.1: RO: needs and evaluation - a) informing



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please evaluate the activities of the CTT in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute?- a) Presentation of the research results / services of your institute –b)Presentation of the research results / services of your institute at trade fairs and exhibitions - c) Collaboration on publication activities on the side of the institute – d) Creating and providing databases – e) Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes – f) Informing researchers on the results of monitoring of market opportunities and trends

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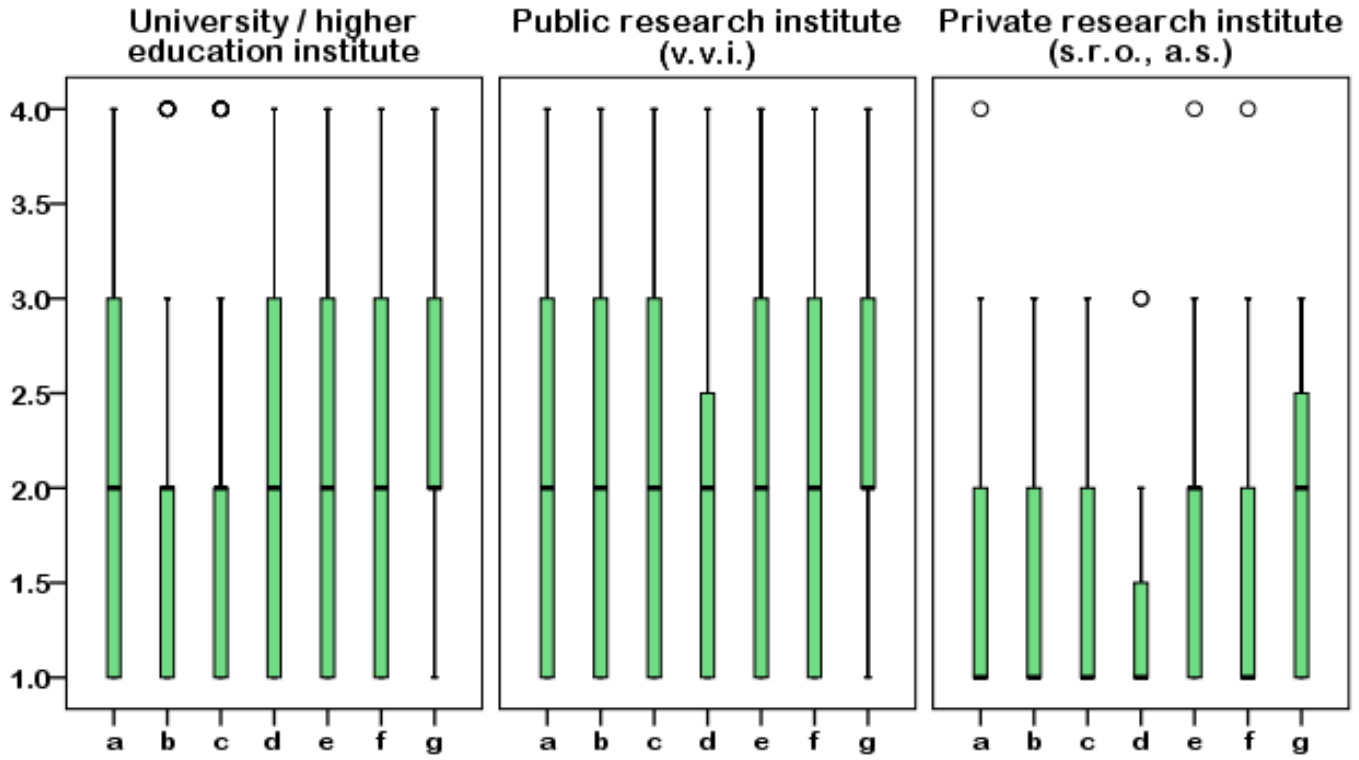
Figure A1.4.2: RO: needs and evaluation - b) searching



Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please evaluate the activities of the CTT in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute? – a) Active marketing activities – b) Mediating direct contacts with partners from the application sphere – c) Mediating contractual research projects with the application sphere – d) Mediating joint research projects with other institutes – e) Comprehensive mapping of resources of the university suitable for commercialization – f) Searching, analysis and monitoring of market opportunities and trends – g) Searching and implementation of external technologies and knowledge to meet the needs of your institute (spin in)

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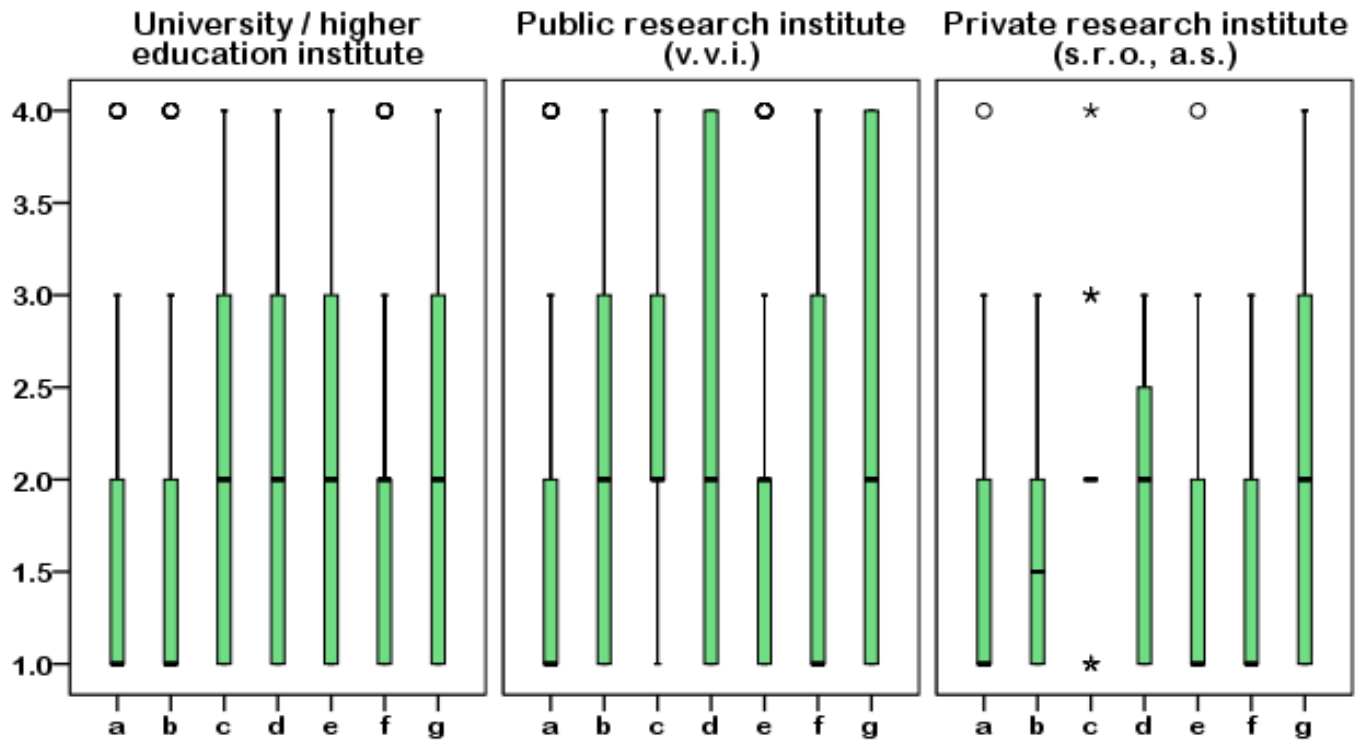
Figure A1.4.3: RO: needs and evaluation - c) commercialization



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please evaluate the activities of the CTT in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute? – a) Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy – b) Development and supervision of transfer agreements – c) Project management during joint or contractual research – d) Conception of a marketing strategy (customer specifications, users, market potential – e) Preparation of plans for the commercialization of positively evaluated projects – f) Commercial and legal security of orders and offers, including negotiating and securing contracts – g) Supporting incubation of spin-off companies

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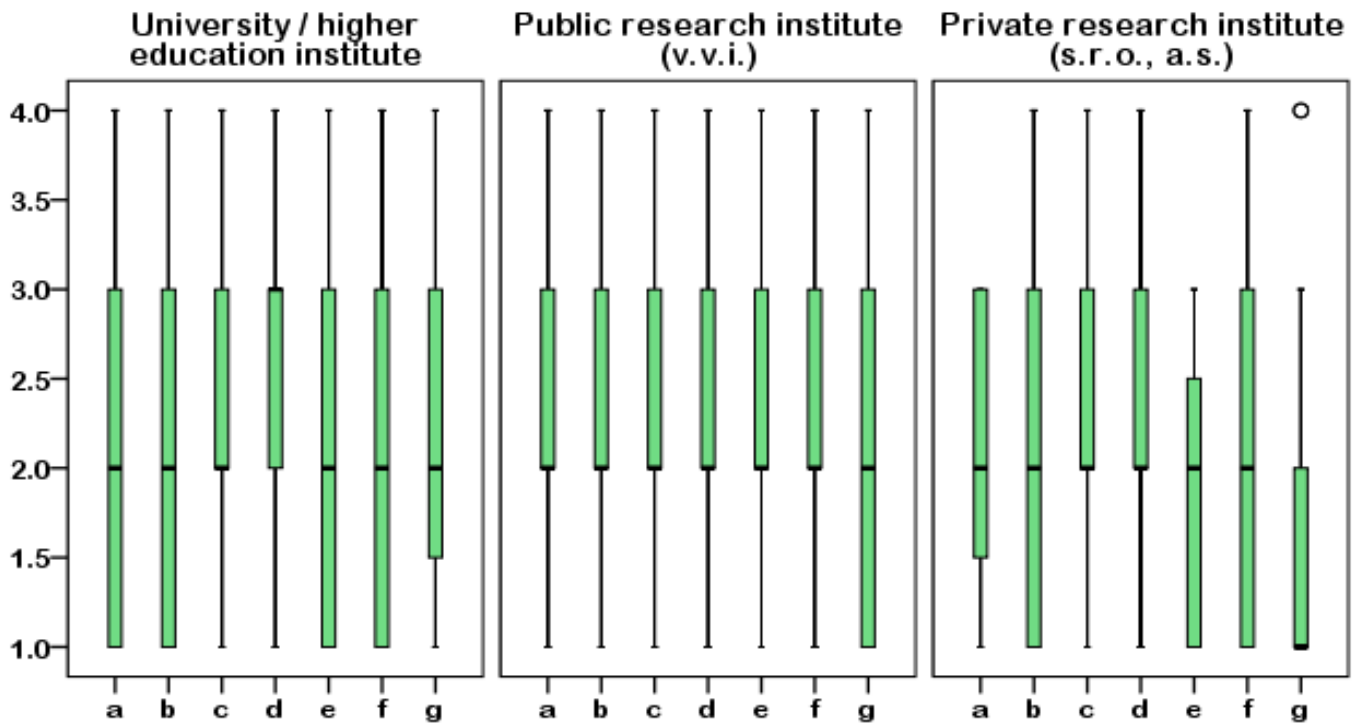
Figure A1.4.4: RO: needs and evaluation - d) trust and networking



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please evaluate the activities of the CTT in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute? – a) Mediating internships of colleagues of the institute at partners from the application sphere – b) Involvement of partners from the application sphere in the teaching / further education – c) Networking activities directed at partners from the application sphere – d) Networking activities directed at partners from other CTT e) Monitoring the satisfaction of customers and the development of commercial collaboration – f) Mediating practice / theses for students / doctoral students at partners from the application sphere – g) Activities to promote collaboration between research and academic institutes

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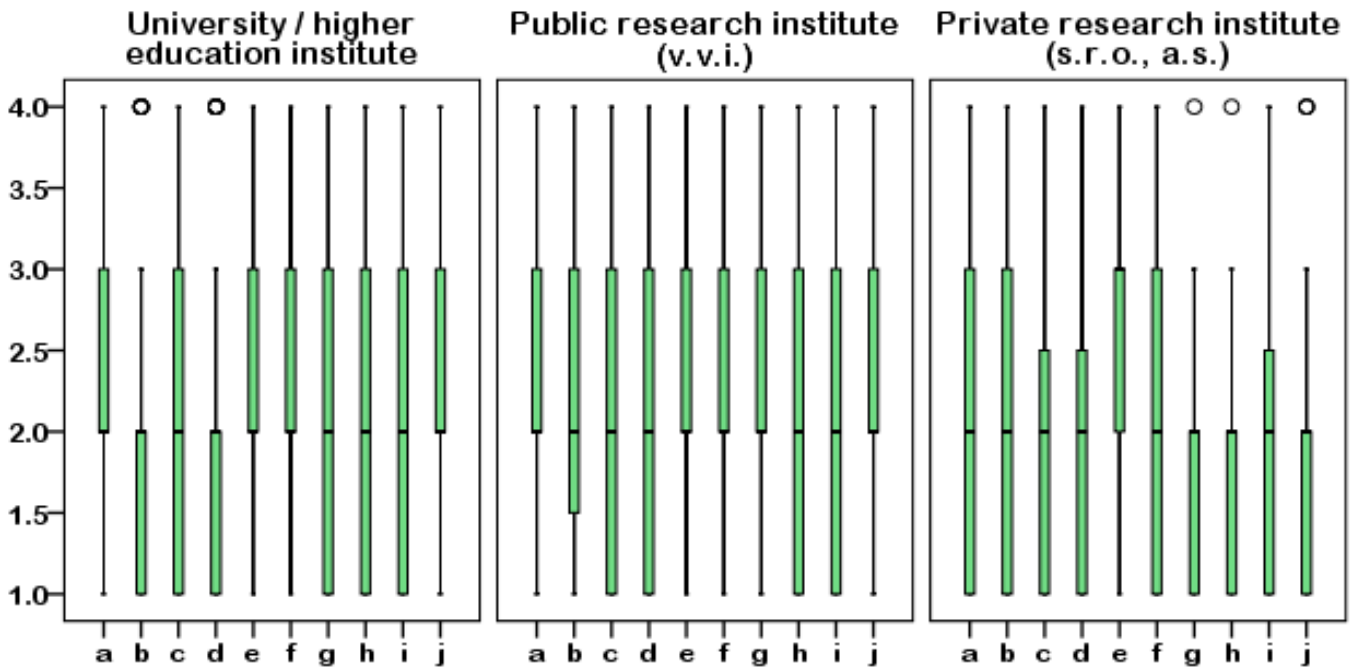
Figure A1.4.5: RO: needs and evaluation - e) culture



Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please evaluate the activities of the CTT in general, whether you have experience with them or not. Do you consider following activities of the centre for TT beneficial for your institute? – a) Increasing qualifications in TT for interested parties from the application sphere – b) Providing information and advice to university staff in relation to intellectual property and TT – c) Draft methodologies, guidelines and strategies related to TT – d) Draft standardized contracts for effective interaction with application sphere – e) Assistance in transferring experience from the transfer projects to teaching – f) Increasing qualifications in TT for research workers – g) Advising partners from the application sphere in defining the terms of reference for research and development - especially SME – h) Advising partners from the application sphere in the implementation of the results of research into practice - especially SME – i) Support of a client and flexible approach of research / academic institutes towards partners from the application sphere – j) Engaging the top management of the institute in commercialization activities

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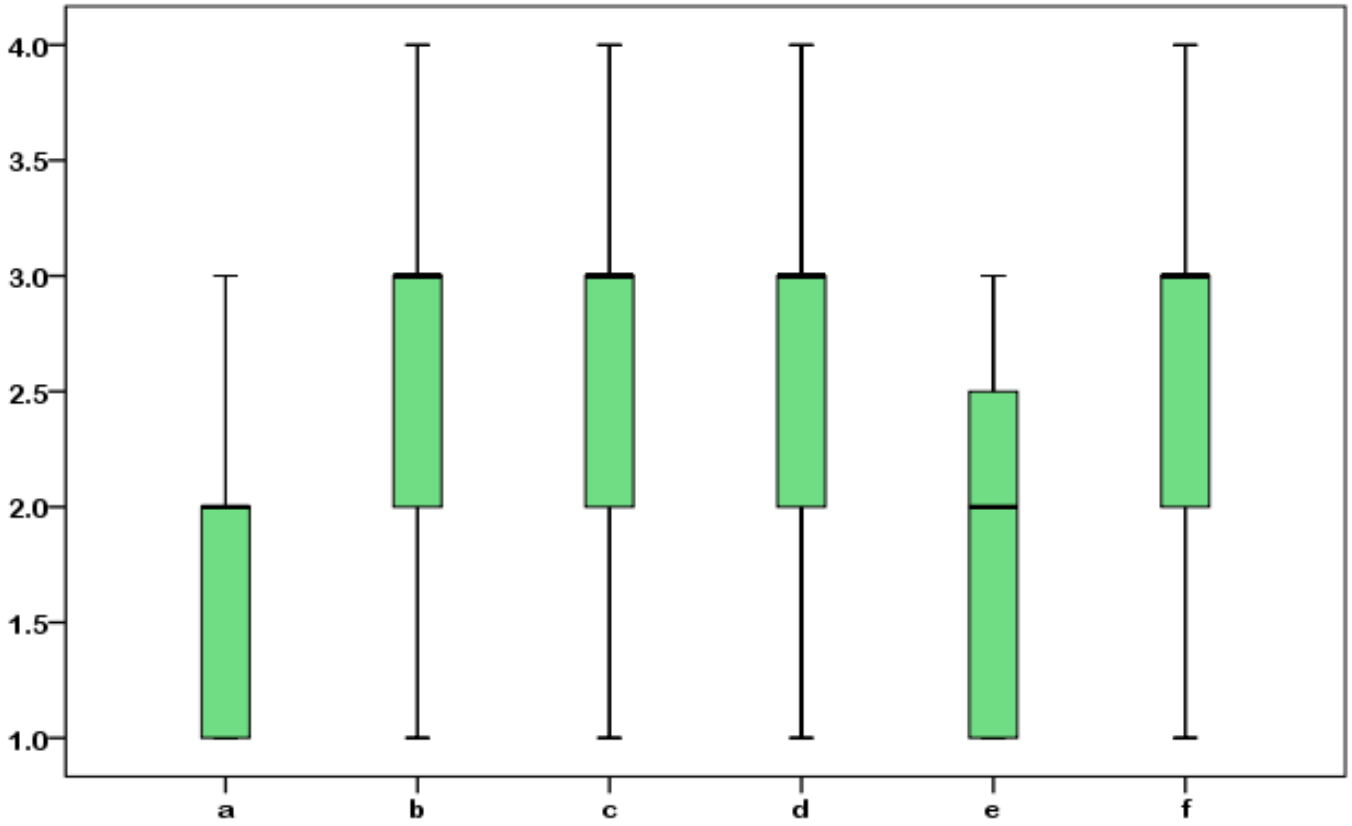
Figure A2.1.1: CTT: frequency and offers - a) informing



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please indicate the frequency of the following activities of your centre.- a) Presentation of the research results / services of your institute –b)Presentation of the research results / services of your institute at trade fairs and exhibitions - c) Collaboration on publication activities on the side of the institute – d) Creating and providing databases – e) Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes – f) Informing researchers on the results of monitoring of market opportunities and trends

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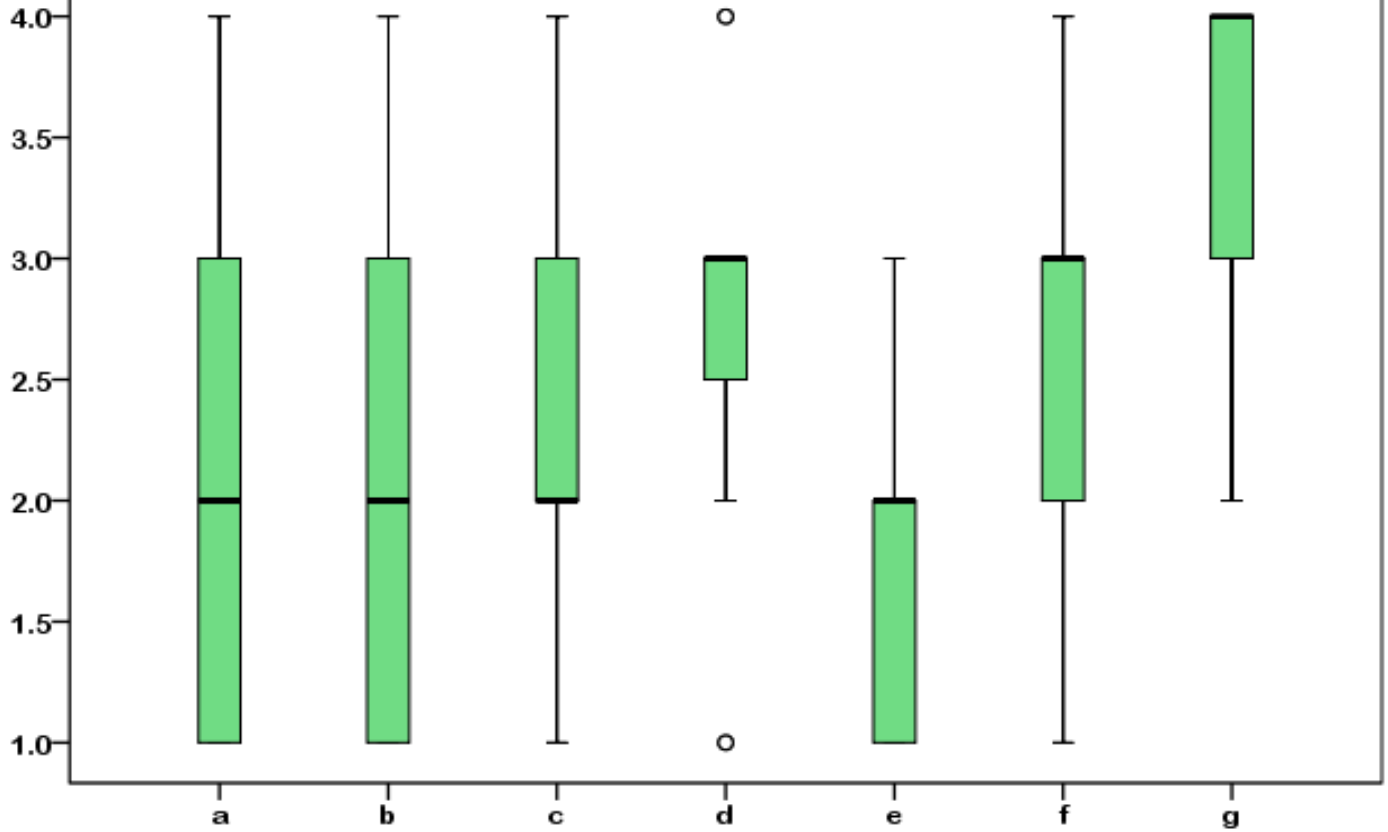
Figure A2.1.2: CTT: frequency and offers - b) searching



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please indicate the frequency of the following activities of your centre. – a) Active marketing activities – b) Mediating direct contacts with partners from the application sphere – c) Mediating contractual research projects with the application sphere – d) Mediating joint research projects with other institutes – e) Comprehensive mapping of resources of the university suitable for commercialization – f) Searching, analysis and monitoring of market opportunities and trends – g) Searching and implementation of external technologies and knowledge to meet the needs of your institute (spin in)

