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Master in Management

Analyzing barriers in business knowledge acquisition processes: faculty and student bias

Master's Thesis by the 2nd year student

Concentration — ITIM

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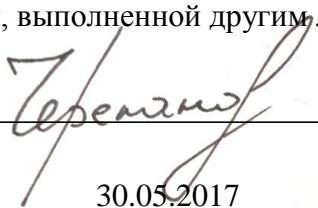
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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Черепанов Артем Александрович, студент второго курса магистратуры направления 38.04.02 - «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Анализ барьеров в процессах получения бизнес-знаний: с позиции преподавателей и студентов», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата.

Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Мне известно содержание п. 9.7.1 Правил обучения по основным образовательным программам высшего и среднего профессионального образования в СПбГУ о том, что «ВКР выполняется индивидуально каждым студентом под руководством назначенного ему научного руководителя», и п. 51 Устава федерального государственного бюджетного образовательного учреждения высшего профессионального образования «Санкт-Петербургский государственный университет» о том, что «студент подлежит отчислению из Санкт-Петербургского университета за представление курсовой или выпускной квалификационной работы, выполненной другим лицом (лицами)».
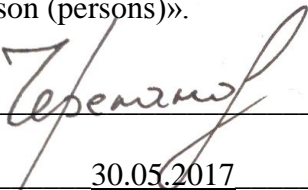
_____ (Подпись студента)

_____30.05.2017_____ (Дата)

STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Artem Cherepanov, second year master student, program 38.04.02 «Management», state that my master thesis on the topic «Analyzing Barriers in Business Knowledge Acquisition Process: Faculty and Student Bias», which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism.

All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am aware that according to paragraph 9.7.1. of Guidelines for instruction in major curriculum programs of higher and secondary professional education at St. Petersburg University «A master thesis must be completed by each of the degree candidates individually under the supervision of his or her advisor», and according to paragraph 51 of Charter of the Federal State Institution of Higher Professional Education Saint-Petersburg State University «a student can be expelled from St. Petersburg University for submitting of the course or graduation qualification work developed by other person (persons)».

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_____30.05.2017_____ (Date)

АННОТАЦИЯ

Автор	Черепанов Артем Александрович
Название ВКР	Анализ барьеров в процессах получения бизнес-знаний: с позиции преподавателей и студентов
Направление подготовки	Менеджмент
Год	2017
Научный руководитель	Гаврилова Татьяна Альбертовна
Описание цели, задач и основных результатов	Целью исследования является выявление и анализ барьеров в получении практических знаний студентом в процессе получения бизнес образования в Российских университетах с точки зрения преподавателя и самого обучающегося. Исследование основано на контент анализе деятельности 70 представителей преподавательского состава 3 крупнейших Высших Учебных Заведений Санкт-Петербурга по направлению менеджмент, 3 интервью с преподавателями факультетов менеджмента и экономики, и опроса среди 90 студентов Высших Учебных Заведений по направлению менеджмент. В ходе исследования были выявлены основные методы взаимодействия и обмена знаниями между бизнес организациями, преподавателями и студентами, проанализированы барьеры в процессе получения практических знаний студентом с точки зрения студента и преподавателя, даны общие рекомендации и представлена модель интерфейса для бизнес симуляции, позволяющая увеличить степень интеграции бизнес организаций и студентов в процессе получения и обмена практическими знаниями. Результаты исследования показывают, что в университетах наблюдается нехватка практических знаний получаемых студентом в процессе получения бизнес образования.
Ключевые слова	Обмен знаниями, получение знаний, бизнес образование, образование, бизнес симуляция, преподаватели-практики, барьеры в процессе обмена знаниями, барьеры в процессе получения практических знаний

ABSTRACT

Master Student's Name	Artem A. Cherepanov
Master Thesis Title	Analyzing Barriers in Business Knowledge Acquisition Process: Faculty and Student Bias
Main field of study	Management
Year	2017
Academic Advisor's Name	Tatiana A. Gavrilova, Associate Professor
Description of the goal, tasks and main results	The aim of the research is to identify and analyse the barriers in practical Knowledge Acquisition by the student in the process of obtaining business education in Russian Universities from the teachers' and students' bias. The research is based on the content analysis of the activity of 70 representatives if the teaching staff of the 3 Higher Educational Institutions of St. Petersburg in the direction of management and economics faculties, and the survey spread among 90 students of Higher Educational Institutions in the management departments. During the research, the main methods of interactions and Knowledge Exchange processes between business organisations, teachers and students were identified, barriers in the process of Knowledge Exchange and Acquisition were analysed from the perspective of teachers and students, general recommendations were given and the model of business simulation interface allowing to increase the interaction between business organisations and students in the term of Practical Knowledge Exchange was suggested. The results of the research show that there is lack of practical knowledge acquisition by students in the process of obtaining business education in the Universities.
Keywords	Knowledge Exchange, Knowledge Acquisition, business education, education, business simulation, teachers-practitioners, barriers in the process of Knowledge Exchange, barriers in the process of Practical Knowledge Acquisition

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INTRODUCTION

One of the main issues that students and professionals face to is the problem of exchanging information between Academia and Industry Institutes. In other words there is a gap and this Master Thesis is concerning the research in this area and the possibilities of bridging this gap because it is creating different obstacles for business developing and students' knowledge acquisition and its' realisation.

The main issue Universities cannot prepare student for real working environment on the market due to certain reasons. One is the inability of experienced and high-aged teachers to be up to time and give an appropriate information to their audience about contemporary business situation. Another reason is the ability of excellent and well-experienced teachers and professors develop innovative and new attitude of their students to business and make them to generate new ideas and technology but at that, level that is inappropriate for business in a particular market. This situation is caused by different attitude to risk and revenue of Academic and Industry representatives.

In addition to it, business does not always require that innovations that intellectual students can offer and more tend to keep same level on technology innovation in order to have stable turnover.

This paper is discussing this gap between Academic and Industry Institutes and all reasons for that. First part is theoretical parts and concerns different practices around Europe and U.S. Second describes the research model chosen for data gathering and analysing. Further analysis will show data distribution and analysing results. Finally, there will be offered some recommendation and ideas according data analysing results and current economic situation on the Russian market.

1. SPECIFICS OF KNOWLEDGE MANAGEMENT IN BUSINESS EDUCATION

This chapter describes main issues of different concepts concerning the topic of master thesis "*Analyzing barriers in business knowledge acquisition processes: faculty and student bias*" and the main goal of this chapter to identify:

- the main concept of the Knowledge Management
- the different foreign and Russian practices of Knowledge Exchange
- concept of Knowledge Acquisition and barriers
- the literature review gap
- the possibility of solution this problem in Russian Market
- the reasonability of the research

As soon as the discussion about these issues is finished the Research Model and results will be described.

1.1 Knowledge Transfer and Exchange

1.1.1 Effective Knowledge Transfer and Exchange

Knowledge is