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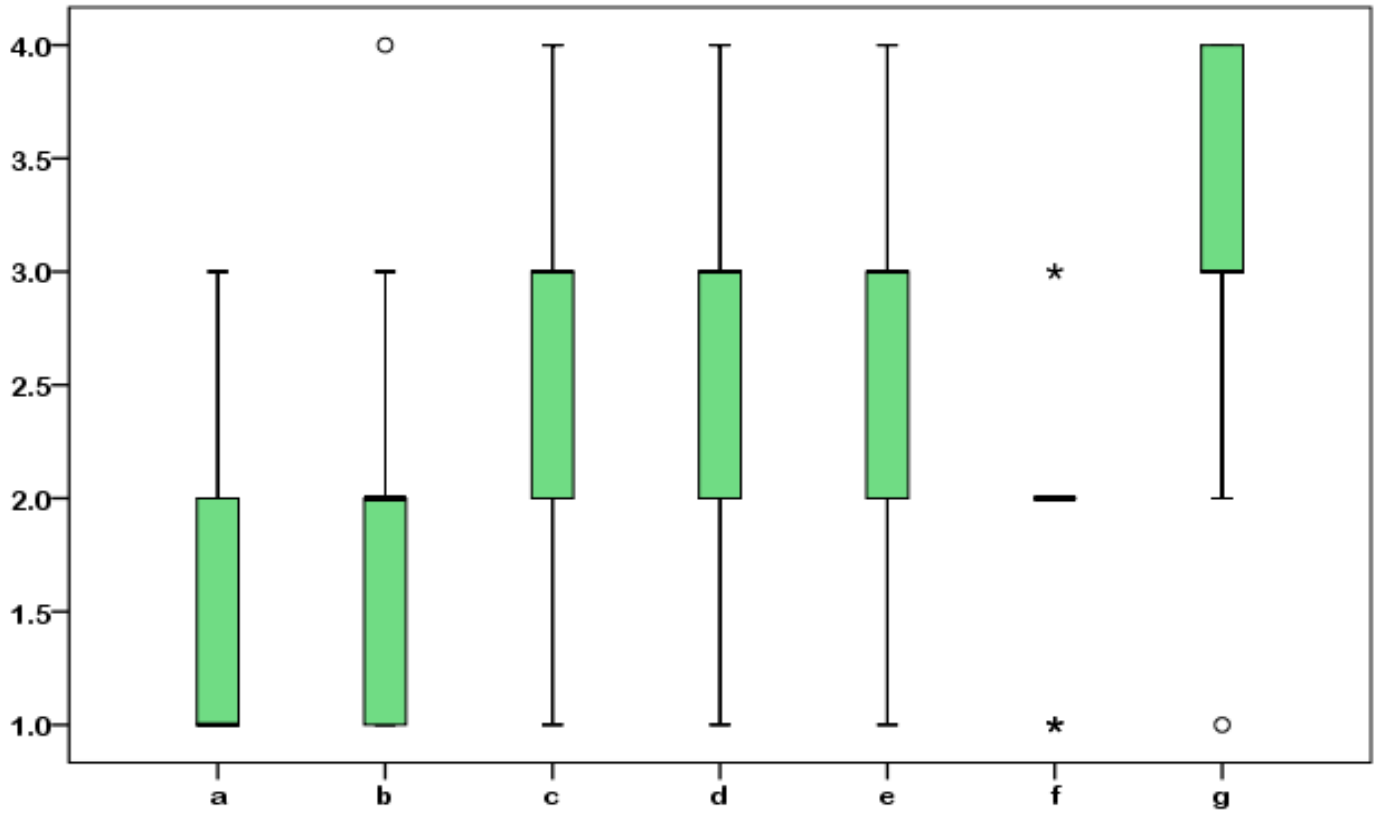
Figure A2.1.3: CTT: frequency and offers - c) commercialization



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question:Please indicate the frequency of the following activities of your centre. – a) Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy – b) Development and supervision of transfer agreements – c) Project management during joint or contractual research – d) Conception of a marketing strategy (customer specifications, users, market potential – e) Preparation of plans for the commercialization of positively evaluated projects – f) Commercial and legal security of orders and offers, including negotiating and securing contracts – g) Support for the establishment and operation of spin-off companies

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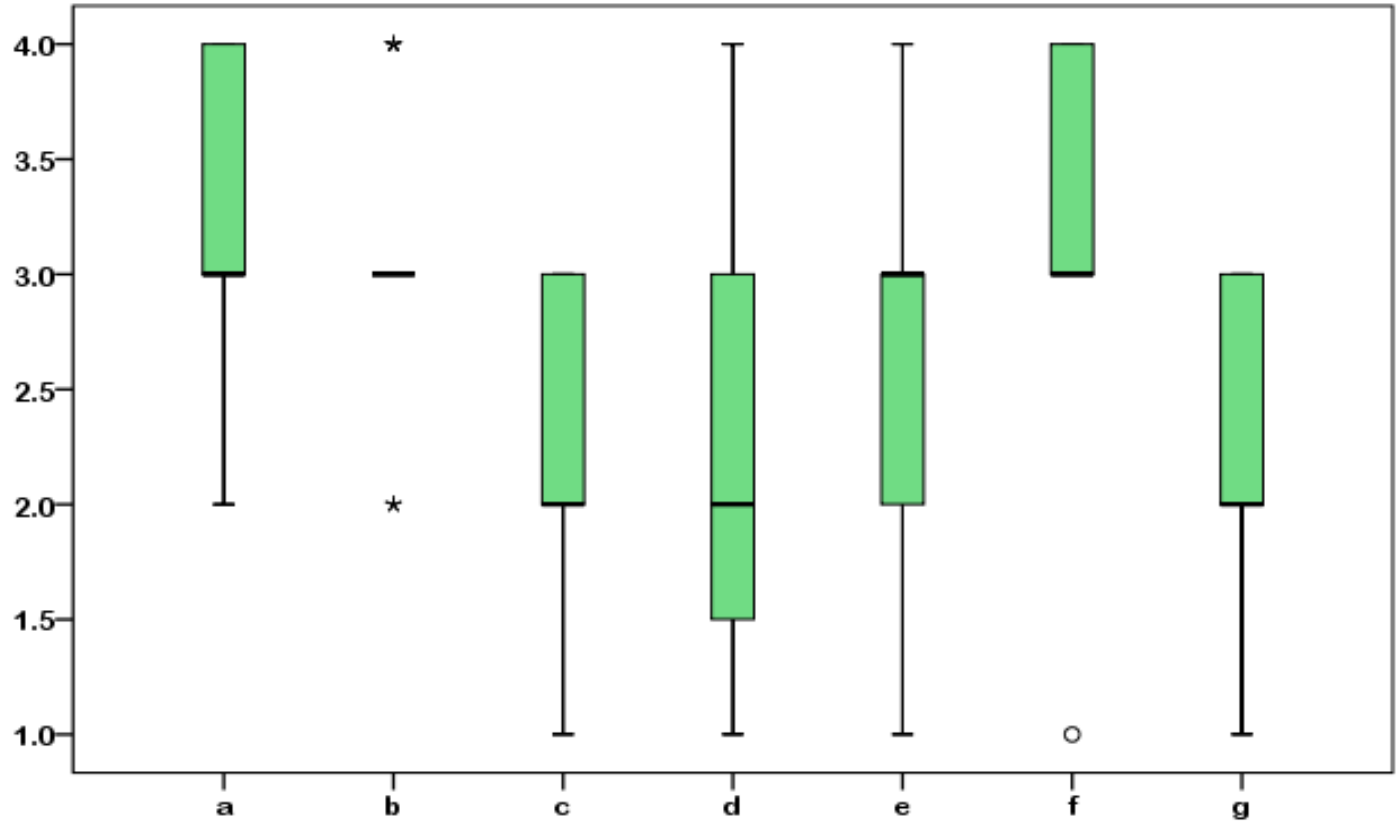
Figure A2.1.4: CTT: frequency and offers – d) trust and networking



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please indicate the frequency of the following activities of your centre. – a) Mediating internships of colleagues of the institute at partners from the application sphere – b) Involvement of partners from the application sphere in the teaching / further education – c) Networking activities directed at partners from the application sphere – d) Networking activities directed at partners from other CTT e) Monitoring the satisfaction of customers and the development of commercial collaboration – f) Mediating practice / theses for students / doctoral students at partners from the application sphere – g) Activities to promote collaboration between research and academic institutes

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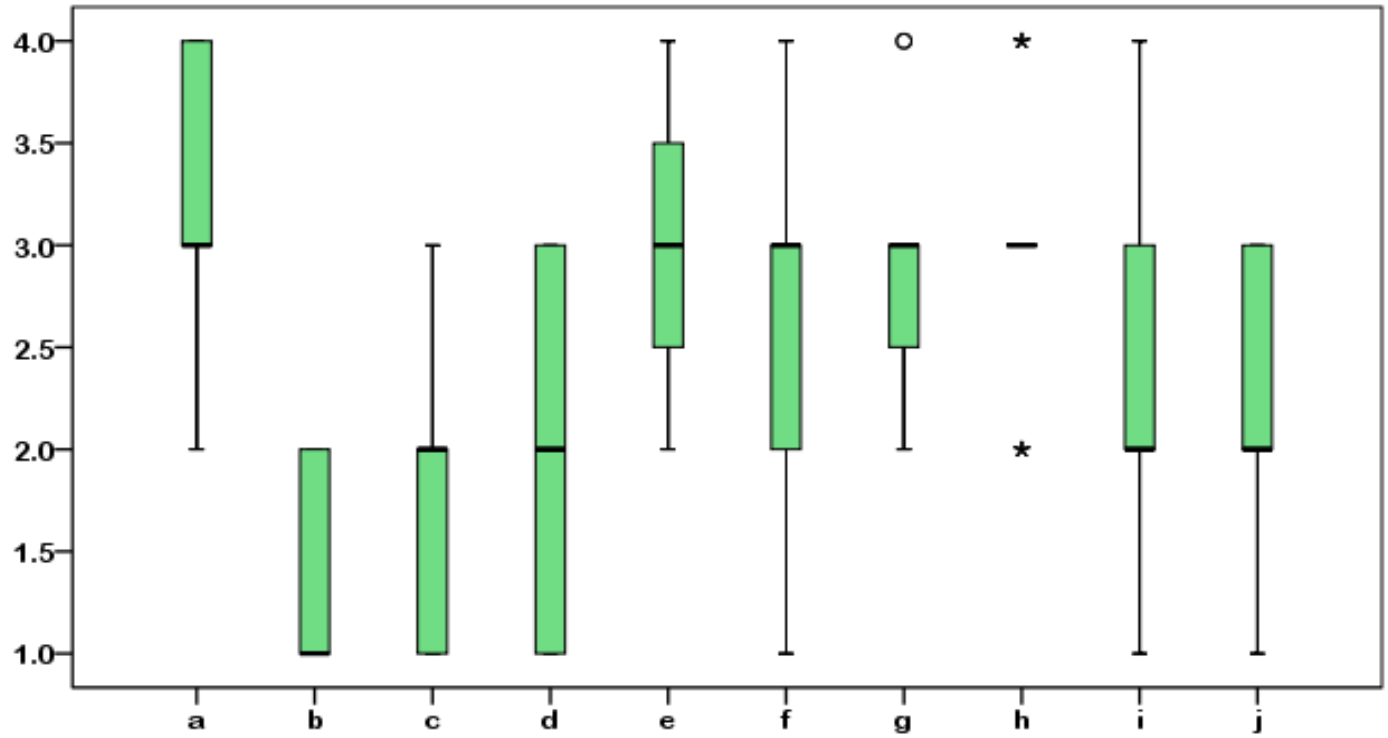
Figure A2.1.5: CTT: frequency and offers – e) culture



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please indicate the frequency of the following activities of your centre. – a) Ensuring qualification measures from the area of TT for interested parties from the application sphere – b) Providing information and advice to university employees in relation to intellectual property and TT – d) Draft standardized contracts for effective interaction with application sphere – e) Assistance in transferring experience from the transfer projects to teaching – f) Ensuring qualification measures from the area of TT for researchers – g) Advising partners from the application sphere in defining the terms of reference for research and development - especially SME – h) Advising partners from the application sphere in the implementation of the results of research into practice - especially SME – i) Support of a client and flexible approach of research / academic institutes towards partners from the application sphere – j) Engaging the top management of the institute in commercialization activities

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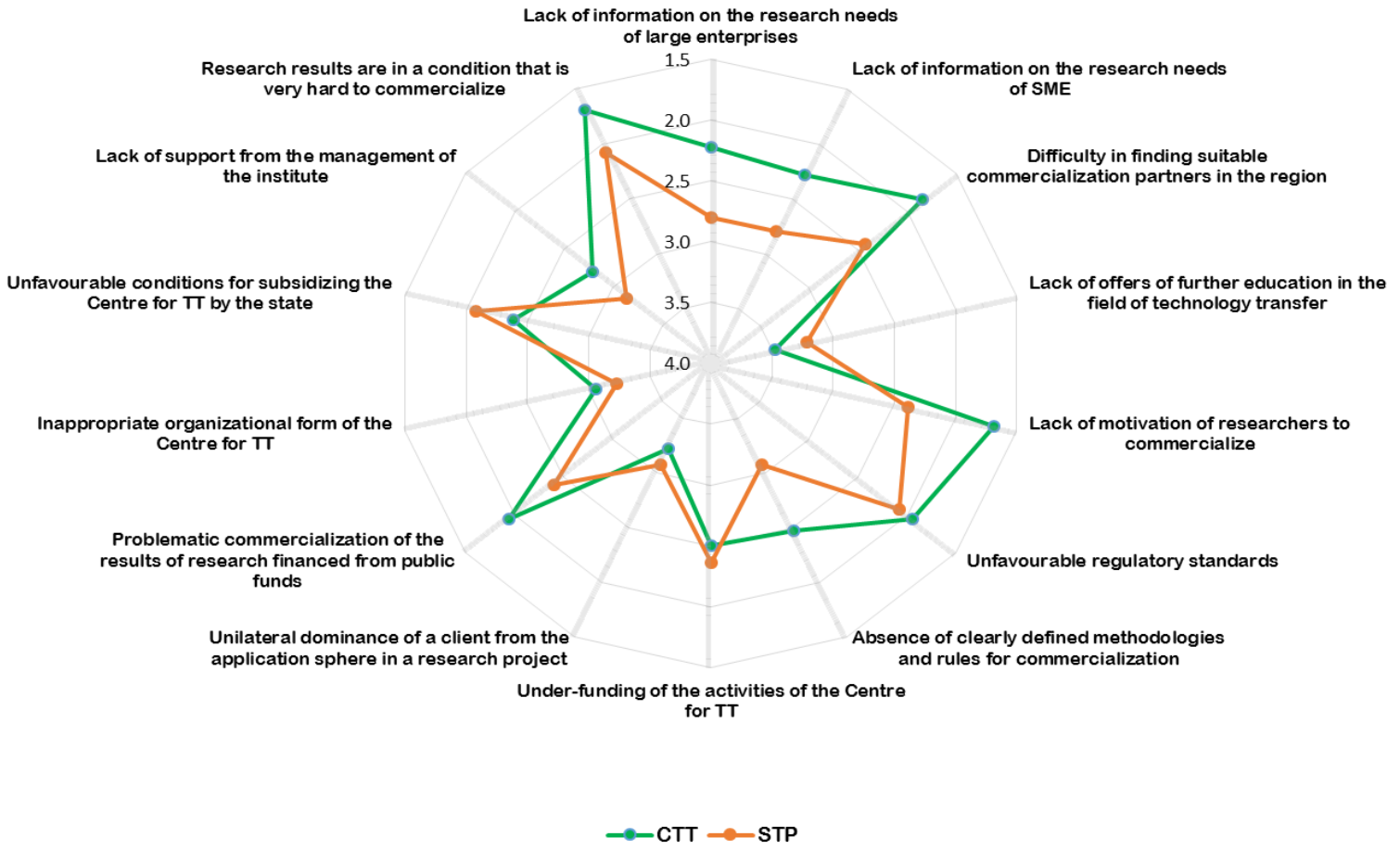
Figure A2.2.1: Barriers to TT - CTT and STP



Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval

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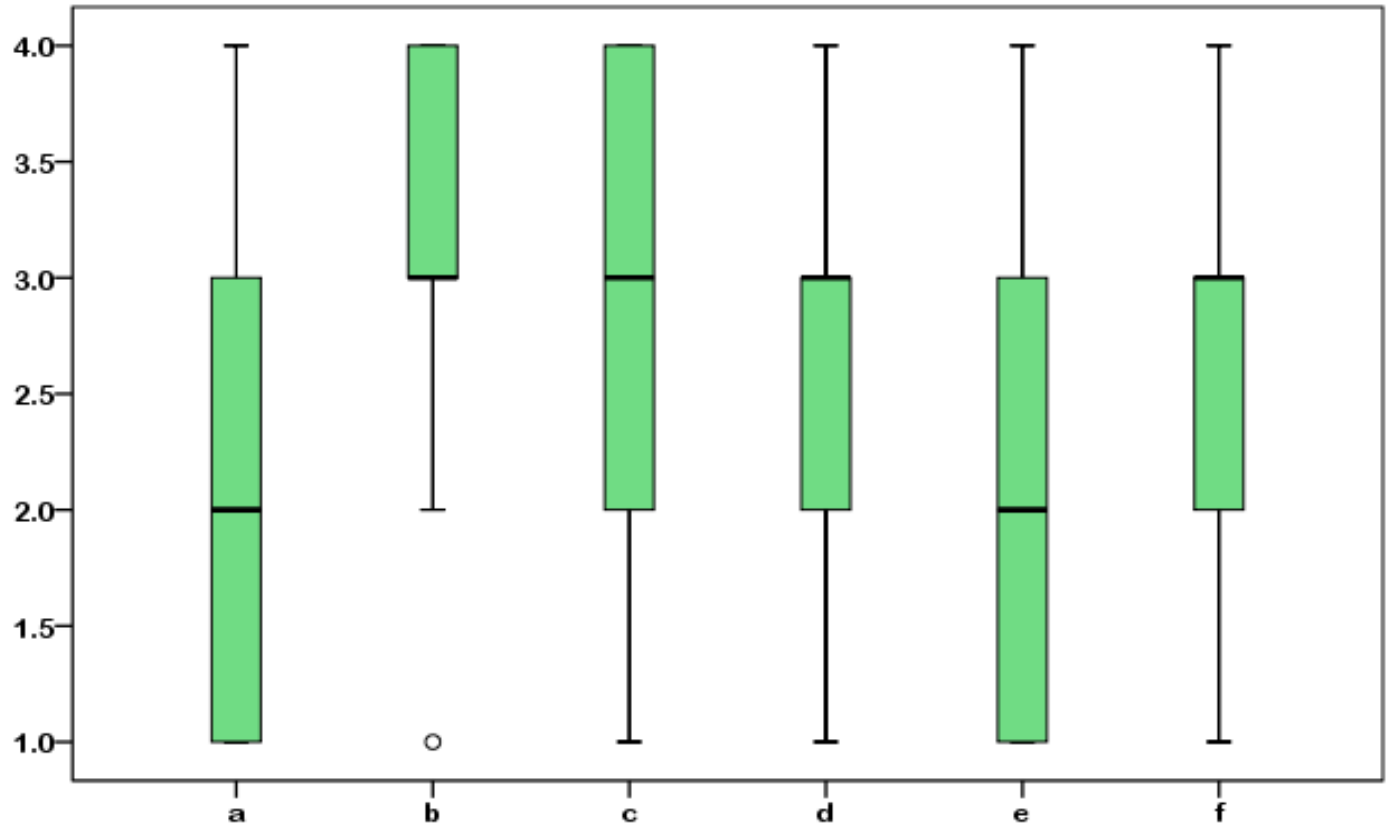
Figure A3.1.1: STP: frequency and offers - a) informing



Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please state the frequency of the following activities of your organization relating to the promotion of TT and knowledge. - a) Presentation of the research results / services of your organization –b)Presentation of the research results / services of your organization at trade fairs and exhibitions - c) Collaboration on publication activities on the side of the organization – d) Creating and providing databases – e) Informing partners from the application sphere about the possibilities of collaboration with research / academic institutes – f) Informing researchers on the results of monitoring of market opportunities and trends

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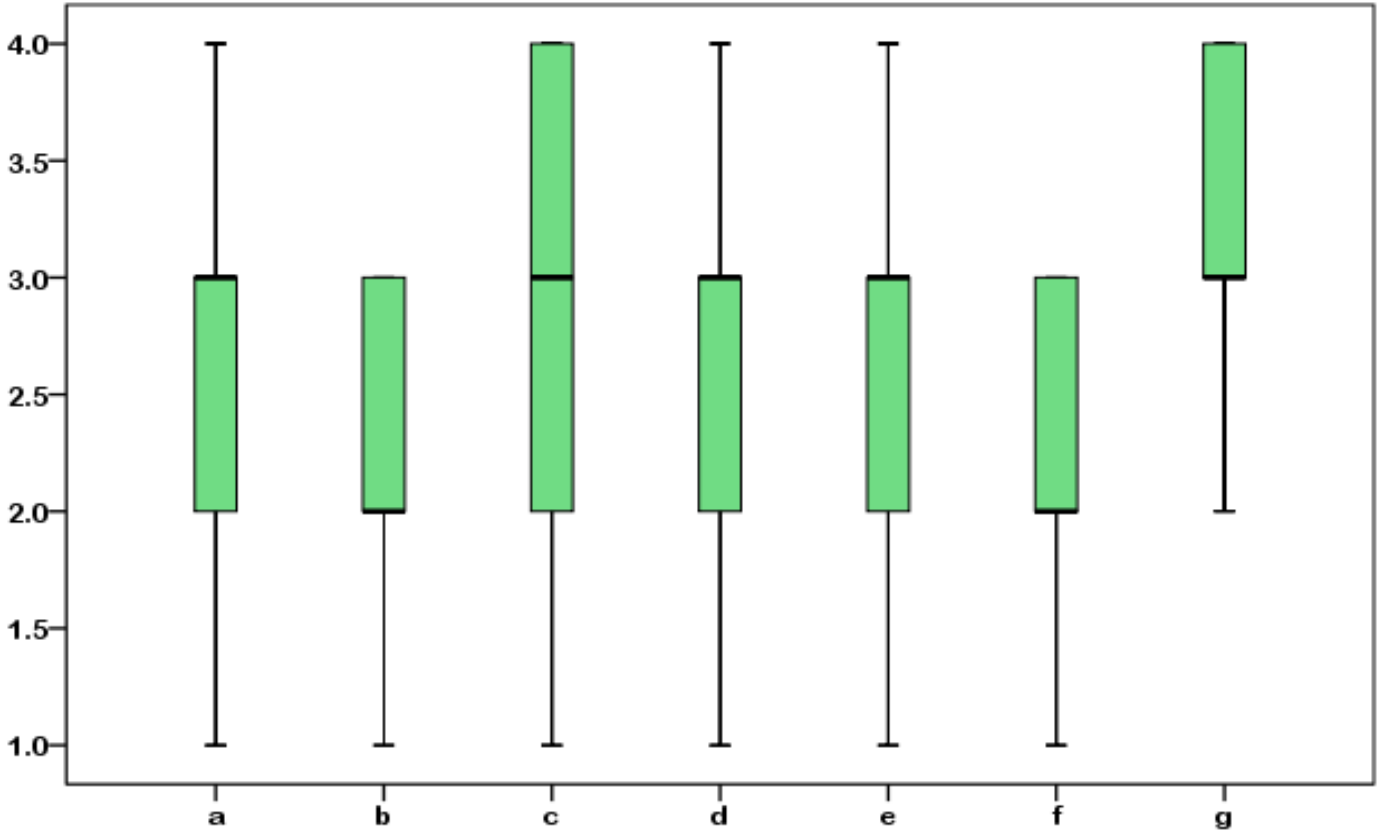
Figure A3.1.2: STP: frequency and offers - b) searching



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please state the frequency of the following activities of your organization relating to the promotion of TT and knowledge. – a) Active marketing activities – b) Mediating direct contacts with partners from the application sphere – c) Mediating contractual research projects with the application sphere – d) Mediating joint research projects with other institutes – e) Comprehensive mapping of resources of the founding institution / partner research organization suitable for commercialization– f) Searching, analysis and monitoring of market opportunities and trends – g) Searching and implementation of external technologies and knowledge to meet the needs of your institute (spin in)

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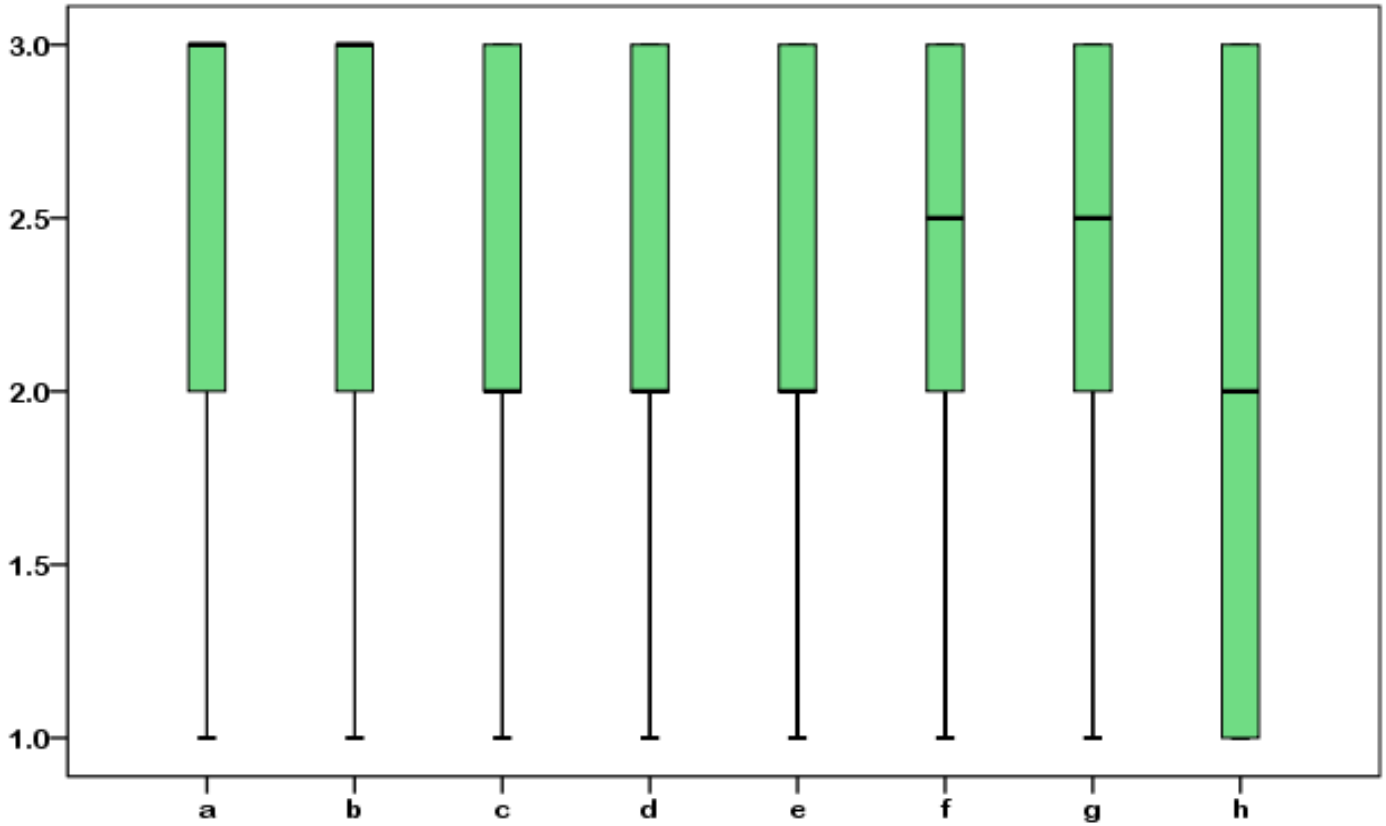
Figure A3.1.3: STP: frequency and offers - c) commercialization



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please state the frequency of the following activities of your organization relating to the promotion of TT and knowledge. – a) Ensuring the evaluation process and the protection of intellectual property, including patent and licensing consultancy – b) Development and supervision of transfer agreements – c) Project management during joint or contractual research – d) Conception of a marketing strategy (customer specifications, users, market potential – e) Preparation of plans for the commercialization of positively evaluated projects – f) Commercial and legal security of orders and offers, including negotiating and securing contracts – g) Supporting the incubation of spin-off companies – h) Supporting the incubation of start-up companies

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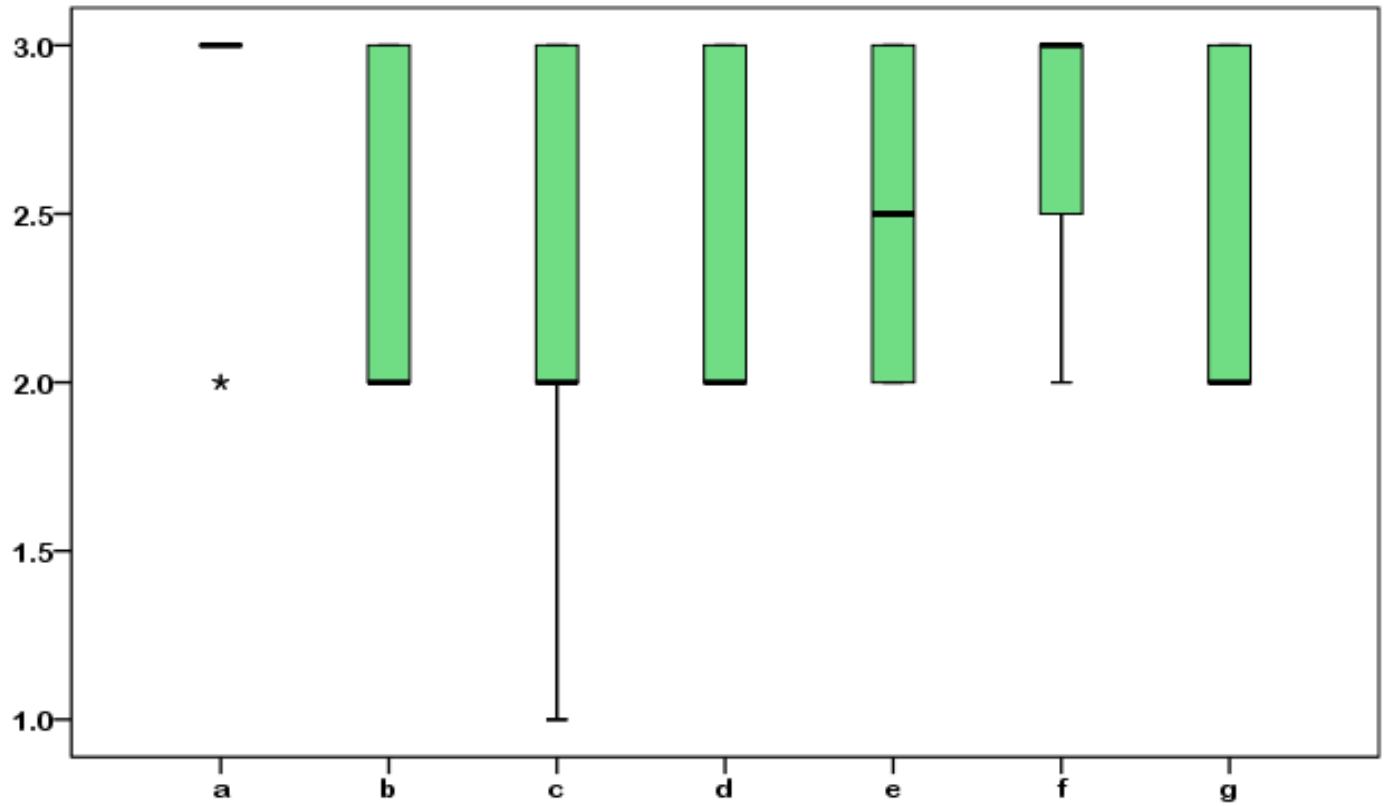
Figure A3.1.4: STP: frequency and offers – d) trust and networking



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please state the frequency of the following activities of your organization relating to the promotion of TT and knowledge. – a) Mediating internships of colleagues of the institute at partners from the application sphere – b) Involvement of partners from the application sphere in the teaching / further education – c) Networking activities directed at partners from the application sphere – d) Networking activities directed at partners from other mediators of technologies and knowledge - e) Monitoring the satisfaction of customers and the development of commercial collaboration – f) Mediating practice / theses for students / doctoral students at partners from the application sphere – g) Activities to promote collaboration between research and academic institutes

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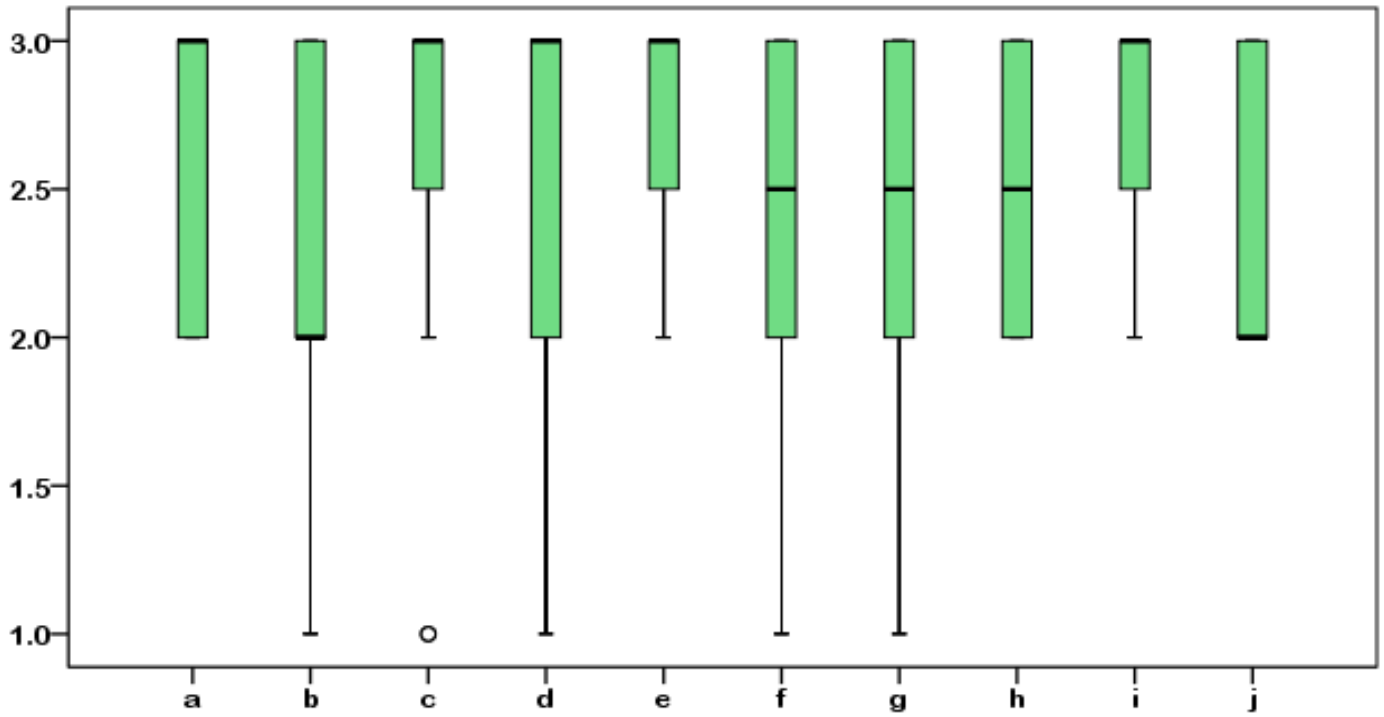
Figure A3.1.5: STP: frequency and offers – e) culture



Authors´s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Question: Please state the frequency of the following activities of your organization relating to the promotion of TT and knowledge. – a) Increasing qualifications in technology transfer for interested parties from the application sphere – b) Providing information and advice to clients of your organization in relation to intellectual property and TT – d) Draft standardized contracts for effective interaction with application sphere – e) Assistance in transferring experience from the transfer projects to teaching – f) Increasing qualifications in technology transfer for researchers / professors – g) Advising partners from the application sphere in defining the terms of reference for research and development - especially SME – h) Advising partners from the application sphere in the implementation of the results of research into practice - especially SME – i) Support of a client and flexible approach of research / academic institutes towards partners from the application sphere – j) Engaging the top management of the institute in commercialization activities

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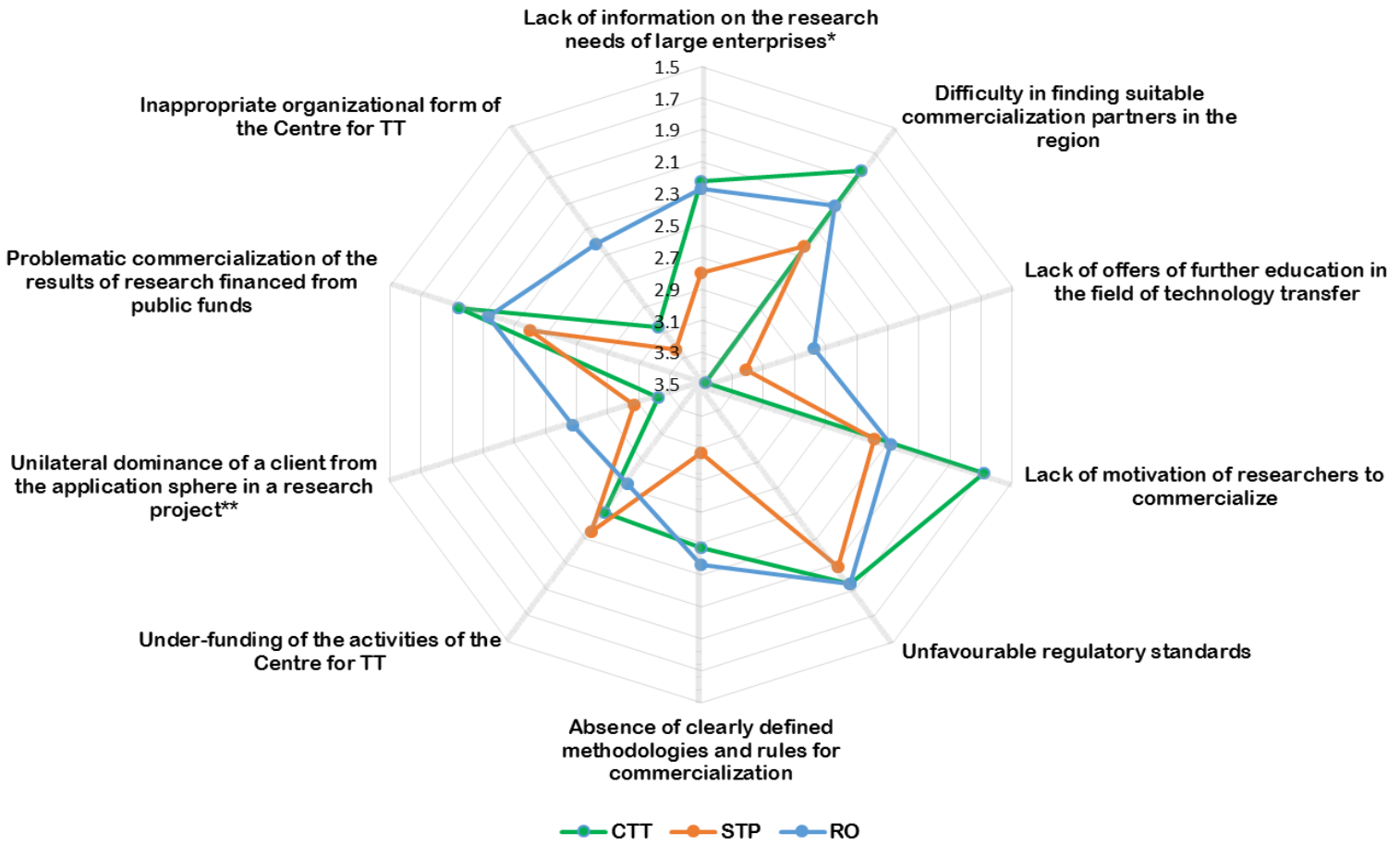
Figure A3.2.1: Barriers to TT - RO, CTT and STP



Authors`s computation. Data: TACR (2014). Scale: From 1: Very large to 4: Small approval. Selected answers - *) RO: Lack of information on the research needs of enterprises - **) RO: One-sided dominance of a client from the application sphere in a research project

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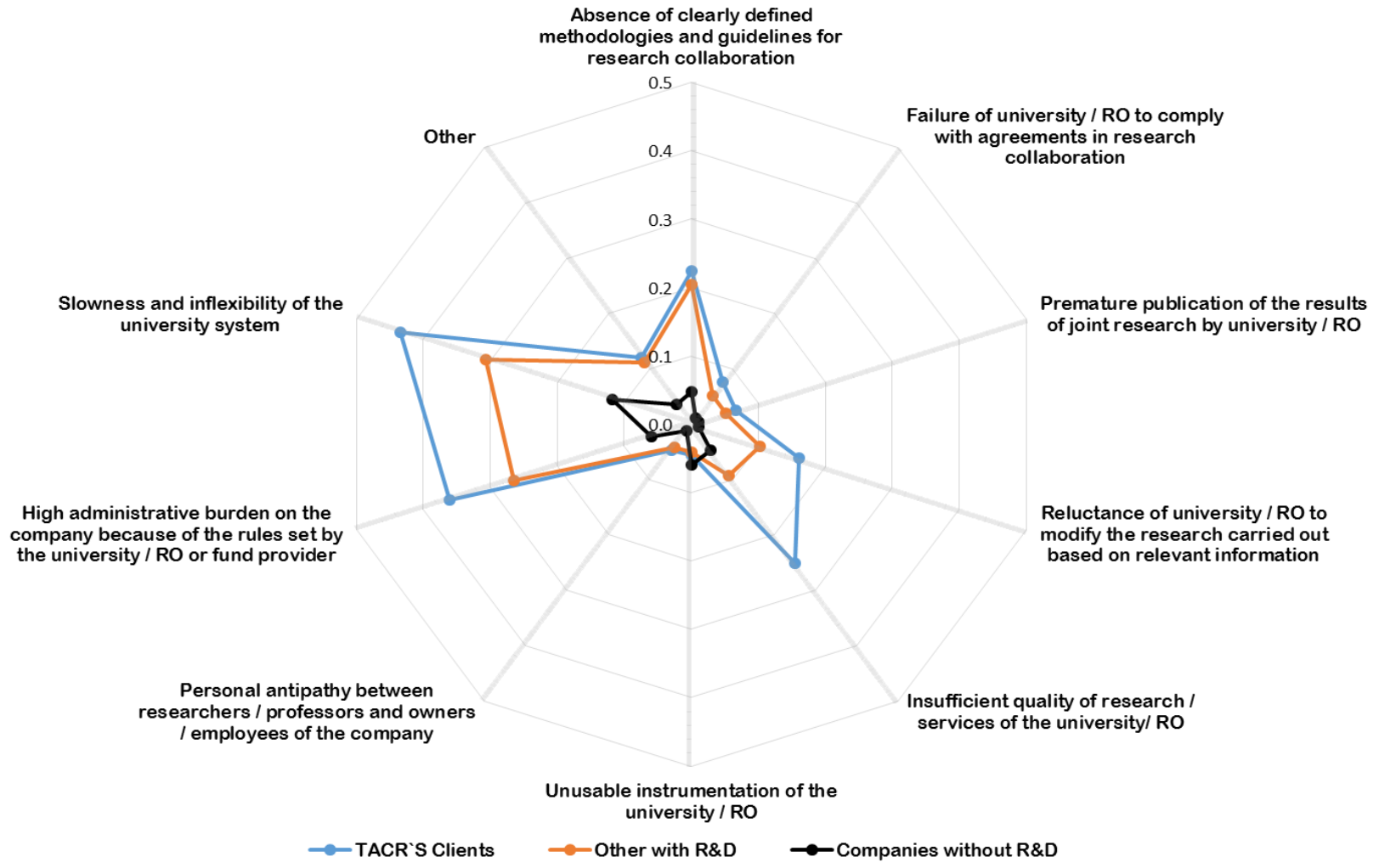
Figure A4.3.1: Barriers to TT - Companies



Authors`s computation. Data: TACR (2014). Scale: 1: Ano (Yes; approval) 0: Empty

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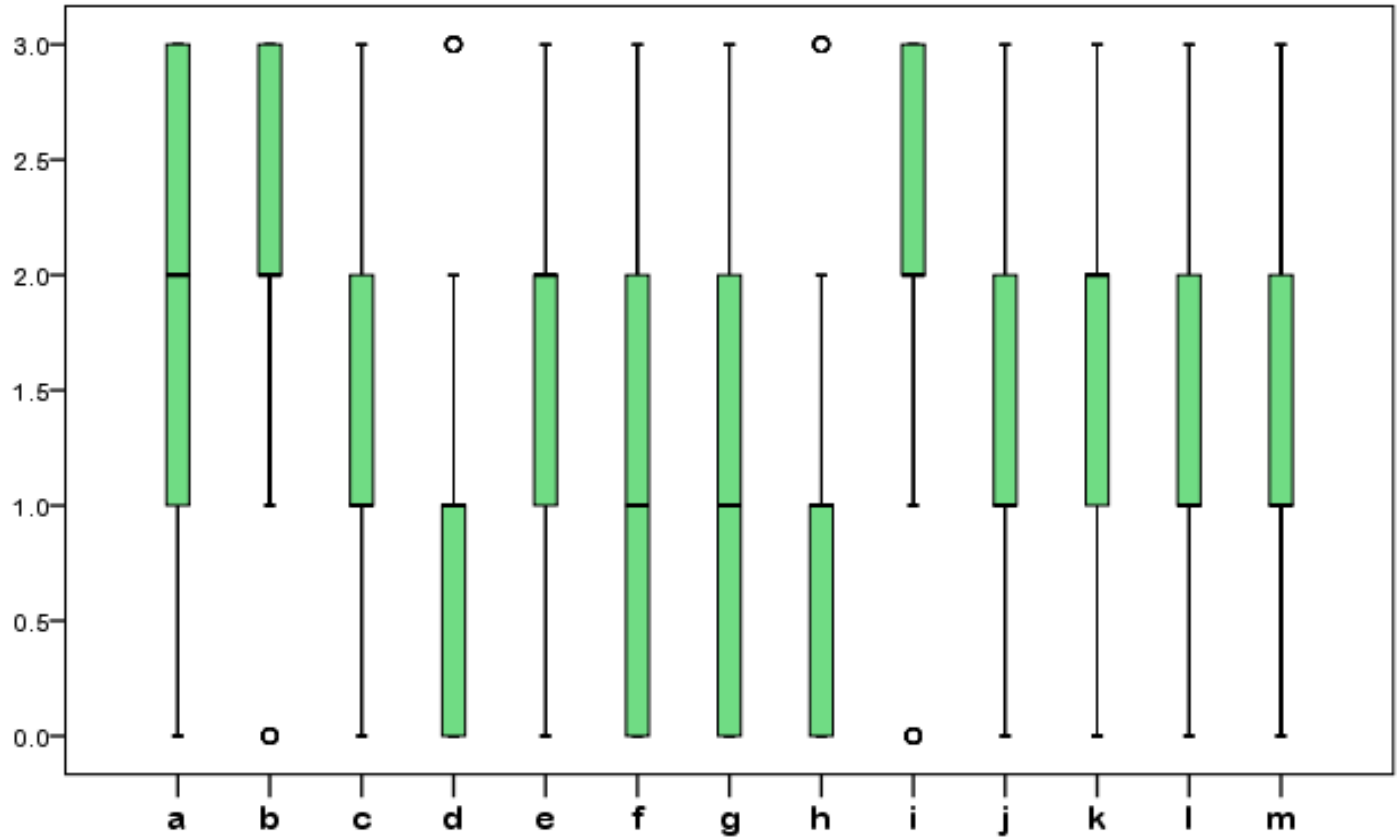
Figure A4.5.1: TACR`S Clients: Needs and evaluation (perspektively)



Authors`s computation. Data: TACR (2014). Scale: From 0: no benefit to 3: greatest benefit. Question: Please state what services of CTT / STP you consider in general to be the least and the most beneficial (i.e. what services according to your view, should a CTT / STP generally offer). – a) Informing about the offer of know-how/technology – b)Informing about the services of R&D – c) Information on further education – d) Offer of joint participation with the university / RO at trade fairs – e) Mediating opportunities for "networking" and meetings – f) Performance of patent search – g) Market analysis – h) Mapping the innovation potential of your business – i) Mediating joint research projects – j) Advice on the introduction of new technologies into operation – k) Mediating practice / doctoral work in your company – l) Arranging work placements of professors / researchers in your company – m) Involvement of your company / employees in teaching at the university

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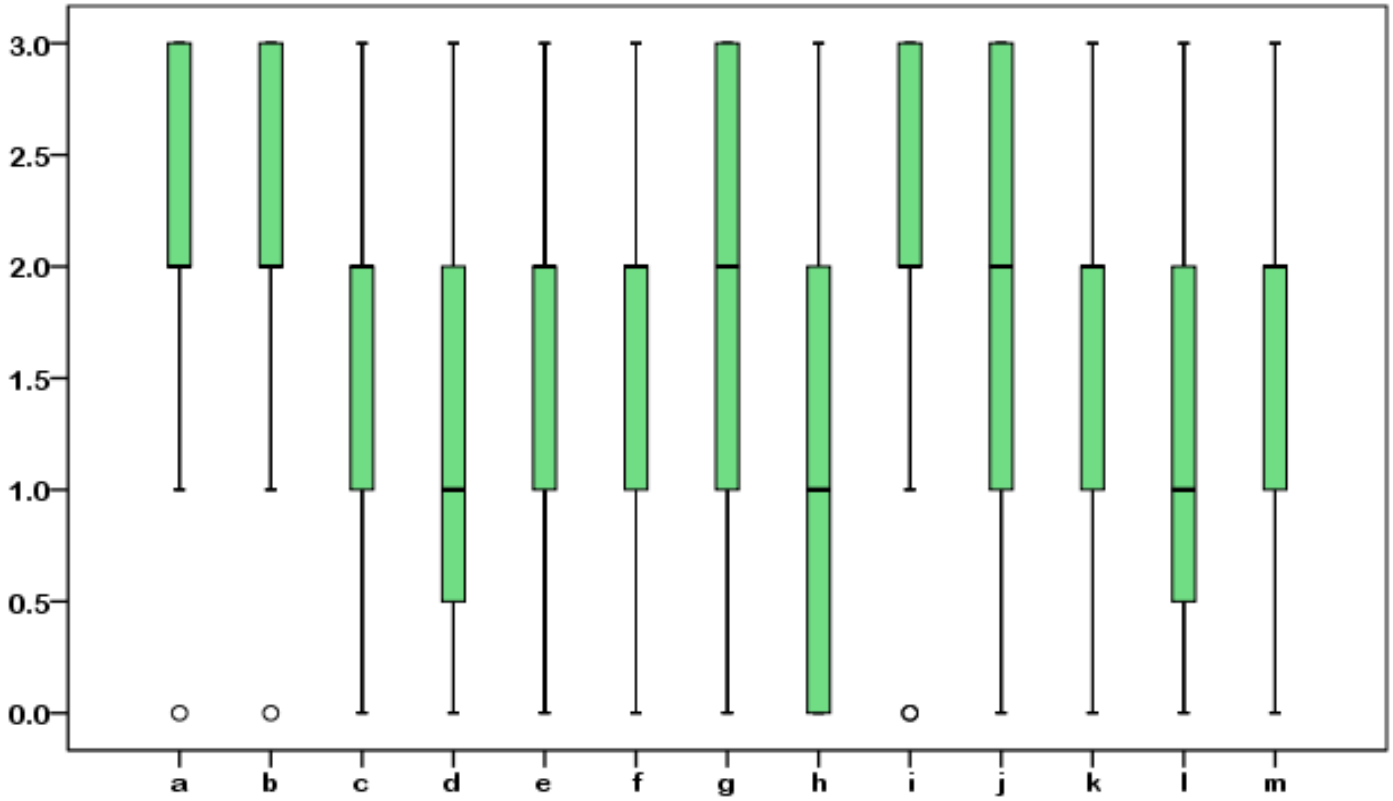
Figure A5.5.1: Other companies with R&D: needs and evaluation (perspectively)



Authors´s computation. Data: TACR (2014). Scale: From 0: no benefit to 3: greatest benefit. Question: Please state what services of CTT / STP you consider in general to be the least and the most beneficial (i.e. what services according to your view, should a CTT / STP generally offer). – a) Informing about the offer of know-how/technology – b)Informing about the services of R&D – c) Information on further education – d) Offer of joint participation with the university / RO at trade fairs – e) Mediating opportunities for "networking" and meetings – f) Performance of patent search – g) Market analysis – h) Mapping the innovation potential of your business – i) Mediating joint research projects – j) Advice on the introduction of new technologies into operation – k) Mediating practice / doctoral work in your company – l) Arranging work placements of professors / researchers in your company – m) Involvement of your company / employees in teaching at the university

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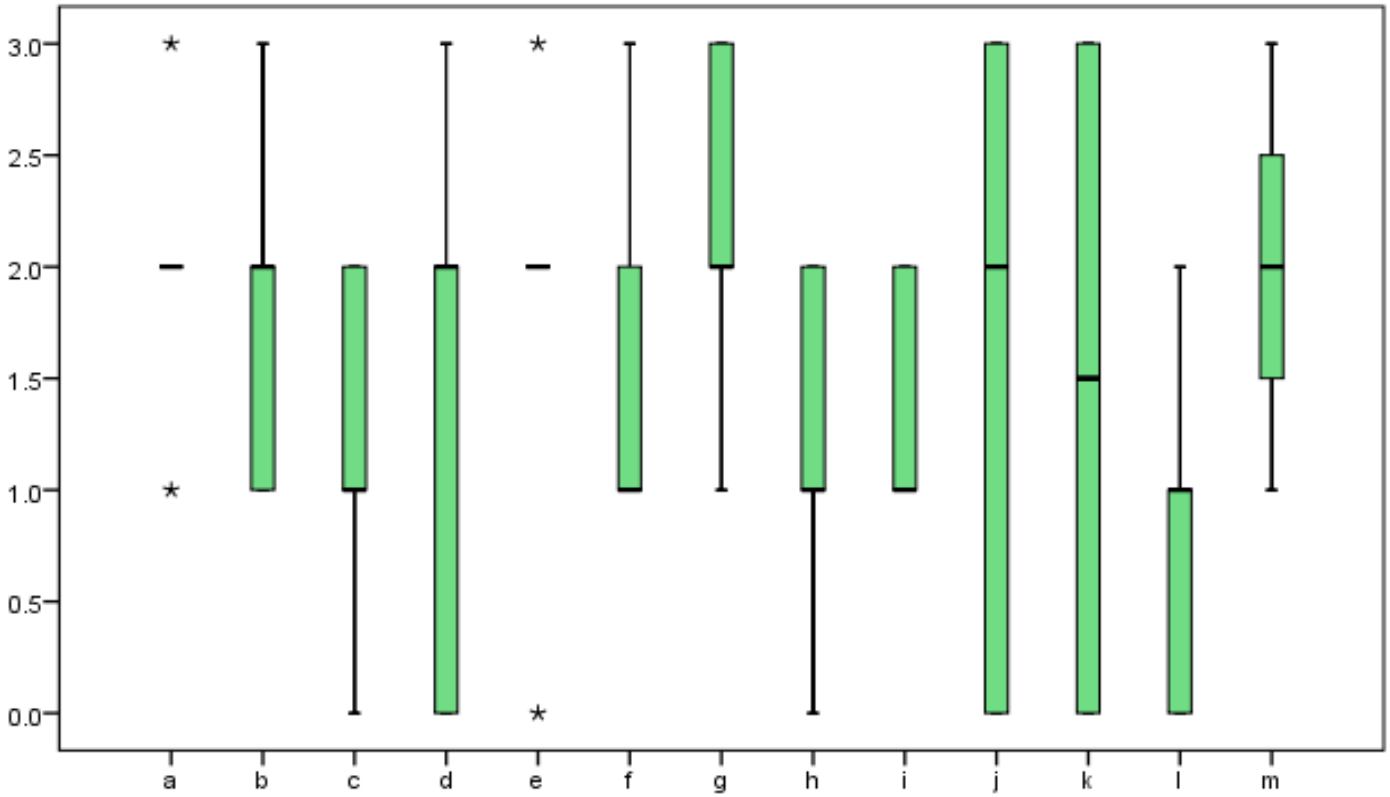
Figure A6.5.1: Companies without R&D: needs and evaluation (perspectively)



Authors´s computation. Data: TACR (2014). Scale: From 0: no benefit to 3: greatest benefit. Question: Please state what services of CTT / STP you consider in general to be the least and the most beneficial (i.e. what services according to your view, should a CTT / STP generally offer). – a) Informing about the offer of know-how/technology – b)Informing about the services of R&D – c) Information on further education – d) Offer of joint participation with the university / RO at trade fairs – e) Mediating opportunities for "networking" and meetings – f) Performance of patent search – g) Market analysis – h) Mapping the innovation potential of your business – i) Mediating joint research projects – j) Advice on the introduction of new technologies into operation – k) Mediating practice / doctoral work in your company – l) Arranging work placements of professors / researchers in your company – m) Involvement of your company / employees in teaching at the university

Fraunhofer MOEZ

ANNEX C: Open Questions

RO_1st wave
What other services or activities would be beneficial in your opinion for the dissemination and commercialization of the research results of your institute?
A more open policy of TACR supporting projects across the board without financial restrictions and a responsive approach to the concept of research, clear rules which do not change, flexibility of the institute, trust and responsibility of team leaders who can manage the grant without the incompetent intervention of superiors.
Clearly defined rewards for commercial activities + formulation of terms for basic and applied research + greater support for applied research from the management of the institute.
It would be good if the Centre would function again.
The basis is personal contact and good results for commercialization.
I can't say. Maybe restructure and rethink the whole concept of research, including the funding system.
Information about the international conferences in the given field of research on which our company is focused.
Promotion of research results, identification of the needs of the application sphere and practice.
Do not evaluate all industries together when evaluating the outputs. For example, in forestry, where the rotation period (the growth cycle of the forest) is on average 100 years, it is not possible to "churn out" new technologies so quickly and in such short-term projects as for example IT or chemistry, etc. due to the need of long-term experiments.
The list is exhaustive.
Reduction in the administration of collaboration.
I don't know.
I think personal contacts are essential.
Ensure the effective sale of licenses, which is currently STRICTLY required. A good scientist, engineer, researcher is usually a bad businessman.
Conferences and publications.
Regarding badly written tenders (only focussed on economic factors and not the quality of work) for the work of small owners, they fall into the red, they cannot renew obsolete equipment, which eliminates the most common possible commercialization.
I don't know.
Replace the people in the CTT with more informed and experienced people!
Sample contracts - with partners, protection of intellectual property, legal advice.
I can't say.
The questions were written by someone who has no idea how contracts are obtained from industry.
Improve the awareness of our work in all spheres. Increase interest in our special research and innovation work.
I do not know the exact answer.
From an economic point of view it would be best to cancel the CTT immediately, we have not received any contacts from industry, the workplace uses its own personal contacts with industrial companies.
I don't know.
Information on "best practice" in foreign universities.
The CTT should have its own branch abroad, e.g. in Brussels, and ensure all the above activities with foreign partners.
Bilateral collaboration with SMEs.
I can't say.
Please add any comments you may have on the issue of transfer of technology and knowledge of your institute
I consider the questions to be biased and it is not possible to give an appropriate and accurate answer.
Eliminate corruption from the awarding of projects.
Greater independence and responsibility of team leaders, reduce unreasonable and dysfunctional bureaucracy which prevents the functioning of the projects, let office workers provide services to research teams and not vice versa, greater flexibility of grant agencies, their legibility, experts should understand the research needs and not

only absurdly control minute monetary errors in financial items, clarity in the rules and if a grant is approved limit the possibility to cut the budget by several tens of percent and still demand the same work.
Our Director will be a member of the board of the company and the company's Assistant Director will sit on the council. We will establish the position of technological assistant director, which will be filled by an experienced worker in the field of commercialization of scientific results who must have a sufficient level of ingenuity and social relations in enterprises.
Transfer of technology should be focused on centres intended for several institutes in the given locality. The CTT should be highly professional and the state should allocate funds for the creation of technology transfer centres and support their activities. CTTs should actively work and be partly evaluated and remunerated by the impact of their work on TT. In Prague transfer of technology for ASCR should be concentrated to one of the several low quality CTTs. The obligation to establish a CTT at each institute will lead to low-level centres.
It gives me lots of irrelevant work to do.
At first when I began, the CTT worked and we tried to find people interested in the results, even though we couldn't. Now, I believe the centre was closed for economical reasons.
Everything is based on the personal initiative of the individuals. There is no systematically built organizational unit which is responsible for obtaining projects which are in line with the development strategy (it takes anything going) and there is no organizational unit directly responsible for the implementation of the results, namely commercialization. Everything work in the style: Do you want this work? Then go get it. And when you've finished, sell it too. The main thing is that you don't bother us with it.
Each research institute should have its own CTT or at least another means of finance it in collaboration. The activities of the CTT should therefore be supported in part by public funds and partly by the commercialization of results.
Create suitable legislation for the transfer of technology and knowledge.
The business sector (small and medium-sized enterprises) in the Czech Republic in their majority still see "innovation" as if it was the interest of society or the state, not the companies themselves. The attitude of many companies towards research is still "if the state/government wants innovation from us, then it needs to pay us for it". I often find that a major barrier to technology transfer between research organizations and companies or for joint research between companies and research organizations is in particular the lack of a qualified research workers in companies who could both assess the importance / value of new technical knowledge and the temporal and material / financial intensity of the research. The so-called "managerial" approach to running a company is often subject to the illusion that success is achieved by requiring the shortest terms and the lowest rates. As a result of the aforementioned surviving "socialist" business culture, the management of many companies in the Czech Republic acts as if they are naturally entitled to the research results of organizations supported by public funds. + Fortunately, there are some rare exceptions. + + Large enterprises in the Czech Republic in our industry are virtually all owned by foreign companies. Their interest in their own research conducted in the Czech Republic is negligible as they are forced to use research and development performed in research centres of the parent company, usually abroad. It makes sense to negotiate technology transfer and contract research only with the parent institute.
So far, this issue has been resolved on an as needed basis, now the creation of a special department has been approved. I am looking forward to working with it with a mixture of hope and scepticism.
I have little personal knowledge of the issue of technology transfer at the moment. To improve knowledge of this issue there could be a lecture or a series of lectures that would give those interested more details on the themes outlined.
I think it would be good to create scientific areas and issues currently addressed at the given institute on the one hand and a list of commercial entities on the other hand and then try to look for possible links. This could lead to new opportunities for collaboration between academic institutes and commercial partners.
The main barrier to successful technology transfer is the very inactive approach of CTT to finding collaboration with industrial partners and transferring these contacts to researchers working on the relevant projects. Another barrier is the method of evaluation of scientific work because the collaboration with companies usually does not produce impacted scientific publications, which is the main criterion for evaluation of scientists in the academic sphere, whereby penalizing the scientists involved in the collaboration with industrial partners.
Transfer of technology and knowledge in our institute is very important and I would like develop it further.

I am more focused on basic research than applied research. Nonetheless, I participate in applied research. The greatest barrier is how time consuming the “application” is - which is the part that distracts me from my work and which I do not enjoy. If I think that there is something particular required from me from practice then I have no problem with motivation.
Most small and medium-sized enterprises are more interested in survival. If they are interested in research and technology it has to have immediate benefits. In many areas of research there is no corresponding partner in the Czech Republic.
The greatest barrier in this issue is the reluctance to actively collaborate between the academic and industrial spheres.
Not all results of research can be commercialized, even though they may have wide application. This includes governmental support – e.g. working on various concepts of the state (transport, water, housing, etc.). This type of research is hardly supported at all.
Due to the specific nature of our industry I do not have much experience with CTTs.
The problem of commercialization of the results of forestry research is the long-term impact (decades, centuries). Results “sell” better if they have a profit effect over several years. In forestry, therefore, support from the State or other public sources is irreplaceable.
Lack of information about the needs of small enterprises.
More specific legal advice should be provided.
The fundamental problem is the current running of businesses, their owners, the high cost of investment and the introduction of new products on the market and the risk of loss, focus on immediate profit. Pressure on the implementation of research results based on unrealistic expectations.
Lack of support in terms of management of the institute, fragmentation of individual research teams, emphasis on the importance of published results of research activities.
Problems during the acquisition (initial generation) of funds for the creation of specialized units of the institute for the commercialization of R&D results, which would reduce the time burden on creative professionals and would in turn enhance their creative potential.
So far we have not seen any activity come our way.
Lack of skilled workers – there are more offers than the capacity of high-quality human resources.
Very narrow range of potential customers for contract research primarily from small and medium-sized enterprises, difficult to apply research for the benefit of non-governmental organizations.
I do not have any experience with the issue of technology transfer.
The creation and functioning of this group is in its infancy, professional links and contacts and the work methodology are being created. The biggest problem is the mindset and approach of researchers, especially the older generation, to the need to collaborate with the application sphere, which many underestimate.
Transfer of technology works best on the basis of past relationships and personal contacts.
In the area of the physiology of physical loads the transfer of knowledge and technology into practice is quite difficult; the main customer is from the area of sport and health prevention, where direct contact with specific customers works best. In times of economic crisis consulting on health and sports is not a priority; activities of the department of MoEYS which is involved in science and research in the field of physical education and sport are limited. Successful transfer of technology and knowledge in this area would require knowledge of the academic and consumer environment as well as professional and managerial competence. One more note - university CTTs do not have a legal background and academics refer to private law firms when submitting e.g. utility models and patents, which I consider a major shortcoming.
The only successful projects are those that the project mangers or the departments perform themselves with great effort. The service of the university is zero.
Currently, in my opinion, the biggest barrier to technology transfer in the Czech Republic is too few proactive visionary enterprises rooted in basic research. It is a shame that such businesses are missing in the Czech Republic. Recently qualified university graduates (mainly chemists) who would power such enterprises are often lost to this area. + In the Czech Republic we need very a vibrant business scene in this sphere to avoid these losses. This requires a supercritical number of such enterprises to be active in the Czech Republic (not companies producing

generics, but rather companies like Syncom BV, Otsuka, etc.). As many as 20 to 50 (possibly up to 100) of these new enterprises are needed in the Czech Republic at a rough estimate. Then, graduates will be able to choose an attractive place and not be lost (graduates are a large and largely untapped potential in our country which has not been put to full use). The ultimate goal would be for us to become a knowledge-based power by 2030, like in terms of chemistry Israel or Switzerland.
Most transfer activities at specialized unskilled workplaces in the Czech Republic lead to an increase in administrative costs and have no obvious economic effect of the transfer. Therefore, there is an irrational tendency to provide these activities on a materially professional (but in terms of transfer amateur) level. As we know from abroad, we are still waiting in vain for professionals in this field.
We have no contacts other than those we build ourselves. We are able to manage transfer processes ourselves, but there is little opportunity - SMEs do not have the finances to purchase know-how and large companies outsource these tasks abroad.
I would welcome if the transfer of technology at TU in Liberec was performed by a skilled team of professionals who would provide staff at schools with qualified service during the transfer of knowledge from universities to the industrial sphere as well as during the commercialization of research results.
1. Currently, there is a lack of information on both sides. CTT should provide it. 2. Administrative and legal support if something is negotiated (even outside of the CTT). 3. Support of decision-making and a strategic approach (also requires expertise or consultants at the CTT) e.g. the question of a sales strategy for licenses, awards, etc. Comparison with foreign institutes, competitors. 4. Support of spin-offs for enterprising researchers and academics. Clearly defined rules for the distribution of profits, property relations, and other legal assistance. Material assistance at the beginning based on the set rules. Advice on other activities (see above (1) - (3)) to the same extent as for employees. 5. Education and providing contacts to partners including capital, stays in foreign incubators, etc. (especially for those interested in spin-offs).
Lack of information, heavy bureaucracy,
I think it is important for managers of CTT to have a sufficient technical education. In general, I believe that these centres artificially create jobs and employ economic and managerial pseudo-experts who are not able or willing to understand the technical issues of their work.
There is nothing like this at our institute, only certain administrative assistance from the R&D department, etc. Personally, I have never thought that something like this could exist, but after completing this questionnaire I think that if a CTT exists at another institute then why not at ours.
Lack of awareness of the needs of research by industrial partners. Most contractual research is formed on the basis of personal contacts - problems to be solved are not freely available from industrial enterprises.
In brief: my research is relatively easy to commercialise. Like its co-author, I would like to get immediate direct and indirect benefits from commercialization (e.g. co-ownership of a spin-off on the one hand and a generally better reputation of the workplace on the other hand) but I want “someone else to do it for me” i.e. I do not want to deal with any administrative, intellectual property, commercial issues. To a relatively small extent I am willing to provide the necessary services to the commercial partner. On the contrary, I would like the commercial partner to train and continuously inform me about improvements to the commercialized methods. ++Even more concisely: I think I know how to save/earn money from the specific research method in practice. (i.e. I have contacts to commercial operators who are interested) but I don’t see any interest from my institute to commercialize, the set rules should clearly state what personal benefit I will get from it. I want to continue to do research, rather than go over to the commercial sector.
I recommend less training and more support in solving specific (mainly administrative) problems if research scientist. I believe that the effectiveness of CTT activities in technology transfer is not comparable (it is lower) with the effectiveness of direct contacts of research workers or scientific teams with partners from practice.
Unprofessional and unqualified personnel.
All technology transfer is about money. The centres are established in order to obtain a leading position or to purchase equipment.
Academic staff should not lack practice from the application sphere and the staff of the application sphere should trust the technical expertise of academics.
The University has five faculties and it would be good for each faculty to have its representative in the centre, which

could make contact with the application sphere.
CTT poorly formulates results in a misleading way! You have potential users!
In my opinion, the long-term view of application companies continues to win: “What works (somehow) doesn’t need fixing”. This creates a barrier between the academic and application spheres.
There is no clear strategy from the state for supporting the transfer of innovation. Support of technical education at all levels is missing incl. support for practical training of students in companies. A concept of long-term support of collaboration between the academic and manufacturing sphere is also missing. There is no feedback from the collaboration between research institutes and companies.
Only officials with no accountability.
In my experience from the application of research results into practice (mainly in the form of start-ups than collaboration with corporations, IT sector): +* The researcher or the institute / research group must be particularly interested. + * A clear advantage for the institute is the creation of an independent source of funding (over which it has control). Independence from the mood of MoEYS (grants for education - in the case of universities), and the need to observe the distribution of money and the rate of spending defined in projects. +* Bureaucracy should be kept to a minimum. Ideally the contracting authority should handle it with the researcher themselves. Only give them the ability to access the know-how (contracts, processes, etc.) +* I am a supporter of a minimal solution. +* CTT may make sense when dealing with corporations and patenting. +* CTT (as an interface) does not make sense when dealing with SMEs and various types of licensing. The market is very dynamic and there should definitely not be a situation where the CTT “solves” the license agreement for three quarters of the year (I have witnessed this). Such things must be done immediately, otherwise the SME will find a different partner (or the market changes and the SME ceases to be interested). +* Ideally, I think the model RI should be (research institute, university, ...) - spin-off/s.r.o. - Partner (application sphere). Where there is a close relationship (including staffing) between the RI and the spin-off. +** For the RI the licensing of something may mean the need to prove some support (the SME requires it) and therefore it is taken away from the research. +** Spin-off is ideal for providing support, it can do marketing, etc. It can also function as a “money bank” in the case of poor years at the RI (it cannot obtain grants and threatens to dismiss the research team). +** Spin-off is agile and must earn money, so communication with the application sphere is active. +** The application sphere does not always like working with RI (it sometimes wants to have as an s.r.o. as a partner). +** In the case of joint research projects it can offer both RI (public institute, university) and SME (the spin-off). ++* As for the spin-off, if I’m not mistaken, at our institute the university wants to have a smaller share (it’s OK) and rather large powers (removal of directors, etc.) - which is unacceptable for realistically minded scientist/entrepreneurs. Here I would suggest that the RI accepts the spin-off as a venture investment and that is should be able to handle at least one of the 100 spin-offs. It does not complicate the life of the spin-offs by interfering with them. In other words, I would not have a problem with the RI having a share (they deserve it) but I would have a problem with an “official” talking to me about it who doesn’t knows anything about conducting business. ++* It is clear to me that the IT sector is quite specific, and what works for IT does not work for medicine. In IT we can, in several cases, afford to “commercialize” research for a single day. We can just rent a server, launch a website, create a mobile application, and see how the market reacts (if it is interested / not interested). If it is not interested, that’s OK, we will go and do something else. If it is interested then we can start the formal commercialization. ++I have broken it all down. I hope it helps you. I will be happy if you manage to stimulate greater interest with scientists to commercialize and transfer their results. I know it is possible. It is after all work, a lot of work, but it is also a lot of experience. It is not for the short term, but it pays off in the long term.
Decentralization of activities - greater support at the level of our academic staff.
Improve awareness of the opportunities in the areas of technology transfer from the side of the centre and the interconnection of collaboration at the workplaces of institutes in relations with the application sphere.
In my opinion – something is expected from the Department of technology transfer that it cannot deliver. Commercial application of results can only be arranged by people who create the results. They must therefore understand what they are selling. UTT can only function as an auxiliary service. Primary it is the technical content of the negotiation which determines its success or failure ... the contract always gets signed somehow. + This relates both to issues of obtaining contractual research and the sale of know-how.
Basically I do not know anything about the university’s transfer centre. It does not represent itself and there hasn’t been any need to actively seek it out. + At present the administrative demands on our work are almost

exponentially growing on all fronts. The commercialization of results therefore represents further paperwork, although it is true that in this case it is far more justified than in many other cases.
I have been forced to use the services of the technology transfer department once when I needed the signature of the representative of the department on a price offer sent to a company in the framework of a tender for an innovation voucher. In the end I found a partner and negotiated the scope of collaboration myself. The technology transfer department may well act as an intermediary due its signature obligations but my perception of this institute has so far been very negative.
In my position I have yet to be involved in the process of technology and knowledge transfer, so I have neither the experience nor inspiration for its further functioning.
Improve awareness of our work in all spheres. Increase interest in our special research and innovation work.
Dear colleagues. Given that at our institute at the Institute of Chemical Technology in Prague the money from TACR is an absolutely vulgar way of theft, we are no longer involved in the performance of the grant. All of the results are now fictional and therefore the entire project has only led to the transfer of money into the private pockets of superiors. This is a sad reality, which TACR should better supervise.
The problem is that many institutes and organizations do not have the spare funds, even if they are interested in the results. Today, the biggest problem is increasingly more complex.
The greatest barrier is that the transfer of technology and knowledge is not being done by the right people. The people with practice and working in research and have researched something should be doing it. It is difficult for someone to transfer something to the application sphere (even if they are highly intelligent) if they do not understand what they are transferring, either from the side of the requirement for practice or the applicability of the research results. So in my opinion the CTT must also build on the right people, otherwise it will not lead to the greater good.
The CTT at CU works very “secretively”, it does not seem that there are any experts who could help in any stage of commercialization. This activity is left to the faculties, where, of course, it is rather amateurish.
The questionnaire, the same as the services of the centre, is too complicated and distracts me from my work.
I find that the main problems are the lack of interest and concerns of academic staff about collaborating with the application sphere.
Many colleagues still do not regard applied research as being a “good” domestic scientific institute. For SMEs, the situation is much better; it is difficult to obtain research collaboration from large enterprises.
If you don’t provide something yourself then you practically doesn’t get it.
The questionnaire is too complicated and doesn’t solve anything.
Complicated administration and underestimation of any possible positive results. Unclear support from the institutes and governing bodies.
Academics should be encouraged to collaborate with the application sphere and not only for publishing activity. On the contrary, quality results of technology transfer should not ne publicly disclosed.
In my opinion, the greatest barriers are a lack of quality and motivated professionals, bureaucratic burden, which is in turn discouraging, sometimes the lack of work for staff responsible for finding potential partners, sometimes even their unprofessionalism, lack of administrative support, lack of motivation of employees. The biggest problem is also an overload of work of individual professionals who do not receive adequate financial remuneration and sometimes even face departmental fragmentation (work on several unrelated projects). It would be good to monitor how many “businesses” or projects the given workers are interested in to avoid overloading them and to prevent poor quality or superficial work, which can only be exchanged for quality work in a one or a small number of areas.
CTTs were originally founded by projects financed by the State. Now, at a time when they begin to finance themselves, they are beginning to have an incredibly high demand on the share of acquired contracts, for the use of patents, etc. For our workplace, where R&D and patents are generated, the services of CTTs are so expensive that we would rather not use these services. Our faculty even refused to contribute to the operation of the Rector’s office. CTTs are useless if a company is interested in collaboration; they contact the expert themselves and prefer to keep them secret so the TT centre cannot claim funds for works contracts. Administration is not so complicated that a professional workplace could not take care of it. Another negative example is the help of CTTs with patenting R&D results. All costs must related to this activity must be paid by the workplace, and they pay commission to the CTT as

well. It is far cheaper to contract this service directly with the patent office. CTTs are not at all helpful to researchers but they are parasites to their work.
The biggest problem is the funding of processes related to the protection of intellectual property (patent agency services, fees for applications, maintenance fees, etc.).
There no CTT in our work so far but I'd like to give a general viewpoint of CTTs: too much administration, I do not mean only the disposal of partial tasks but also the choice of the appropriate scope.
The CTT should be a functioning service ensuring all administrative activities and actively functioning. The current situation, where scientists and academics must provide almost everything ourselves, is unsatisfactory.
Suggestions for minor modifications to the questionnaire: +1. Clarity in the questions asked - please indicate which questions you consider to be incomprehensible and tell us why. +- Please state the importance of the following motives for the implementation of technology transfer and knowledge at your institute. +Modification: Please state the importance of the effect of the following motives on the implementation of technology transfer and knowledge at your institute. ++- Please state the importance of the following barriers to successful technology transfer and knowledge at your institute. + Modification: Please state the importance of the effect of the following barriers to successful technology transfer at your institute. ++- Lack of options for further education in the field of technology transfer (spin off creation, protection of intellectual property, draft contracts, evaluating technologies, etc.) +Modification: the word "evaluation" should be replaced with "appraisal" because "technology appraisal" is considered to be an established phrase . ++- Please indicate the forms of technology transfer and knowledge at your institute in terms of their frequency. + Modification: Please indicate the forms of transfer of technology and knowledge according to the frequency of their occurrence at your institute ++- Provision of services other than instrumentation. + Modification: Provision of services through the use of instrumentation. +2. Clarity and structure of the questionnaire – do consider the structure of the questionnaire to be clear and logical? + Opinion: I consider the sequence of the questions to be logical. The structure of the questionnaire is relatively clear. +3. Time required to complete the questionnaire - What is your opinion on the time spent completing the questionnaire? + Suggestion: The questionnaire is very detailed with a considerable number of questions therefore the time required for its completion is somewhat high. Perhaps the questioned researcher would be able to handle tables to fill until the end of the questionnaire. ++4 Any other observations or comments. +Suggestion: I would recommend expanding on the questions which would help assimilate and characterize the experience and knowledge of questioned researcher in the field of technology transfer, in order to identify the relevance of their responses in relation to technology transfer e.g. specify the previous experience of the questioned researcher in more detail - what kind of results of R&D has the researcher commercialized and how often, when was the last time, etc.

RO_2nd wave
What other services or activities would be beneficial in your opinion for the dissemination and commercialization of the research results of your institute?
Financial support from the CTT and ensuring HR capacity for these activities.
Informative www activity
Online education and dissemination of information through the Internet
Funding of commercialization from public resources (TACR, MoEYS)
Change and adaptation of legislation on the supporting of R&D
A significant change in the legislative environment on the lines of Dutch or finish legislation. + Increased institutional support for applied research institutes. + Change in the parameters of RIR.
Mutual communication and exchange of information.
Actively search for interested companies.
It is necessary to raise the overall level of expertise in the corporate sector. As long as there are not qualified people able to articulate their needs and understand the answer, neither of the parties will be able to communicate with each other. This is not provided by any CTT.
Tax breaks for businesses, state support towards research and innovation in the form of better informing companies, use of television and radio to promote research, use of research results which originated in the past for

the Czech Republic and its governmental bodies.
Please add any comments you may have on the issue of transfer of technology and knowledge of your institute.
- At the university, it is important that the management understands the importance of CTT/TTO and its impact on the image of the school +- in terms of organization, the CTT/TTO should be independent, flexible and financially supported by the university + - the university must have a working IP policy (defining the status of the researchers, ownership of IP + publication of results, protection and use of IP, sharing of revenues, etc.) +- the university should know how to listen to the needs of industry, be interested in trends in industry, have a kind of technology foresight (e.g. through the CTT), which will define the priorities of the research institutes strategy +- for successful TT the university should also generate outstanding scientists who create extraordinary results.
Commercialization is not a prestigious activity, it is not evaluated scientifically, it is not a traditional activity. It is difficult for the institute to looking for suitable partners who are willing to invest sufficiently in joint research.
The greatest problem is the lack of clarity in the purchase of proposals and results of research, the pilot operation of results is also often lagging.
The greatest barrier is the focus of our institute, specific themes are addressed in our research are that result in the solutions of research needs tailor-made to the client. We subsequently sell the transfer of knowledge mainly in the form of educational activities.
The transfer of technology is best solved by the researchers who developed the technology, services of CTT only make the transfer more expensive without any added effect.
One of the barriers is the different relationship partners from research and the application sphere have with the result of the collaboration, i.e. occasional effort of workers from the application sphere to “optimize” their share in the result of the collaboration.
Incorrectly set conditions of institutional funding in the Czech Republic + Legislative restrictions.
The possibility to “commercialize” the results of humanities research directions is very doubtful.
It doesn’t work at all.
See the above answer.
A better survey of the needs of commercial entities which would be worth providing. Better communication with research organizations. Reduction of administration, statistical reports and a reduction of state intervention which affects research institutes and organizations. Research should explore and not constantly show what it is doing.

CTT
Please specify the barriers which your Centre for TT has come across or specify others:
There are no local partners, scientists are pushed by the funding system to publish / (not only publications but e.g. student dissertations), a large distance from the market
One of the main barriers is the aforementioned lack of interest of researchers in commercialization, career plans are set so that workers have virtually no incentive to commercialize. There are also no examples of successful commercialization, and if there are, the remaining often less successful scientists cook up all sorts of obstacles and gossip about the theft of state property, etc. + Generally, the position of CTTs at universities is also desperate, the ideal form would be a separate entity in the form of a limited company owned by the school. This would straighten out a lot of misunderstandings on a faculty level. +It would also help if TACR could sponsor the creation of technology parks at universities which do not have them. This is probably the only way to start one here, and would allow the self-financing of a TTO to a greater extent.
Orientation of the organization towards point gain (RIR) instead of the real application of knowledge in practice, prioritization of short-term over long-term benefits (and consequently there is a lack of motivation from the individual scientists to transfer in the form of licensing), reluctance of companies to pay for intellectual property (and fear to talk of money for intangible assets), bureaucracy (especially disproportionate administrative burden in relation to the grant provider – which often requires extensive documentation, which of course a clerk could not understand, professional due diligence would be much more effective).
The relevance of barriers is presented irrespective of their occurrence in our practice. We consider the impact that such a barrier would have if it occurred.

Lack of experts for “proof of concept” – we have been looking for nine months:-(++Amendment to the Act on Public Procurement - quality and uniqueness basically cannot be tendered – the government simply doesn’t know how to do it and does not evaluate anything over than the price cost:-(
The Act on Public Procurement and its application in finding partners in patent services or completion prevents the effective work of the CTT +- The obligation to reduce funds for resources obtained through commercialization discourages researchers +- The obligation for partners in pre-seeds are in many fields difficult to fulfil +-Instead of the “Porsche-effect” and demonstrating the benefits of commercialization we are under pressure not only from researchers but also from the Ministry and we reveal how complex collaboration is during transfer. Everyone would rather publish than begin Moloch-like collaboration with the CTT. +
Subsidies for CTT activities are not adequate and in the future it looks worse, however subsidizing the CTT is essential. + There are not enough subsidies for activities like pre-seeds – this is a large obstacle particularly in Biomedicine (drugs, medical devices).
In particular, incompleteness of R&D results for immediate practical use, and difficulty in completing them – there are no mechanisms in this process and it would probably be impossible to bring them to life –the conditions for their functioning 1) resources, 2) time and personal capacity, 3) interest and motivation are lacking. If the “proof of concept” stage does not work systematically, and in rare cases according to the actual possibilities, we face the already mentioned problems.
Separation of the Czech Republic into two transfer centres i.e. Prague and the others meaning Prague has completely different conditions for the transfer centres than the rest of the country. This I see as a very poor solution. I think the conditions should be the same for all universities.
Space for your response to the above questions on this page
Apart for secondary economic activity and the construction of a new building the entire budget of the institute can be considered as a resource for research activity because it is the main activity of the Institute.
What is missing is a definition of a spin-off, if it is taken as synonymous with a spin-out, then a spin-out is defined by HEFCE as a company that uses IP arising from or owned by the university. A start up is defined as company based established by members of a university and its fresh graduates. This definition is a bit farfetched, but objectively according to the definition, UPa does not have any real spin-off company that would use intellectual property owned by the university. UPa has about three start-up companies without a university share. ++I cannot answer the previous questions, our centre was established in April 2012 and during the first half of the year we basically familiarized ourselves with the requirements of MoEYS for our programme. This information is available from UPa, if anyone is interested.
The total amount of funding for research activities for the year 2012: The total amount in billions is based mainly on grants for research centres financed by the OPR&DI, including the large Ceitec project. These are investment projects, where in addition to wage costs expensive equipment is purchased and facilities, laboratories etc. are built.
The problem with the verification of inventions - there is no “proof of concept” expert:-(++ we consider the path of a spin-off as being unsuitable for a public research institute.
The information is completed only for FNHK, not the other collaborating universities. The CTT was founded in July 2012.
We have one start-up company, which verifies the results of research in the field of cosmetic and health cosmetic applications, and which is gradually expanding its market potential. +The spin-off company - partly owned by the university - was not founded - see note at the end of this part of the questionnaire.
The spin-off company was founded in 2013. The share of the university is 70% along with three partners, each having a 10% share. The initiative came from below. A researcher came to us who has a long-term partnership with a company that is interested in conducting business within a spin-off and not through sideline activates. The process of setting up the spin-off including a comprehensive business plan and intensive work with a lawyer lasted 8 months. The process had to undergo the approval of the school management, the Management Board and the Academic Senate.
Did the activity to establish a spin-off company come from among the academic/research team?
Output of a joint project.
From the students.

Did experienced partners or organizations participate in the creation of the spin-off company?
We found a partner from Switzerland (an individual with experience), who joined the project
Innovation centre
Czech Technical University in Prague, ILA
From a range of IT companies
Professor Fusek - UOCHB, doc. Melichar - Radiomedic, UJV AV, Ing. Vyhnanek - SSOB Advisory, JUDr. Berger - AK Berger
Was your institute familiar with the situation on the technology market before the establishment of the spin-off company?
An analysis of the relevant market was perfumed before the establishment of the spin off + those interested in the technology were known.
Market analysis within the business plan.
Market analysis of technologies and direct contacts with customers for the technology.
Market analysis.
Market analysis.
Market analysis
A comprehensive business plan - CSOB Advisory in collaboration with researchers, workers from CITT and experts from the Faculty of Economics CZU.
Did any academics / scientists leave the realization team during the development of the spin-off company?
Time reasons.
Did you experience any obstructions during the realization of the spin-off company?
Inflexibility of other research organizations in the project, lack of experience and understanding of the researchers who were involved.
Lack of seed/venture capital in the area of life sciences.
Legislative barriers.
Lack of experience on the part of the university.
Only the occasional classic negative reaction due to ignorance or for the reason that everything that is new is suspicious and everything that is entrepreneurship at the university is a con.
Did you lack any support during the realization of the spin-off company?
A legislative framework allowing universities to perform commercial activities through a spin-off.
No, we had a lot of support from the management and scientists were for spin-off activity enthusiastic and were not deterred by entering a completely new territory.
In hindsight, would you have done anything differently during the realization of the spin-off company?
It is good to minimize the number of members in the company.
Speed up the licensing of intellectual property.
So far, almost everything goes smoothly, we will see in a year, when the company will have had some time to operate.
Were the relations between all of the partners involved during the realization of the spin-off without problems?
Different objectives of individuals and individual co-owners of the company.
The reluctance of scientists to give up research at the university in favour of the spin-off company, fragmentation of competencies, unclear organizational structure, unprofessional management of the company.
Please indicate what motivated your institute to establish a spin-off company compared to commercializing through the sale of exclusive licenses
The decision was based on the nature of the technology and also according to the preferences of the partners involved and the people we found that were interested in the technology.
The uniqueness of the invention/solution during the currently unfinished development of the product, causing a lack of interest of businesses and a low selling price of the resulting intellectual property.
Internal motivation.
Common interest of the project partners.
There was no sufficiently reliable commercial partner.

Know how was not simply transferable to licenses.
The business enthusiasm of the science team, its long-term collaboration with practice. It was not a case where it would be advantageous or desirable to sell licenses.
Please provide your most important insights and views on the operation of a spin-off company
The primary task of a spin-off company must be to make a profit (not points/financial benefits from the State, etc.) and a strong and experienced project leader must be identified who aligns himself with the company. At least one strong client (or investor) with an interest in the product and who will provide the initial revenue needs to be known in advance. Problems: failure is not accepted in the Czech Republic (for spin-offs it is very likely), the liquidation of the company is very complex and expensive (PRIs and universities do not have the resources for the recovery of these losses and will thus representatives of institute in control bodies will have a lot of problems). The whole system (legislation, funding, evaluation of research institutes) is not quite ready to establish spin off companies in bulk with the financial participation of PRIs or universities. More important than the technology and the project itself is a well crafted and flexible implementation team.
The reluctance of scientists to devote themselves fully to the company and invest their own money in it at the beginning, inability to self-reflect on the quality of the management of the company. Too many other activities not related to the company.
How TA could significantly help is by funding a national approach to marketing studies. See the MARS programme in Ontario, or the British Library. We lack access to market studies that specify individual markets, size, price, development, etc. This is crucial and it cannot be provided at universities.
Problems: a long approval process, which greatly hinders entry onto the market, difficulty in evaluating intellectual property inserted into the basic capital of the company, early stage technology and lack of resources to cross the “valley of death”.
Slower legal establishment relative to public institutes.
It is progressing well and we are preparing another spin-off.
If there is a strong product, it is possible to assert itself on the market.
An example of best practice: www.projektove.cz
Operation of the company itself will begin December 2012. Otherwise its business activities have so far been run in the framework of complementary activities of the faculty. Regarding the establishment of the spin-off there is a clear need of support from the school management, a thorough assessment of all risks, in-depth work with lawyers, properly motivated and business minded scientific founders of the company and their enthusiasm, experience of others - UOCHB, UJV AV - Radimedic.
If your institute did not deal or does not deal with the possibility of establishing a spin-off company, please give reasons.
Generally in the Czech Republic modern science does the minimum that would lead to the creation of spin offs focussing on technology, be they in the field of natural sciences or biotechnology. There is no breeding ground, examples of best practice, experience, suitable and experienced managers, and partly also funding but most importantly the mentality of head R&D workers, who fell asleep somewhere in the 1950s or 1960, does not help. Unfortunately, universities are not able to retain talented people and they are often not even welcome. There are many reasons, one of them is incredible inbreeding which leads to an overall dementization of universities, where the average and below average become professors and associate professors and they then attempt to prevent meritocracy, above-average and successful. I’m afraid that there is not much time to change it.
The spin-off is yet to be established, therefore, we do not meet the condition of “establishment of a spin off = the establishment and subsequent operation for the purpose of generating profit.” However, we can say that the CTT has initiated the setting up of a spin-off and participated in all aspects of its establishment, in collaboration with experts from a range of investors. The collaboration with partners is seamless, with academics, less so. We have seen barriers in the form of PPI and the administration of the spin-off in the case of the continuing participation of the institute.
It is the most difficult and riskiest way of introducing a new technology onto the market. It is far easier and less risky to implement a new technology through an already established and stable company, for which it is not a question of life or death, but has a wider program, which means it can withstand any possible failure or a slow start to the new technology. Furthermore, a business entity, including a spin-off, needs greater flexibility and operability not

only in the response of the market but also in decision-making on important issues – being bound to a PPI does not allow this. In a market environment, if a new entity is to develop and based on the results of a PPI then a start-up seems the most promising form.
Please provide additional information on the method of financing your centre.
This system allows us to focus on the work, not on administration of grant projects
Previously, the budget was in the range of hundreds of thousands of CZK; today we received from R&DI around 10 million – we have higher FTE and we can finance e.g. more international patent applications, workshops with international participation, etc.
We are a TTO funded from Priority Axis 3.3
The CTT has had its own patent fund from the institute for several years now. +In 2013, our activities were supported through OPR&DI Call 6.3, which replaced financing from the OPEC project. We also perform a RCO project on the creation of a regional network and training in the area of EU subsidies, which is directly supported by one of the European programmes. +Income from licensing is redistributed and 15% is retained by the CTT. Income from licensing has a substantial period of inaction and we see returns several years after the conclusion of the contract. +Even if we provide contractual research, we do not have a share in these revenues. + support of university leadership and willingness to allocate sufficient funds to operate the CTT so that it is not dependent on government subsidies, which it may or may not get, seems to us to be the most important.
An approx. 15 million CZK annual operating budget is required for the effective operation of Czech Technical University in Prague. + We have 1.5 - 2 million CZK from the budget of Czech Technical University in Prague. + For comparison, VIC which provides the central IT needs of Czech Technical University in Prague has a budget of 60 million CZK.
In the future we want licensing to provide a majority share in the financing of the CTT.
FullCOST overheads of the OPRDI project from Priority Axis 2.
We have established a fund to support commercialization and operation of the CTT. The problem is the lack of excellent examples of collaboration with industry and lengthy processes related to the management of the support from OPR&DI.
From the perspective of a new methodology for evaluating the results of PPI we expect a significant decline in interest and the requirements for submitting protection documents, in particular, utility models and industrial designs, as well as patents. By freeing up this capacity CTT can perform activities to external clients. However, we have R&DI projects which will continue to require the submission of protection documents in virtually the same rate as before but in the sustainability of these activities will be difficult to finance from our own resources. Emphasis on the application of R&D results in practice, which is a condition for the allocation of a large proportion of the support under the new evaluation methodology, is correct, but it contradicts reality in terms of the conditions and the possibilities for applying new R&D results in practice. This may result in a continuation of formalistic tendencies - how to meet these criteria and “reach” to point evaluation again is an end in its self; If this is not possible, we can expect more resignations in the area of industrial legal protection at PPI, which has been more or less successfully underway in recent years. = Skoda and the journey back. In order to avoid this, at least on a mass scale, all available means of motivational instruments should be focused on the central, critical part of transfer - the intensification of all forms of REAL collaboration with practice, minimization of administrative barriers and support that which is really worth supporting.
What other services or activities does your Centre for TT provide?
Mainly the organization of what I would call “entrepreneurial spirit”. This is particularly the establishment of the SPINUP club, which brings together people interested in conducting business in research and development. It is about the underpinning of this 2.5% sleeping minority which is able to set up a company from their research and sell licenses. If activities of a similar nature were part of a future TACR programme it would help to create a long-term strategy.
- Patent attorney services for external clients: protection documents - representation in dealing with new patents, designs, trademarks, maintenance and renewal of existing documents, conflicts, defence of rights; +- the issue of licensing agreements and other areas of industrial legal protection; +- advice and consultation in all area of intellectual property.
Some of the above mentioned activities are run by other components of the organization and not the ICTT.

Please add any comments you may have on the issue of transfer of technology and knowledge of your institute and the operation of your Centre for TT.
For the newly established CTT, the leadership of the institute need to support the TT processes i.e. provide a certain financial stability to the CTT (without excessive administration). Next, there must be more motivation of researchers to work with the CTT. Linked to this is the necessity of the relevant economic and legal education (in the area of TT) of science students. The most important barriers include the legislative and administrative issues around the economic activity of the PPI and universities and the related inflexibility in decision-making (approval for the establishment of a limited company takes at least 6 months). The problem for the spin off company is the general lack of acceptance of the possible failure of the project (if the project is subsidized then it must be successful). It is very important to support high quality and original (basic and applied) research in the Czech Republic, to create new and original projects from technologies with high added value can be created (a sufficient amount of quality projects for transferring).
The process of establishing TT takes about 7-10 years, it is necessary to create conditions for starting R&D at the institute. There is a danger that when all of the TT activity starts to be financed at once and then finishes many of the institutes will stay somewhere “halfway”.
Based on years of experience, we have identified certain problem areas. Some are of an internal nature (MU system, willingness of scientists, awareness...) which can be removed or at least mitigated. Others stem from the different perceptions of reality of academics and the authorities - and here we are trying to improve but in these cases we would welcome more support from the authorities (MoEYS). We are ready to share our extensive experience and insight from practice; should there be an interest we would be happy to provide feedback on the process of implementing commercialization activities at the university. + Commercialization is much more than just selling successful technology, which is actually the end point. The process begins with the awareness and preparedness of good researchers - this is the area that we would like to focus on because without quality research outputs we cannot perform quality transfers. However, we do see a societal shift and a gentle improvement in the field of TT.
See my previous comments. I’d just like to add one, in my opinion, important comment about the expectations of the TT, due to the structure of the questionnaire. All forms of TT must of course be supported, however, it is important not to have exaggerated expectations. The Czech Republic will probably never produce a start up company from R&D in the amount and quality to make its mark on the revenues of the state budget. We should learn from countries where TT has taken place for several decades and where they have gradually sobered up from the above-standard employment opportunities and revenue of start up companies and the sale of licenses (yes there are exceptions but those relate to universities which do not in the least resemble the medieval university houses of the Czech Republic). In my view, and due to the possibilities of our universities both mental and physical, we should focus on direct investment of the application sphere in R&D in universities. Unfortunately, the TACR often distorts these relationships and makes them more or less formal. The ideal form of support would be a financial bonus for basic science for each crown that the school gets itself from the application sphere. The significance of the TTO would markedly raise, as would, in my opinion, the quality of research and the quality of people in universities. Pavel Krecmer.
The system of evaluation of research organizations should evaluate their quality, not quantity (a different approach distorts the system), + there should be a functioning national forum for communication between CTTs as well as with grant providers; grant calls should be well thought out in advance with regard to the realities and needs of research organizations, bureaucracy should be reduced and common sense in project administration should be strengthened.
The biggest barrier is the lack of confidence of the commercial sector in the university environment. + In addition, unclear financial return on investment in science, which is not eliminated, for example, by state support in the form of tax relief. + High financial demands on patent protection for “uncertain” and innovative solutions. + underfunding of CTT.
TT in the Czech Republic is about 20 years behind developed countries. In particular, the need to improve the approach of parent institutes, universities, to the issue of TT, where there is the need to support massive collaboration with industry. There are still barriers to collaboration due to different expectations in terms of the method of delivery of the results of the work of academics. To overcome these barriers technology transfer centres

are key, only they can manage the work of “their” academics to meet the requirements of industrial partners. It is therefore important to support the centre in general.
Long time and high cost of the discovery of active substances and their practical application in the field of pharmacy and medicine. State/EU funds for clinical studies and acceleration of the introduction of new drugs for the general health of the population in the areas of non-communicable and communicable diseases (cancer, HIV, HPV, ...).
At TUL we are just starting to collect experience with TT
A desperate shortage of experts to implement the “proof of concept” stage.
University revenue from commercialization activities is currently negligible in the overall context. Change is a long-term process requiring a great deal of effort and investment in building quality infrastructure, education of professionals and change in the attitudes of academics. A significant problem is the excessive administrative complexity of projects financed from EU funds.
- (im)possibility of setting up a “fund” or account for transfer of technology for the accumulation of resources for future cases of commercialization + + - (in)sufficient financial resources for the development of specific subjects of intellectual property from “pre-seeds” (with the exception of Centres of Competence ...) ++- bad practice of circumventing and lack of interest in commercialization through the home institute, fears and bureaucratic obstructions (including internal) during the adoption and development of intellectual property ++- uncertainties during evaluation, valuation and commercialization of the results of R&D.
- Incomplete results for immediate use in practice + difficulties in completing (organizational, capacity, cost) + - sometimes a lack of feedback on potential practical applications of R&D results focusing on “academic freedom” +- sometimes inadequate contractual treatment of results of R&D targeted according to the requirement of practice (so that the participation of the PPI is reasonably priced, including the financial effect) + - sometimes an inactivity of thinking – formalism of scientists and researchers, a reluctance to look into the “mirror of reality” and infecting young PhD students from the beginning of their work with this approach (commercial = offensive, applied research = corrosion of science , etc.) +- disjointed long-term concept of the system of state aid for technology transfer – in order for the individual stages of support to be organically linked through RIR evaluation and so new things are not negated by old and so achievements are not discarded but produce results +- it is necessary to take into account the typical reaction of most people - that instead of “facing the problem” they take “the path of least resistance” ...

STP
Please specify the barriers with which your organization meets in activities related to technology transfer:
Financing of collaboration from the partner, lack of clearly defined methodologies and rules for commercialization practice, ambiguity in tax relief for research
Overshooting the expectations on both sides of the transfer
A whole number of activities are of a non-profit character only and never provide any return to the CTT. Today, the operation of the CTT has no economic return or benefit, or profits will be only made after 5-10 years of operation. Few institutes are able to fund it from their profits (without public aid).
Lack of preparedness of results for practical use + the difficulty of completion - resources, time, personal capacity, interest, motivation
* Discriminatory rules (disabling) for the participation in some recent versions of MoEYS programmes - COST (CZ), INGO (CZ). They ignore the fact that during the denationalization of research institutes the status of PPI did not exist (if privatization had not taken place in the standard way - INOTEX s.r.o. (and later CTTV as its branch), the existence of an applied research and technology transfer workplace would have been at risk from the onset. + newly introduced exclusion of applied research workplaces from support for R&D networking in COST limits one of the most defective communications between academic and applied / industrial research and innovation (which are, among other things, one of the stated aims of the COST programme in the EU). Exclusion from INGO threatens the ability to finance costs associated with work in European governing bodies of NGOs. RTD institutes (Steering Committee TEXTRANET) and coordination of European RTD activities (BioTEX R&D Roadmap - common Europena programme during the introduction of biotechnology in the textiles industry EU). Obtaining these positions is in fact the result of long-term activities.
Due to the fact that the companies now headquartered in our STP either work directly in the application sphere or have experience with technology transfer, they have so far shown no interest in the provision of transfer of technology from our side. + If our organization had more information, finances and other resources, at this point it would probably not have led to it providing more services in the field of technology transfer. Current tenants are able to provide this area themselves. + In the case of an interest in transfer technology, we are able to provide these services primarily externally in collaboration with companies headquartered in STP.
What other services related to technology transfer does your organization provide?
Patent attorney services for external clients: +- protection documentation - representation, conflicts +- contracts +- advice and consultancy - the whole area of intellectual property.
Technology transfer is complemented by collaboration within the “Scientific Council” of BIC Brno composed of 20 professors and scientists from leading research institutes and universities.
Monitoring programmes of RTD EU for involvement in (multidisciplinary) project consortia, support of SMEs in their involvement in calls - national/international, preparation of applications and coordination of participation. +Coordination of BioTEX R&D Roadmap EU. +Participation in innovative activities of the CLUTEX cluster
In the event that a tenant expresses their interest in a specific service in the area of technology transfer, we are ready to contact external partners and provide the required service – if we are not able to meet the requirement ourselves. + The STP manager is always at the tenants’ disposal and they can contact him with their requirements. So far, however, we have had mainly requests for help with technology and in connection with the use of the premises.
Please specify an external supplier of services related to technology transfer and knowledge.
AKTOP, TC ASCR, Berg and White (CVK), Czech Swiss Technology Transfer, Czech ICT Alliance, Karel Cada, various CTTs and STP/PI. In our case, we have strong collaboration with the founder and operator TIC CKD Praha - TC ASCR.
As holders of the quality trademarks EU-BIC TT we are the supplier in accordance with European standards (EBN Brussels).
CTTZ UniPardubice – collaboration; +STCHK - Spolek textilnich chemiku a koloristu (IFATCC - International Federation of Associations of Textile Chemists and Colourists) – organization of professional conferences + TU Liberec – collaboration with the academy. Research + CLUTEX clusters of TT, monitoring of the required innovation activities of member companies, promotion / presentation of results, management of joint projects

If your organization has not dealt or does not deal with the possibility of incubating a start-up company, please give reasons.
The company has yet to be approached, the STP is only open since September 2013, the companies contacted have yet to show a common interest in collaboration.
Due to lack of interest and no start-up companies in the problematic North West region.
It is solved by the South Moravia Innovation Centre.
So far, start-up companies have not shown any interest in our premises for associated services. At this moment we are preparing in the framework of the holding, of which STP Roztoky a.s. is a member, a project to find and support start-up companies. We are gradually gaining experience with tenants and the operation of technology of specific areas that is constantly being optimized so that the environment is prepared for interested parties also from the range of start-up companies.
Did the activity to establish a spin-off company come from among the academic/research team?
Sub-activities began in connection to the main focus of INOTEX and INOTEX/CTTV.
Did experienced partners or organizations participate in the creation of the spin-off company?
Former employees.
University of South Bohemia.
Was your institute made familiar with the situation on the technology market even before the establishment of spin-off company?
Contact with the user community, partial joint activities with the main institute.
Did any academics / scientists leave the realization team during the development of the spin-off company?
Specialization outside the core areas of activity.
Death.
Did you experience any barriers during the realization of the spin off company?
Finance, sales.
Please indicate what motivated your organization to establish a spin-off company compared to commercializing through the sale of exclusive licenses .
Separation of specialized activities, superior competence management within individual organizations.
Non-transferable know-how.
Personal involvement.
Please provide your most important insights and views on the operation of a spin off company
The company is at an early stage. We have not encountered any problems.
If your organization did not deal or does not deal with the possibility of incubating a spin-off company, please give reasons.
The company is preparing for this activity in 2014, taking into account the opening of the STP in September 2013. We assume that the activities of the spin-off company will begin on the 1st of July 2014.
We are not a university or R&D
Due to lack of interest and the absence of spin-off companies in the problematic North West region.
Universities use their own STP/PI and there are generally very few spin-out companies. The work is of course the same as for a start-up company, of which we have many (I think even the most in the Czech Republic).
In STP-ICT we have no experience.
It is solved by the South Moravia Innovation Centre.
The creation of a spin-off company (with an ownership interest from the university) is a highly complicated affair. We would rather choose the variant based on a limited company, which only has a contractual relationship with the university and no ownership interest.
Start-off companies have yet to show any interest in our premises or associated services.
Space for your response to the above questions on this page
The company submitted 12 applications for utility model or trademark for the year 2012 +For the year 2013, this

number is similar. ++Total funding for research activities - the figures are estimated for 2013 but shall not apply to the operation of the STP, they refer to the overall research activities of companies operating at the original address.
We do not do R&D.
In essence, PIC has fulfilled its original function. There has been no interest from local companies in our services - incubator, technology transfer - for a long time (a problematic region of North West Bohemia). The incubator is occupied by one of the original companies. In addition, the lease agreement will soon end and the owner has yet to provide us any information on their further plans.
The above questions, in my opinion, focus more on TT departments at universities and research institutes, not institutes such as BIC.
Innovative business strategy follows the issue of patents and legal protection - with regard to priorities for rapid deployment of innovative projects and technology transfer the priority is fast “materialization” of outputs with the support of small-scale specialized production (refining, prototype workshop), application services and testing.
Tenants have not shown any interest in our support and our services in these areas. To-date, the current tenants are adequately equipped, informed and savvy enough perform all of the necessary activities in those points themselves.
We have stated known values; clients mostly maintain information as a trade secret.
Other (please specify): Please provide an estimate of what sources will fund the operation of your organization for 2012 (or 2013) (in %).
From the income generated by our own activities.
We are a subject of the state administration – Region.
Complementary activities.
External services, rent.
The company’s own resources.
Our own equity.
Please provide additional information on the method of financing your organization
About 50 % of the company is financed from its own resources, which we acquire through commercial and scientific research activities for Czech and foreign industrial enterprises and participation in programmes of TACR (TIP, ALPHA, EUREKA, COST). The company has recently submitted an application in the OPEC programme and wants to expand its STP activities to include consultancy and educational activities for primary and secondary schools and collaboration with public universities.
We are a purely private organization that needs to make money itself. We reinvest the money we earn (like any non-profit organization) into our activities and development.
BIC Brno is a business and innovation centre, which has operates in the Czech Republic for over 20 years. Through our activities, especially in the field of “technology transfer” we create a bridge between research institutes and industrial companies, and we support the transfer of innovation into practice. + Our aim is to support entrepreneurs in the creation of innovative projects and provide active consultation, assistance, training, as well as important information. Our long-term partners are part of what we call the “BIC Family”. We help solve their problems, we search for collaboration partners and we ensure their continued development through participation in projects financed by international, national and private sources. ++ BIC Brno programme to support innovative companies was previously supported by PHARE and subsequently from business support programmes. When these forms of funding end the support of innovation partially weakened. BIC Brno still continues to support innovation from our own funds or funds obtained through participation in international projects. ++ Support of research and its integration into the international collaboration is ensured at BIC Brno through our participation in MoEYS EUPRO programmes (RKO and OKO in 2000-2012). BIC Brno has built a research organization (pursuant to Act 130/2002 Coll.) and in the framework of its R&D activities has a twenty member “Scientific Council” composed of professors and researchers from leading research institutes and centres. ++ A suitable form of financial aid to support the activities of BIC Brno via the new CzechInvest programme “Consulting” would certainly increase the range of services provided, which would in turn increase the competitiveness of Czech industry.
Costs of the organization are funded from rents for the space of the science and technology park.
The VSB-TUO business incubator is part of the university. The data above on this sheet relates only to the university

unit of the incubator management, not the university as a whole.
Please add your comments to the issue of transfer of technology and knowledge of your organization.
In essence, PIC has fulfilled its original function. There has been no interest from local companies in our services - incubator, technology transfer - for a long time (a problematic region of North West Bohemia). The incubator is occupied by one of the original companies. In addition, the lease agreement will soon end and the owner has yet to provide us any information on their further plans.
We collaborate to a greater extent with the workplace of the founder TC ASCR, which has many technology transfer experts. We participate in projects such as EFTRANS, Technology scouting, etc. We are an accredited member of SSTP and we collaborate with other organizations (AKTOP, ILA, Berg & White, PI/STP/CTT ...). Of course our dealings with the development of start-up companies are in the early stages; at present, we do not perform the protection or transfer of intellectual property.
When we established CTTV its profile of activities was based on the use of existing technology and knowledge and its further development was implemented in pilot form. We monitor the possibility of speeding up the transfer results of applied research through innovative business including specialized production capacity, which is used to solve so-called “customized solutions” - adapted to the conditions of the users and accelerating the marketing process (including the acceptance of small-scale contracts).
Our science and technology park offers services related to technology transfer, our current tenants, however, are not start -up companies and due to their experience and focus they are able to provide technology transfer themselves. In the event that any of our tenants would ask us for technology transfer, we could provide these services (STP manager, technician, receptions - depending on the nature of the request) or through an external contractor (again, depending on the nature of the request we would approach a company or collaborate with the Czech Technical University in Prague Inovacentrem which headquartered at STP Roztoky a.s.).

Companies_1st Wave
Other innovation. Please specify
Transport systems (water transport).
Enforcing massive, multifaceted and idiotic EU legislation.
Monitoring the aging process of optical cables and the changes to their properties.
Health and social care.
We have many. An example for Bohusovice dairy the development of NutrilaC type foods for special medical purposes, recipes, technology. Olesnice dairy - cottage cheese with probiotic microflora - recipes, technology, micro-organisms. Various dairy farms - recipes, technology. Kunin dairy - kefir drinks with higher levels of vitamin B12. RAPETO - BIFI PANGAMIN nutritional supplement. etc.
Development of hydraulic machines.
Other. Please specify: Other: What specific form of collaboration took place?
Patent attorney services performed by employees of the university.
Strength calculations.
2 university cluster members.
Expert opinions.
Testing.
Excursions for students to a combined transport terminal.
Product testing.
Contractual research.
Personal collaboration.
In the framework of GACR, TACR, MIT.
Free consulting services in connection with new projects.
Other support programmes such as TIP.
Evaluation of product safety.

Other. Please specify: How did you make contact?
Academics among themselves share information that our company is interested in collaborating with the academic sphere.
VUT co-founded the cluster, use of previous experience.
Directly contacting a particular workplace with the expected know-how.
We made the contacts ourselves without any mediation.
Based on more than 15 years of collaboration with university staff.
Our own publications.
The founders of the company work or have worked at the university.
On the basis of mutual agreement.
On the basis of contacts from practice.
I teach at the University.
Working together on past projects.
Consultations, assistance in problem solving, lectures for students.
The collaboration is long-term, it has many different forms.
Recommendation from a third party.
Tendering.
Technical journals.
Within the Association of Microturbines.
Recommendation from a third party.
Recommendation from colleagues from the sector.
Other motives. Please specify: Other: Please select from the following list the motives that led you to collaborate.
Efforts to improve transport systems in the Czech Republic (water transport).
Building a future competitive advantage (in the case of successful completion of the project).
Cheaper services than elsewhere.
Participation on other projects.
Lack of capacity.
Mutual benefit (“mental” collaboration).
The state illogically puts pressure on collaboration even in areas where it is not necessary and where a company would perform the activities of the RO far more effectively.
The original idea was that the university will benefit from its research but unfortunately due to the sheer incompetence of universities it did not.
Long-term collaboration.
Other test equipment.
Equipment.
Lack of own development capacities.
Mutual benefits.
Lack of certain calculations and analytical SW.
Expertise and competence.
Use of specific knowledge and skills incl. instrumentation.
At first the motive was an advantage over the competition but at first collaboration advantage of the motif and are now the knowledge and know-how of our academics.
Awareness of the practical collaboration between road and rail transport.
Extension of the development team.
Work on new and important technology and research.
Increase competitiveness.
Check out students before they are employed, these days their level is generally poor and is getting worse.
Diversification.
Profit, making money.

Necessity, otherwise humourless evaluators from the academic sphere would drop the projects.
The university benefits from us in terms of new development directions, sharing the knowledge of development.
Support of the university.
Assistance with the implementation of meaningful themes of applied research at the university.
Finding suitable talent for the company.
Above all, sophisticated solution of our own subject of research and development - a new product - in our case a medical device associated with the relevant medical technology.
The opportunity to test the developed equipment in health care.
Continued collaboration with former colleagues.
Capacity.
Special requests.
Sharing expertise.
Utilization of university capacity.
Division of work, mutual utilization of capacity.
Common objectives, common interests.
Obtaining information from other fields.
Access to know–how in the field.
Faster acquisition of much deeper knowledge in the given area.
Collaborative work.
Jointly inspired collaboration.
Experience.
Equipment and expertise in areas where it is lacking.
A shortage of skilled capacity.
Intensity of research and development work.
Other barriers. Other, please specify: Where do you see the greatest barriers in collaboration with universities/RO?
Zero or low level of co-financing.
In some cases, completely unrealistic financial requirements.
Keeping t deadlines for the delivery of results, standardized methodology.
Lack of funds.
Selection of able (hard-working, creative, having to move the gate) academics from the set of all academics is not a problem (publications, conferences, direct questioning by email). Each capable academic is punished by the administrative authorities of the university for their initiative, participation in projects with manufacturing companies). The economic as well as project department of the university are unaware that their job description is something other than an inspector or controller. Rectors and deans change, these people remain.
Priority is given to creating a good working collective and start solving the problem.
Lack of university resources that could be used for research.
I do not see any barriers.
Desperately poor research performance of the RO.
Incompetent personnel, which in many cases are not even technically savvy, which may come as a surprise. The sheer inability to perform quality research corresponding to existing knowledge, environmental friendliness and cost effectiveness.
Poor performance of academic research.
Ineffective research of the RO.
Low work performance, inefficiency, inflexibility, inability to use the knowledge in real practice.
We do not have problems, we solve them mutually as we go along.
I do not see any barriers.
None, it’s about people , if it doesn’t work we have to look elsewhere.
We do not see any barriers.
It’s a different based on the person and collaborating organization. There is a mixture of all possible barriers (and

those mentioned above) with varying intensity. Difficult to define, it would require a special analysis. To a certain extent, we have long-term collaboration with verified partners where we know their limitations and their possibilities.
The difference between the objectives of the company (tangible result of the development, market procedures, economic performance) and the research organizations (academic results, theories and publications).
None.
Financial demands.
Options for claiming relief for income tax.
University research is not focused on practical results (e.g. creation of software that can only be operated by the author). The main engine behind the university is its commitment to the R&D project and not its applicability.
We have no major barriers.
Everything can be solved if there is interest and partners for university activity.
We have not had any barriers yet.
Different motivation and working methods of the contributory organizations and industry.
Low support of activities in the field of health and social care from TACR, despite the fact that demographic changes clearly indicate the need for more effective service solutions, including the use of innovation, ICT and modern humanities methods.
Problematic accounting procedures.
Weak orientation towards the sale of result - still only focussed on research.
Universities are motivated to acquire impact publications not to work, 99 % percent of what they do is with this in mind and for us this can be totally useless.
I have none.
Low knowledge of market needs.
We do not see any of the barriers mentioned.
low to zero effectiveness in RO - slow, low inventiveness, excessive demands on resources.
The issue is more complex.
Lack of confidentiality of ongoing research.
Underperformance of academic research.
Slowness of any activities at the university!
Completely different priorities of the university and the market. The university is much easier to apply for grants than working on a particular task, with a fixed timetable, the results of which cannot be published, adhere to a fixed budget and achieve real results.
We have no experience with barriers at the university.
We have not encountered any significant barriers.
Non-existent support for collaboration and the endless bureaucracy of development programmes.
Meeting deadlines.
Lack of inventiveness of researchers from universities / RO and they are also not very hard-working (putting it politely).
We do not currently see any barriers.
Universities are not interested in applied research; they are evaluated based on basic research and publications mainly in domestic and foreign scientific journals.
Lack of time of leading experts from the RO.
Low possibility of motivating R&D workers with the gradual release of funds from grant programmes based on the results achieved within the expected time.
Sometimes low agility and commitment in achieving a prototype.
No barriers.
Insufficient free capacity of required specialists for research.
Difficult to define the work required, the need for close collaboration, different criteria for the results of work.
Suggest what should be changed in order to improve collaboration between companies and universities/RO.

Deeper integration with practice.
- Closer personal relationships +- greater support.
Universities should consult with companies on their focus of research. They normally evolve “in a box” - Research results appear in scientific journals but are not applied in the commercial sphere.
For competitiveness results contractual research should be more widely supported. Payments to universities for the supplied results should not be paid at a flat rate, but only after the delivery of the results. This would increase the emphasis on quality and timely results from universities.
Universities should have clear rules prepared for different forms of collaboration.
Better handling of intellectual property by the RO.
Find a common interest i.e. create a stronger link between the output (input) interesting for the manufacturer (marketable products) and interesting for the RO (article, grant ...)
a) for grants more acceptable external demand for themes + b) more accessible funds for less common themes.
There is no central register of activities/database (RC/RO or SME) “where”, “who” and “what” the do - SME usually have no time no or interest in looking for “ someone somewhere”... and so it is solved by other means ...
I do not see any major problems.
Research centres.
a) Get rid of mediators + and straighten relations between the company and the creative university worker carrying out specific research activities in the project. + Today in every regional town there is at least 15 organizations which “promote innovation”. + Apart from exceptions (CzechInvest) the work of this mass of people involves “development activities”, “training of organizations” and other unnecessary activities + TACR has no regional representative and handles it from a single place ++b) get rid of all university departments that were sneakily established under beguiling slogans like “promoting collaboration with manufacturing companies” + instead, assign an accounts to each academic to keep their accounts (not that they delegate work to the academic and become their controller). Performance of such accounts must be measurable and effective. + Ad informandum: In companies the work of an accountant which can converted into FTE (the accountant does nothing more than take care of the accounts of the project) corresponds to 30 projects = 1 FTE of the accountant ++c) in the Czech Republic (establish a single accounting department somewhere in the Ministry with qualified accountants who for a reasonable fee will help companies (and academics) with the accounting of international projects (FP7).
It is important to mutually beneficial connections and proper selection of the research team with the specifics of the connection. Immediate solutions friction surfaces.
Improving the economic activities of universities and RO.
People and their thinking.
Universities often provide their work at the lowest level, i.e. the performance of simple measurements. The measurement values are not the result - it is necessary to define clear conclusions, showing what the company must to improve, innovate, etc.
Research focused on the needs of industry, compulsory teaching hours of students in practice.
Work only with professionals.
If a company is to grow it must invest and must have finances to rent university laboratories and pay service personnel. It is clear that the university must make money (at least partially) and therefore cannot approach collaboration by providing the company with its know-how and research results for free. The company must have a sufficient amount of its own funds or else it cannot collaborate deeper with universities.
More modern training that corresponds to global trends and equipment.
Simplify administration.
Clearly defined commercial and legal procedure of how to engage the university in the market environment. + + Or a procedure for how to simply invest the finances generated by companies into universities in order to obtain qualified experts and know-how.
Professionalism, rapid response to comments.
Put less emphasis on searching for university staff for the evaluation of publications at foreign language conferences, often irrationally and purposefully organized at universities, compared with collaboration with

industry with tangible results.
Only give money for research to companies and businesses to pay people at universities.
Easier administration for joint development.
Logistics of office work.
Support of collaboration in the form of projects is very inefficient because of the inflated administration. Researchers spend more time managing the project than on their own work even if they employ administrative staff – they still have to prepare the documentation. More effective is direct collaboration between businesses and universities on specific contracts. The support of this system would be e.g. tax relief.
I don't know.
Reduce bureaucracy and reporting obligations (Czech Statistical Office, RVVI...)
1) Increase the openness of universities to communicate with the contracting authority. +2) simpler administration.
Flexible and participative administration.
Communication, collaboration between universities and practice, comprehensive investigation of the problem.
More time spent on specific projects on both sides.
Train university staff in understanding the world of industry and commerce, train university staff in marketing innovation of IP, cancel the CTT in its current form and the current staffing as a strongly complicating element of collaboration.
??, perhaps sometimes a more friendly form of negotiation...
There is no parameter of speed of research + There is no parameter for assessing the participation of private capital in projects. It is most decisive and the fair.
Simplify administration (project management) at the university + General support for staff participating on research and development projects at the university.
University management is completely incompetent.
The possibility to apply the interim results of research into other related steps of the project i.e. if it is found that the planned schedule is not leading in the right direction, it must be easier to change the procedure than unnecessarily spend the scheduled resources without achieving the best possible result.
Flexibility of the management of the university, at the RO it is not a problem.
Cancel the possibility of 100% grants for RO, which should significantly improve their motivation to collaborate.
Evaluate students involved in collaboration. There is low interest in practice from students.
This is a naive question. The must be a functioning system where the academic must confront practice in regular cycles and only after they are successful in practice can they begin the next academic cycle. This is unrealistic in the Czech Republic. ROs are average and below average Molochs. So what should change? The staff of the ROs...
Greater promotion of research and development, support for new technologies that make sense.
Universities need to be designed in a completely different way. Greater expertise, more rigorous selection procedure and no work tenure, the requirement that academics also have non-academic practice. Knowledgeable professionals should be working at universities and not people who would not be employed anywhere else than in the academic sphere.
Total change of personnel in the academic community.
Greater public support for joint projects. Set project rules for relationships between businesses and universities.
Universities should start to be more flexible, they should not have so much bureaucracy. Greater autonomy of young people without dependence on old professors who are there in quiet retirement.
Universities/RO should be more motivated to work on applied research and to solve the current problems in industry.
There is not enough pressure on ROS to collaborate. + In the clash of two worlds (commercial and academic) enterprises often lose motivation, partners often have different objectives. Surprisingly the final product is not the joint objective for academics, the transfer of technology = points is enough for them. + Enterprises would certainly welcome tax relief for technology transfer, and working with senior graduate students, etc.
Optimize research at universities and get rid of the absurd, unpromising and obsolete research. Define clear

priorities. Focus mainly on applied research. Our country is too small for basic research. Each university must be able to publish research tasks in a simple form so that they can be made available. Faculties should not have more than one task in a 5 or more year period if the task does not clearly extend to the commercial sector.
Less administrative burden.
Some companies have made a living from the whole system. Research and further application are only a described paper that is not applied in practice but the money can be obtained - in huge sums.
Collaboration would benefit if the money allocated to R&D projects was already stolen during its evaluation by TACR, GACR, MIT, etc., i.e. if the money would be allocated based on the quality of the project and not on the basis of personal contacts and the political pressures involved.
Public research organizations should be more motivated to conduct research with commercially viable results while maintaining an economically reasonable amount of costs for the given development for a collaborating commercial enterprise.
Well financed projects focused on the manufacturing sector.
Closer connections between of universities and practice.
Less administrative burden.
I don’t know.
Increase the dependency of financing of PPIs for specific results of developmental tasks in applied research.
I don’t know how it can be solved both institutionally and methodically, both parties must want it and it must be beneficial for both.
Increased motivation of university staff to their activities in research and development done within the university. Many of these conduct business privately because the set conditions are often de-motivating.
From my position I rate the collaboration with the university / RO as being very positive. + + However, the rules for collaboration between companies and universities / ROs should be clearly stated (and state-controlled).
Simplify administration.
Indirect support - tax relief for costs related to working with RO and evaluate ROs based on their commercially utilized result of collaboration with commercial entities.
Collaboration without the hassle.
TACR projects are motivating in this direction; continue with further calls from the Alpha programme.
Universities should be forced by the state to better support the commercialization of their results. + Option to write off collaboration with the University as research and development.
Regional universities should focus more on technology and the needs of regional companies.
- Greater pressure on universities (from the founder) to collaborate with non-academics - Now universities are by and large an almost closed community ...
Universities /ROs should receive only a part of the money for projects and the rest when they properly perform their work in the framework of the project.
Accelerate work on the project.
Less bureaucracy.
1. Motivation of universities. +2. Improve conditions for the sustained profitability of collaboration between enterprises and universities with ROs.
Set rules for financing universities/ROs so that these institutes are clearly motivated by the practical results. Today, in most cases, there are experts in the justification of grants and subsidies. Stop investing in extensive development of higher education because it then generates additional requirements for operational funding but without much effect on the practical application of the results.
Businesses should pay research organizations based on the actual work done or, better yet, on the basis of actual benefits (i.e. only a share of the turnover in the first three years after introducing the research results onto the market).
Universities/ROs should be better funded and evaluated differently. The number of publications in impact journals should not be considered an appropriate criterion. This would reduce the pressure on workers and improve the quality of work and meeting of deadlines. In the case of universities, define the scientific and educational activities

of workers and then subsequently form groups with sufficient capacity for R&D activity.
Greater support from the state, better access to funding for joint projects.
Clearly defined interfaces between educational activities and research activities. Space is required for both activities.
Clear commercial results that bring benefits not “points to the RIR”.
Simplify administration.
-
Flexibility of university staff towards the given theme, creation of responsibility in the project, pressure to commercialize during projects and accountability for results.
Greater initiative from the university, offers for collaboration in specific fields.
Narrow the research areas and concentrate financial resources on a smaller number of projects, greater interdependence among students and practice - training, internships, etc.
Simplify administration.
Universities should be more open and flexible in relation to current market needs. Any change (be it logistic or in thinking) takes an inordinately long period of time at the university. The effectiveness of collaboration is also hindered by the reluctance of the academic community to adopt the new Higher Education Act, which structurally changes the competence of university leadership and the management structure.
Flexibility and speed of provided service, willingness to take risks, reduce the cost of services.
Increase the mutual awareness and trust of both sides on the basis of personal contacts; change the system of evaluating the success of teachers, which is now based on publishing the results instead of practical research results (patents, new technologies, new products).
1. University instrumentation compiled outside the traditional elements of basic research and partly from elements of applied research. Such a university is able to take the feasibility of result more into account during R&D activity. +2. Give universities professional privileges in the expert analysis and assessment of large national tenders (e.g. in transport during the construction of major roads, in defence during the performance of contracts, health care ...). These professional privileges should be publicly known and promote the attractiveness of universities to the commercial sector.
Shorten the time limits of the required activities.
High financial demands of universities/ROs.
Remove the above barriers.
Universities must learn to cover part of the costs of collaboration with industry and they need to set up a team of competent managers, not only to have officials who are understandably afraid to make a mistake.
Generally speaking, I don’t know.
There should be more opportunities for direct meetings i.e. more workshops focused on collaboration, etc.
Funding of higher education institutes only on the basis of projects is dangerous; it may cause an outflow of top experts.
Internal accounting rules of universities/RO and legislation for the application of costs for university employees in companies.
Increased motivation of institutes and universities. Part of the motivation is obtaining funds - grants, substantially less is the interest in the successful result as the main objective. The joint participation of practice is tolerated only because it is required.
The requirement for the involvement - financial need – of university staff in projects of enterprises – so that they are to a certain degree dependant on this collaboration
Ensure greater coherence of RO with enterprises.
Regular meetings with representatives of universities.
The need for greater flexibility and responsiveness - solving tasks not only with student work but concurrent business activities of universities with the active participation of students. Then standardize communication channels of universities with the private sector - simplification of the assignment of tasks and transfer of solutions

through specific…
In points: +- reinforce the competencies of involved workers among SMEs and universities +- resources for mutual collaboration ++
I feel that the knowledge and competence of our universities are significantly lower than in enterprise and in foreign schools. I do not see any motivation to adapt to our needs. Everything is slow, verbose, without any real or fast action.
Further simplification of rules of collaboration.
Simplification of administration + view of universities/RO on collaboration (from the established world of academia to the world of commercial contracts) + investment of our funds into joint projects (i.e. not only in the form of the time of the individual employees of universities/RO).
The possibility to make changes during the course of the project, when you lose the sense with which the project began and why the company became involved in it - see e.g. legislative changes in subsidies for the co-incineration of biomass. The possibility to switch to an alternative objective in the same field, which will be beneficial for the company.
Less bureaucracy from the provider of grant programmes ++ greater willingness of schools to achieve the final (commercially applicable) product than to own part of their research, i.e. focus on the final product - not its theoretical part fit only for a Bachelor's dissertation etc.
Greater involvement of universities/RO in the result.
Financial interests in the results of development
Financing
Better promotion of what universities can offer.
Flexibility of the administrative procedures of universities, + change the negative attitude of some scientists to applied research and the practical results of their scientific activity.
Learn how the university system works particularly in the USA. In the Czech Republic it is often just freeloading on grants and contributions per capita (student) and this affects the type of people at the university.
Get to know each other's needs, priorities and work style.
Universities are primarily focused on the generation of publications in journals and there is no visible effort to transfer technology into practice. This is probably due to a lack of greater motivation in terms of the evaluation criteria of universities.
If there is an agreement, so I see no barriers to collaboration between universities and enterprises. The only thing that could be better is an overall simplification of administration.
Increased activity of universities in contacting companies with research activities and their further application in the part of the applied research. + Activity and responsiveness of universities during the assignment of seminars/Bachelor's/Master's theses on themes that are generated by enterprises – themes from enterprises should take precedence over themes from schools. This would primarily provide the possibility of using or implementing the results of the work and also the possibility of better employability of graduates in private companies.
Improve the funding opportunities in this area.
Implement programmes to support the transfer of results. A model could be Rural Development of the Ministry of Agriculture – under the measure of innovation. The enterprise is supported in their innovative actions involving research and implementation under the condition that the research/private organizations, PPI, universities participate, it receives part of the funds for research, investment in equipment, construction work and other costs.
Reduce bureaucracy and the rigidity of apparatus. + Isolation of several workplaces.
Reduce administration processes - very lengthy contracting processes.
Universities should be given more resources to ensure that they can propose the testing of new technologies along with enterprises. Subsidized research projects are set up so that instead of testing new technologies which begin abroad, they can only "investigate" or verify through research technologies that private enterprises have already tested and implemented. In our line of work it is not possible to talk about the results of basic research.
We work with VUT Brno. Not much. When we collaborate we do not have any of the problems that are stated in the

previous question.
Simplify the administration of applications, improve mutual awareness.
Collaboration lacks a common interest - to invent and sell. If the university was part of a business and like a business invested in development and then had a share of the sales profits, then it might work better.
Develop a formal relationship between enterprises and universities so that collaboration is based on mutually communicated and identified needs and not only on the personal relations of selected employees.
Legal and tax regulations.
Let enterprises have the money they earn and assign research and development at their discretion; they no longer care about effectiveness. Introduce training and also tax assignation of legal entities that pay taxes, for the benefit of specific disciplines at universities so that it is clear which are the disciplines that enterprises want - then education will be cheap and useless and the student will have to pay the full amount . And if they do not, then soon there will be no one for skilled work where something is produced. There will only be public administrators, social anthropologists, political scientists, and philosophers, etc.
Better defined rules for the commercialization of the results of supported projects. (easier way for enterprises)
Greater willingness to collaborate and inflexibility on the part of the university regarding all sorts of administrative barriers.
Greater support from enterprises employing students (professional practice) and recent graduates of secondary schools and universities.
Reduce administrative burden.
Simplify the process of approving contracts, unwillingness to work on projects in the preparatory phase, where the recourses are not yet known, little knowledge of practice and use of practical knowledge.
Create an entity to cover jointly solved requirements so as not to degrade capacity on both sides.
Simplify bureaucracy in relation to other institutes.
Appeal to the practical application of the results of research tasks and their availability for individual enterprises.
Earmark large resources from ROs to applied research and experimental development.
Only a generation change; according to my experience the younger representatives of the universities are more flexible and innovative in identifying potential interfaces in projects.
Less administrative burden.
Clear objectives, roles, responsibilities, involvement, rewards.
Simplify administration.
Less university formalism.
Simplify administration on the part of enterprises, allocate resources to external research.
Facilitate access to finances from public sources, which currently do not provide transparency and effective management of public funds. You usually have to hire an expert for the acquisition of grants and yet (and perhaps because) the funds are given to poor quality projects. +Maybe promise at the beginning instead of grants a interest-free loan for the project, and gradually, as its benefits unfold over time, provide bonuses for meeting clearly defined parameters (on a professional level it would be possible to assess the results as well as the staff of local universities). Certainly involve universities more in practical research results.
Establish closer personal contacts, find common objectives and interests.
The university should not be an incompetent Moloch who would not earn enough for salty water in practice, in the state they are now. If such a clear out of staff was supported, I think everything would work on its own...
Firstly, the current situation is appalling. Academic practice is full of average, intellectually impotent individuals. They do not produce anything, either in basic or applied research. The produce inapplicable research, i.e. something that is not basic research and cannot be applied either. A great way to earn a living. The solution that the situation will improve by enterprises performing research by carrying these academics on their shoulders and subsidizing them or persuading them to finally start something meaningful, is naive and misguided. Encourage enterprises with the potential for something that is not just a mere burden ...
The capacity of researchers at the university is lower than in enterprises, low orientation on results.

Organization of practice for students.
Universities should invest in the innovative centre - CTT could be managed by people with practical experience. Many universities lack the conditions for small-scale pilot production – e.g. clean rooms. Involve experts from practice in school activities – a strategy for research and education.
- Simplify administration. +- Universities have high overhead costs; the price charged for similar services by commercial entities is paradoxically cheaper, often significantly. +- Universities do not have project managers, experts are often not good administrators and it is not expected from them. +- The state should pay enterprises for the practice of students, today it is often the opposite - the enterprise pays for the student's internships, while having to also pay the associated costs. +- University staff usually do not have a car and money to travel, so the meetings take place mostly at the university, which can sometimes be limiting. +- Professionals at universities often have very high teaching loads, so they have little time for research.
RO staffing.
In several cases a competitive role within universities/RO (between faculties or centres) ruins collaboration.
You ask, as if it was the will of these people to change anything ... have you already forgotten the street action, when the otherwise toothless amendment to the Higher Education Act was prepared? Or look at the opinion of Drahos... who would cancel TACR at the drop of a hat and consume the "saved" resources, but 70% of the budget for TA projects is given to ROs instead of enterprises, without a whisper! What would you like to change in such a system, for God's sake? People? Jokers ...
Mandatory experience in companies in cycles of several years for academics. Once they prove themselves then they can return to teaching. Today, individuals "educate" future "experts", who would not even earn enough money for their own existence. This is really great preparation for young people...
UNIVERSITY STAFFING
I think the main problem is the people. While innovators and researchers from enterprise have strong and intensive experience with the academic sphere (study, practice, often leaving in disgust), academics have zero experience with the corporate sector. It is then difficult to find a common language. If enterprises have the obligation to collaborate with ROs otherwise they will not get a penny for development then agencies like TACR should also see to it that the ROs have a similar obligation to send persons from the academic sphere to enterprises. And I do not mean students who otherwise need it and are often gratefully take the opportunity. I mean academics who, isolated in their institutionally provided environment, fight with each other undisturbed over academic power, positions, and money.
Academics -> to enterprises.
Contact staff at universities/RO with practice! Until they know firsthand, it will only be enforcing on the companies something that is not worth it.
It is on many lines. Surely it deserves a separate survey! Universities (ROs) live under the illusion that they produce the most amazing research, and if enterprises were worth anything they would already be earning money from it. The memorable performance of Professor Drahos on CT24, which he described "foreign scouts prowling around the boards of the presentation of results of Czech scientists" at a conference dedicated to knowledge transfer of the Academy of Sciences and universities. And the Czechs were not! Just look at the annual reports to see how many transfers were sold. And if a transfer is sold, usually there are grants for those who buy it, often a befriended "company" which was established by the same people that bought it (exbio has been doing this for years). In short – it is about people. Universities (ROs) will always be incubators of average, so you cannot expect them to offer something above average, which is the innovative corporate sphere. Enforcing collaboration by using the scoring system in ALPHA, Epsilon and possibly others, supports universities (ROs) in the short-term but in the long term it cannot bring anything. Logic – is worthless even if it costs money, so give us more and perhaps we can produce something, the corporate sector enjoys a fraud on the taxpayer. For me it is a deluge. No one is currently doing anything with small innovative companies in the USA for example (see their SME business program support) that have most of the super innovative ideas. The support only began to succeed when several universities started to hang around them and to help them (especially by knowing the evaluators). This system is going under! It is unsustainable in the long term. It forces the support of inefficiency and undermines capable legs. I know dozens of dignitaries from universities. I can honestly say that a firm would not employ any of them. It would be a waste of

money.
CONFRONTATION OF UNIVERSITY EMPLOYEES WITH PRACTICE.
University staff should have to have practical experience. Until this changes, NOTHING will change! And I do not mean the experience of a start-up grant, which is passed to a concerned “businessmen” among the university staff by his friend who sits in on a grant or subsidy council.
The staffing of universities/RO would have to change.
Greater personal experience of university teachers with practice.
Researchers from the corporate sector should get closer to students and vice versa, researchers from academia should regularly in sufficient time prove their ability to transmit knowledge in enterprises. Unfortunately this is unfeasible as academics are afraid of confrontation with the corporate environment.
1. functional positions of professors +2. academics should have 3 years' of experience in companies every 5 years +3. CANCEL compulsory collaboration with academics, if a small business wants to succeed with the project!!!!
Above is the selection criterion “Saving costs for research (economically more efficient than internal R&D)”. This has to be a joke? Let’s do the numbers together: ++a) Our company wants to perform research because it will end in us obtaining contracts. +b) We formulate a project +c) in order for it to be accepted, we must have effective collaboration. +d) so we submit a joint project with a RO. +e) if the resources of the project are balanced, we can say we have the same costs as the RO, let’s say 1 million CZK each. +f) the total support, however, is 65 %, so our small company co-finances the activities of the RO to the sum of 350,000 CZK. +g) we obtain a total grant of 650,000 CZK for research and from our own resources we give 700,000 CZK. This is an amazing deal, right? +h) meanwhile the RO performs activities for a 1 million CZK grant, which we could easily do ourselves for 1 million CZK. + ---------- + In summary: + the State gives 1.3 million CZK + we give 0.7 million CZK + the actual price of the research: 1 million CZK + + Sorry but is this supposed to be “Saving costs for research (economically more efficient than internal R&D)”? Is this effectiveness in practice? I repeat once again: it was 2 million CZK in total, we could do it for 1 million CZK. But what about the people in the RO?
The commercial sector is built on performance and the rule of survival is profitability – effectiveness. The university sector is built on academic freedom, which can be interpreted as - give us what we want, and especially do not dare tell us what you want us to do for you or, God forbid, do not ask us for tangible results. Therefore, these two disciplines cannot complement each other. It is necessary to change one or the other. But because the company pays, maybe it would be better if the change came from the university/RO. So what exactly needs changing? The position of the RO. And how can we change it? Freshen up the RO and shuffle the people around - those from the RO go to practice and those from practice to the RO. After all, it should be one of the pillars/conditions of the project support from public resources that an enterprise will engage its staff in teaching at universities and university staff will go to practice to show what they have to offer (or not).
The whole system of priorities in the country would have to change. I think that the “cheap” money would have to disappear from the system. + If it is easier to get money from state aid than it is to satisfy customer requirements then even manufacturing companies will ask for support. The only criterion which should be used to evaluate applied research is the money made by the project. Reporting of other results is misleading. Publications and their numbers are not related to applied research - the result can be used by everyone. If the patent is registered to the respective territories then it has no meaning. If its use does not earn more than the cost of the application and the research project then it has no meaning. A utility model is a simple source of revenue for ROs (novelty is not evaluated, work for about three months - the annual contribution of RIR points – 20 to 50 thousand CZK per year for several years) + The state budget should only finance basic research (to the extent that the state can afford it). Universities should be rewarded only by the number of graduates who find a place in the sector in which they studied, in a position that meets their qualifications. Universities should not be funded according to the number of publications, patents or students. Universities whose graduates cannot find qualified application should be closed. Applied research should not be funded from the state budget (it should be self-funded in the longer term). + in order for there to be a friendly environment for research and innovation (and for it to be worth investing in research) the system must be friendlier to entrepreneurs - a smaller amount of regulations, severely limited government, transparent tax system, lower taxes, etc.
In our experience, this cannot be generalized because we collaborate extensively with universities. However, we

have chosen a specific university / department / institute, because in some workplaces of the same university the collaboration is excellent and in others there are a range of problems that impede collaboration.
Ease of establishing collaboration.
Reduce the administrative burden on universities and allocate more resources which come directly to the university for collaboration to those who conduct the research. Administration overheads are disproportionately high.
University staffing.
Universities/ROs should be more open to people from enterprises and vice versa, people from universities/ROs should forced by rules i.e. legislation to confront their skills with practice!
The complicated answer. The state administration has become a depot of average and non-performance. This is the main problem. In order to change this, collaboration should take place naturally. Unfortunately, at this university it is very difficult to find partners. And if by chance someone finds one then they will usually have ideas about themselves and their work rates which do not corroborate with their skills. These are usually the students which they produce. Confidence, incompetence. What needs to change? Perhaps a thorough exchange of positions at universities. Find capable people from practice. But these people regard the academic way of life - academic cronyism and politics - as being abhorrent. Therefore, this is difficult to implement. But everything stands and falls with the people at universities. The academy is doing much better than universities, it is just controlled by idiots (incompetent, careerists, who love the limelight and love to listen to each other and how they are world famous (see the complements to ERC).
The quality of university/RO staff would have to increase significantly.
The current collaboration is absurdly enforced. Do you want money for corporate research? So get a partner from a research organization! The effect is that instead of being developed from the research a small business, what little research it has, it gets bogged down by inefficient research of ROs in order to be co-financed. It is economic stupidity. Let the RO be so attractive that companies will want them and then we can talk about co-financing. The current situation is a way of getting more money from companies to maintain inefficiency. In the USA a few years ago research compared the performance of applied research in companies and at universities. And it was found that the volume of activities that cost the federal budget 1 USD is in the corporate sector 2.5 times higher than in the university sector. TACR should finally start to listen to companies rather than academic lobbies and come up with a programme of this type so that even companies can compete for grants. And not have the ball and chain of research organizations around their leg...
Speed, flexibility.
Reducing administrative constraints during the negotiation of collaboration.
Reduce the percentage difference in the level of funding for research.
Administrative simplification, greater elasticity and flexibility, more autonomy for individual institutes, faculties, departments of universities and colleges.
x
Higher penetration in terms of interest in research.
We have a thoroughly positive experience of collaboration with universities.
Connect the expected outcomes of the project (research and development) with the objectives of the specific employees at universities/RO.
I have no comments.
Functional point of contact for partner search.
Mutual exchange of information on innovative projects.
Clear definition or limitation for the application of the results (know-how, acquired HW/SW) of collaboration with universities/RO for commercial purposes. In some specialized fields it significantly degrades the standard competitive environment.
Reduce the administrative burden of reporting projects to support providers (MIT, TACR ....)
Increased emphasis on the education of students with regard to the requirements of the market - companies.
Clear identification of a task coordinator.

Developing the potential for joint projects of companies and RO dealt with public support are a good way.
Reduce subsidies, 100% subsidy is wasted without effect, introduce the necessity of co-financing based on business
The collaboration suits us.
Focus on the commercialization of research results into practice, restrict theorizing (research, “copying from the Internet”), use feedback from practice in universities.
1. Less administration – burden on time +2. Having to provide funds to supported / funded projects from PPI and universities is a barrier to collaboration; these institutes do not have enough +3. Promote collaboration for a relatively small improvement of the existing situation in a commonly used practice, quality collaboration deepens over a longer period of time, and both parties better understand what practice needs and science offers, the quality of results of collaboration is improving.
Greater involvement of experienced university workers. A typical example of the situation at universities is that the project manager for the university gives a sub-task to a student, who knows little about the given issues and basically learns about it during the project. Then there are many errors and adjustments, which cause delays.
Our experience is entirely positive. Perhaps only a 100% grant share of universities, compared to a limited share for companies would lead, regarding the minimization of the total cost of the project, to an economically necessary minimization of the share of the cost of the university and thus the necessary but undesirable limitation of its project participation.
?
Our mutual collaboration does not need changing, we are in daily contact.
Minimize bureaucratic requirements and reporting method. The costs associated with reporting and compliance requirements, along with the risk of returning funds may exceed the amount of support (from the perspective of a large manufacturing company. Whilst removing the positive effect on the co-investigator.)
Let people work.
Reduce bureaucracy.
Academics in the project are too academic and removed from real practice - customer requirements. They mostly prioritize technological interests of the project than parameters such as the price of the product. The work rate is also slow compared to a private company.
Improve the rules of collaboration by simplifying administration.
Reduce administration from the side of the grant organizations.
Greater consistency, more precise contractual relations.
Motivation for conducting quality work, which is often missing at universities/ROs.
Stop requiring, + the university/RO to co-finance their share of the research/development from so-called “private resources” + a public institute obviously has little of these; which causes a problem in the real budget when applying for a joint university-business project in a public tender.
Simplify administration during the provision of support for joint projects e.g. the possibility to modify the project and transfer funds between chapters and years. For longer projects it is very difficult to strictly determine the schedule, which is often dependent on the partial results and must be modified during its course. The inability to transfer funds leads to inefficient “spending” according to a rigid budget –it is spare in places and in others it is missing. The limit of 20 % for services is also low – these days there is the need to involve more specialist service providers in research (designers, laboratories, experts ...)
This is a long study. But to put it simply: remove the separation of RO from practice -> workers/university teachers/RO made at some time to work in corporate practice. Conversely, universities/ROs should be open to people from industry. Today workers/university teachers/ROs dread confrontation with corporate practice because they would not succeed. At least most of them. Conversely, capable people from enterprises must bribe the workers/university teachers/RO with various benefits of joint projects, so that they could have an opportunity to pass something on to students. And so the space does not match the possibilities. If this was resolved 99% of the problem would disappear by itself.
Activity of PPI in the presentation of results of their own research to commercial companies. Real interest in applying the results in practice.

Leave it to natural evolution! Universities must undergo an extensive clear out and replacement of personnel. Do not force small enterprises to have a university partner in a project so that they can have a chance to succeed. Universities are extremely badly managed, which is confirmed by their very nature. Solving it by supporting companies that need resources for internal development, when the state is not able to restore order at universities due to screaming dignitaries is stupidity. Small and medium-sized enterprises actually have no real ability to support research nowadays. Only when they start bribing incompetent people.
We share the views of the SME association.
Universities are a world unto themselves. Isolated, they react to everything on the outside with suspicion, hostility and irritation. This is where it is necessary to begin. Communicate to academics that they are paid from taxes of companies which create value. Therefore, whether they like it or not, they must listen to companies. Companies do not want much. They want university graduates to correspond to the idea of the company about what a university graduate is. Dozens of graduates come to us for an interview every year, and if we take one for training, we consider that a successful year. This is where it is necessary to begin. Replace the average that universities now teach with above average from companies. For individuals who are able pass values on the professional life of students. Once the average of universities has largely disappeared with it will disappear the problem that you are asking. Suddenly it goes, alone and without the enforcement of collaboration, which I think is a big mistake. Small businesses suffer greatly from it.
To put it simply – a purge of personnel at universities is needed. Everyone should have 3-5 years of mandatory practice in business. Those who succeed can return to shape the younger generation. This will help create much needed links and transfer between companies and universities would inadvertently start to work. Under the current arrangement, it is not possible to do anything with the existing people at universities.
Reduce project administration.
Motivate universities with something other than articles with impact factor, more focus on the real use of the results and the application of the developed technologies, motivate universities to become more involved in project work, to better evaluate the staff working on projects, motivate them to participate in collaboration
Increase the motivation of universities/RO to achieve specific results applicable in practice.
We generally do not have a problem with collaborating with universities. We found it helps to precisely define the rules of collaboration and ensure that the project manager controls the fulfilment of the time schedule, which researchers and students tend to interpret very loosely.
Better connections between academic theory and the real world market, especially respecting the physical capabilities of people. There is no “manual dexterity” or at least an idea of how thought up procedures can be done in reality and not “on paper”.
Greater involvement of PhD students to practice in enterprises.
Proactive approach to identifying themes and universities offering them.
Clearly predefined conditions of commercial collaboration, particularly in the case of overlapping activities of companies and universities/RO.
Facilitate access to public resources.
Simplify the bureaucracy on the part of universities.
More flexible functioning of universities.
Greater financial support for state colleges and universities for their own research and follow-up collaboration with companies.
Collaboration between companies and universities/research organizations is generally seriously complicated in the Czech Republic by the applied system of funding/support of joint R&D projects. All of the entities involved are unreasonably forced to plan/perform activities within the R&D projects in a calendar year. Support/funding is allocated to the calendar year. In the event that during the R&D, a situation arises where a task is demanding and requires longer testing then it becomes unpleasant, the rules of providers poorly govern how to continue in the project. The researcher, who due to the delay of a task returns part of the grant because they cannot continue in a related task, has no legal entitlement to the recovered support in the following year, and the provider is not able to guarantee the allocation of the targeted support which was returned in the previous year. This situation severely complicates the financing and implementation of projects. Targeted support tied to the calendar year instead of the

fulfilment of the project objectives threatens the implementation and completion of projects within the scheduled deadlines and scope of work. In addition, it forces all of those involved to spend the allocated funds for the year, regardless of efficiency and its effective utilization.
In general, collaboration is good. Both sides have an interest in deepening collaboration in the form of joint development of a complex energy product, whose benefits include the extension of application on the consumer market, simplifying the installation of local energy sources, improving the parameters of emissions at the point of installation, and increasing the efficiency of the fuel use. To facilitate the implementation of the project, which was also the basis for the expansion of collaboration between our company and universities/ROs, an application was submitted to the ALPHA programme for 2012/2013.
Fundamentally change the inflexibility of the university system.
Universities should offer more solutions that are real innovations and not only improvements. They have set the wrong motivation because from the point of view of RIR points it is better to register large amounts of utility models (low added value, unverified by the authorities) over patents (greater added value, verified by the authorities). Their research should begin from technologies on a world level, which can be acquired through quality analysis (e.g. though a patent), not a local level (in the Czech Republic, or worse only at the university).
Reduce the administrative burden of managing projects using public resources, but on the other hand, I understand the need for transparency in the use of public resources.
It depends solely on people + barriers are there to be overcome and only when both parties want to overcome them can it be achieved :-)
Clearly set rules.
When performing projects supported from public funds maintain the level of support of the company up to 80%.
Each entity is looking for effectiveness and a quick return from collaboration. Universities have high financial demands without being able to guarantee the results of research within a specific time
We are satisfied with the current level of collaboration.
Application of the aid intensity in the case of collaboration between companies and universities/RO in the framework of R&D. In the event that it is not possible for university/ROs to collaborate in R&D at an equivalent level of support as the company then this collaboration in R&D is to the detriment of the company. The aid intensity with companies decreases in the context of the capabilities of the university/RO. The amount of co-financing from universities/RO in R&D can be such entities limiting during collaboration.
Greater freedom during the project - the opportunity to test multiple lines of research, if they appear during the research and are not part of the application and their verification is desirable.
In the case of grant programmes the principal investigator should have the opportunity to gradually release the allocated grant for each year, (not the entire amount in one transaction within a certain period of time after receiving the grant - primarily from the experience of TIP) based on the achievements and progress of the R&D work.
Stronger links between employees i.e. more people from practice at universities and vice versa internships of university staff in businesses, so universities can have a better understanding of the real needs and realities of the environment for which research is conducted.
Greater support for collaboration between companies and researchers from the university management.
Better presentation of the services offered at professional seminars-for example seminars and conferences organized by the Association of Blacksmithery of the Czech Republic.
Provide copyright claims on the side of the client. + Provide confidentiality which is contrary to the efforts of these workplaces to perform publishing activities.
Simplify and clarify the rules of public support, in particular clarify the conditions for the use of the resulting know-how, clarify the competence of the main recipient towards the other participants if they are responsible for the running of the project, and in this context clarify the responsibility of the other participants during public control, simplify administration during the submission of proposals so partners can focus on the technical quality of the design and planning of the project, universities should be evaluated according to the degree of collaboration with enterprises.
Application of the principles of market mechanisms in the environment of the academic sphere (marketing, etc.).

Recognition of practical results and real applications as being relevant results on academic soil. + Make sure the results of R&D are closer to practical applications, more testing with real data. + Writing an article about something does not mean that it actually works and is utilizable. + Provide support for the sale of results, correction of errors, further development.
Greater interest of universities of the needs of specific enterprises.
The response time on the given matter and findings during the research.
Collaboration with specific research and development staff is generally very good + a barrier to this is often the fossilized and inflexible administration of universities, which often complicates the performance of projects.
Evaluate universities and ROs based more on specific outputs of collaboration with industry and less for publications.
Support of university management of schools for the collaboration of workplaces with SMEs.
Greater willingness on the side of universities + In particular, better evaluation of universities for collaboration with practice.
Eliminate the concern that inside information will be misused e.g. given to the competition.
If we are talking about collaboration involving public funds, which co-finances the research activities of universities, then it is in particular the reduction of administrative burden, e.g. simplifying applications, etc. At the same time a general shift in attitudes is need whereby it is completely unsustainable for academics to continue to only have priorities in the area of education and research, especially contractual research, considered a secondary activity.
Greater involvement of student work in practice + Direct application of the knowledge of students in practice.
Definition of rights for intellectual property arising from joint projects.
The structure of how universities and private enterprises are run is too different. Private enterprises are more focused on the effective use of both time and finances and the principle of how universities are run should be closer to that of the private sector if they are to work together effectively. University staff should be more motivated by achieving results within a certain amount of time.
Legislation, tender documentation for projects, methodology for the evaluation of ROs, etc.
Greater involvement of universities in the application of research and development in industrial practice including the acceptance of deadlines for the implementation of results of R&D in industrial practice.
Mutual perception.
Greater flexibility in the selection of appropriate specialists from schools during the course of the project.
As in other countries, 50 % of the salary of the professor should be paid by of the activities carried out in collaboration with industry. The requirement does not apply to basic research, which should always be paid by the State.
Legislation should be more responsive to universities especially in terms of remuneration of researchers and the management of funds. Internal bureaucracy and restrictions on remuneration of key researchers is a major barrier.
Simplify administration which is stifling research.
- Lack of quality researchers at universities able to work with industry +lack of funds for research in the majority of Czech enterprises.
More expertise on the part of the university staff - profiling experts on the given theme rather than a general knowledge of a large area of the field.
Criteria for evaluating the work of universities and academies (number of articles, theoretical results, etc.) against the criterion of manufacturing companies (fast implementation of results in the form of new products). As a result of the criteria being set for universities and academies there is less interested in following up research results into the implementation stage.
Other. Please specify:: Other: Please state the reasons why your company has yet to use the services of a CTT/STP
We usually deal with the relevant organizations.
I do not need them.
We deal directly with interested professional bodies.
We have not needed them yet.

A disproportionate increase in spending from an upcoming project, low level of expertise.
We prefer direct contact with a particular RO workplace. After all - the CTT workers themselves curse ROs (see, e.g. the (dis)functionality of CTT at Charles University in Prague).
We have our own STP.
We use direct contacts without bureaucracy.
The problem is time and money.
Concerns about the loss of know-how.
Incompetent Molochs.
Egotism.
So far, we have collaborated with universities and there was no reason to change this situation. Education in a company is driven by the needs and situations in different ways. We deal directly with universities due to knowledge of their possibilities, potential and these days also their people.
We do not see any benefit, we are able to arrange everything simply and straightforwardly.
I have not had the opportunity.
I do not know about CTT /RTP in our field.
Lack of interest from the counter partner.
Specificity of the field, which requires deep knowledge. Lengthy training of partners.
We have not found the relevant institute in our field.
No one has ever offered us anything like that.
We have a direct relationship with selected universities.
Inefficient waste of taxes.
The issue of staffing of CTT and internal communication/collaboration at universities.
The knowledge of centre personnel is often not at the required professional level. Often these centres are more about money than about their own work.
We have yet to use it - perhaps in the future.
We have not considered it.
The existing collaboration with RO is sufficient.
So far, we have yet to meet with a demand for the range of services offered.
The current status of collaboration with universities and PPI works very well - long-term collaboration.
Due to long-term ties with 2 universities and 1 RO we do not need to use a mediator.
I do not need it; everything is solved on the basis of personal contacts.
I do not know. I'm not the one who decides about it.
Finances.
CKD ENERGY is part of the CKD GROUP, which is directly linked to a framework collaboration with universities/RO. Subsidiaries establish collaboration on the basis of specific projects.
We do not need it; standard collaboration with universities is enough for us.
We are currently preparing a project with TACR.
Our R&D capacities are fully utilized.
We are a small company.

Companies_2nd wave
Other. Please specify:: Other: Please tell us why your company does not deal with innovation of products processes and services
We do not do innovation but research and development.
Other. Please specify:: Other: What is the level of innovation?

Methodological procedures.
Propulsion of railway vehicles at CNG.
Other. Please specify:: Other: What specific form of collaboration took place?
Collaboration on the development of devices– Fraunhofer institut Aachen, CSAV.
Partial involvement of the university, the risk is borne by the company.
Testing, measurement, analysis of results.
Sale of know-how.
Collaboration in the field of experimental measurements.
Other. Please specify: How did you make contact?
TACR.
Some of our employees teach at universities.
Through a joint cluster.
From acquaintances.
Other. Please specify:: Other: If no, please state why.
University workers are often living in a fantasy world :)
There is no guarantee.
Other. Please specify:: Other: Please select from the following list the motives that led you to collaborate.
Interesting work.
Common objectives.
Helping schools.
We do not have sufficient knowledge in this area.
Activities outside the scope of our research activities.
Customer support.
Access to new equipment/devices, which the company does not usually make money on.
Other. Please specify:: Other: Where do you see the greatest barriers in collaboration with universities/RO?
None.
There are no major barriers.
Not all of our R&D activities can be outsourced.
We are punished by questionnaires and statistics.
Lack of experience with industrial technologies.
None.
Our collaboration has yet to meet with any barriers.
Financial.
Costs.
We have not found any barriers.
The slow progress of R&D work - they have other priorities are not used to working under market pressure.
Suggest what should be changed to improve the collaboration of companies and universities /RO.
Compliance with contractual deadlines.
State support in the framework of the supported programmes for universities/UN.
Change the view that we have everything provided for us, so it’s enough just to perform research, regardless of the output.
Focus results more on practice than theory.
Simplify the various statistical reports.
I do not dare to make a suggestion in this direction (and I do not have time to deal with it).
Reducing administration on both sides.
Greater knowledge of practical problems and greater flexibility.
We would propose greater economic autonomy of universities and RO.

Simpler administration of projects by universities and announcers.
Strengthening activities more towards industrial practice.
PhD, associate professors and professors should be required to work in the corporate sector and should not be able to grow only in the school environment. Excessive specialization of fields is harmful. A universal technical education must be based on a good knowledge of physics and mathematics. Evaluate universities only based on publications with impact factor is short-sighted. If someone cannot implement their ideas in practice is worthless for the industry, even if he is crowned with titles and has published in journals worldwide. If a professor does not perform and at the same time implement research then he cannot nurture utilizable engineers and scientists in practice.
Less paperwork required by technology agencies.
Greater support and awareness.
- Reduce bureaucracy on the part of universities +- move more from theory into practice +- increase the workload of university employees +- financial evaluation of university employees for the real results of research incl. taking into account the practical applicability of the research.
Theses suggested by companies.
Funding for universities and their way of thinking. The research apparatus in the Czech Republic has so much project money that no collaboration with industry is needed.
Innovation vouchers are excellent. The principle is great, increase the amount of funding and extend the possibility of continuation of the already functioning teams to other similar projects.
Increased interest from universities/RO in collaboration without universities/RO wanting financial compensation for the use of equipment in joint projects.
Greater support in the framework of grant rules.
Small businesses must pay the full cost of the research department at the price of around 1,000-1,500 CZK per hour. This is a barrier for increasing the intensity of collaboration.
Greater flexibility in collaboration on joint projects.
Greater involvement of students and staff in practical tasks (commercially exploitable), learn how to sell the results of research on the market.
Involvement of businesses in the grants and incentives obtained by universities. Now in practice it is vice versa
I do not need to change anything, but I would appreciate it if leaders of academic institutes (especially ASCR), and representatives of various industrial associations (e.g. Mr. Hanak) buried the hatchet. Foolish efforts to increase personal prestige and secure votes for the next election are extremely detrimental to relations between companies and universities/RO. They are at a very good level of people implementing collaboration, better than it seems if you read articles written by e.g. Dr. Chyla or listen to Prof. Drahos or Mr. Hanak. Don't let anyone get mixed up in this!
We have not had a bad experience with collaboration.
Greater interconnection of universities/RO with the practices of companies.
Greater transfer of new practical experience and research into the consciousness of universities (transfer new knowledge to students).
More use of workplaces in real businesses.
Simplification of processes and flexible communication.
Unify economic rules.
Do not give 100% grants to universities and thus motivate them to be accountable for achieving results.
Communication and adjust the overall system of R&DI in the Czech Republic.
Practical experience in the real world, not only theoretical knowledge, experience from completed projects for industry.
For effective collaboration between the two sectors it is necessary to distinguish between basic and applied research. In applied research take into account the requirements of the company to adapt to university R&D, especially with regard to the knowledge of the market resulting from the private sector.
Simplify administrative processes and accelerate research at universities.
More extensive collaboration between specialists solving the problem together.
Universities do not have a sufficient number of specialists or experts. The average age of teachers is high, their professional orientation and thinking is often still "socialist".

Market thinking in universities.
More frequent communication.
Reduce the administrative burden on the part of universities, whereby internal regulations mean collaboration is more difficult e.g. keeping to deadlines and administrative and commercial operations.
Processes at universities.
If universities had a market approach to money they would increase work productivity and output would be of a better quality. Currently, the quantity of professional work is more important than the quality.
Other. Please specify:: Other: Please state the reasons why your company has yet to use the services of a CTT/STP.
We only trust personal contacts with reliable, capable and calculable personalities, wherever they are from.
Their capacity is filled.
We do not need a mediator to negotiate with universities.
We have yet to need them.
It is not part of our standard procedure.
The company's management is not interested.

Companies_3rd wave
Other. Please specify:: Other: Please tell us why your company does not deal with innovation of products processes and services..
Bilateral chamber of commerce - very specific offer and structure of the services offered through a subsidiary, we do not carry out any R&D activities.
We do not deal with innovation, we are responsible for the management of industrial zones.
When working with children it is not always possible to innovate.
Other. Please specify:: Other: What is the level of innovation?
That is our personal matter.
From small to complex changes, if necessary.
Other. Please specify:: Other: What specific form of collaboration took place?
Introduction of new knowledge into teaching.
Other. Please specify: How did you make contact?
Personal contacts.
We collaborate with organizations / institutions other than universities / RO. Please specify:: Other: If no, please state why.
Access to international databases, research companies.
OTIDEA.
Other external advisors or strategists.
Manufacturers of plating baths.
Other. Please specify:: Other: If no, please state why.
The manufacturer provides development for us.
Too small company, too small tender.
We have not needed it yet.
Our company is too small for the organization of such collaboration.
Sufficient in-house resources
It is not relevant for our industry.
We can do it ourselves.
It must be an authorized person.
We are a small company but we manage innovation within our team and it is not needed much- the goods that we sell are mostly for single-use.
We manage it ourselves.

Scope of business requires collaboration with universities, lack of funds.
Other. Please specify:: Other: Please select from the following list the motives that led you to collaborate.
Becoming more familiar with the content of education practice.
Interest and experience providing contracts for the university; good references.
Human potential, great creativity.
Provision of services.
Improvement of the technical solution.
Other. Please specify: Where do you see the greatest barriers in collaboration with universities/RO?
Inflexibility of the grant provider.
There are no barriers, we know what we want and we always get it, if not in the Czech Republic then in America - we are a multinational company.
Suggest what should be changed to improve the collaboration of companies and universities /RO.
Change the whole university system. Apart from exceptions, it is far different from practice. Our academic world seems to be in another universe.
Project management - speed, flexibility.
Communication.
Elimination of the so-called “academic environment”, academic freedom, resulting in the failure to meet deadlines. Remove the huge administrative burden and red tape, clear definition of the application of intellectual property, such as diploma and PhD theses, it is not possible to do diploma and dissertation work by entering data from companies and publishing the work on the Internet . Change the mindset of academics.
The state should encourage businesses to employ quality university graduates.
There are no problems.
Support for the creation of joint ventures, which would determine the area of research and development and use the results of joint research and development in practice. Greater emphasis on use of European funds to create such projects with an emphasis on projects that have a clear potential to increase the competitiveness of both companies as well as universities. Allow the use of such funds on risky research and development, where the sustainability (return) of the projects is not so clear at the beginning.
Simplify administration on the side of universities.
I do not know what could be improved, but in the Czech Republic we solve problems to a minimum. Mostly we turn for help to our companies in South Africa, Brazil, and Finland.
Universities must be able to deliver a usable final result within a realistic time. Universities must be able to realistically evaluate and ensure the arranged development collaboration. Universities lack the managers of science with knowledge in the sector and project management skills.
I have no complaints with the collaboration, it is excellent.
Universities/ROs should be equipped with modern technology.
Other. Please specify:: Other: Please state the reasons why your company has yet to use the services of a CTT/STP.
We collaborate directly with the university.
It is not necessary.
We have not needed it; we have enough of our own specialists.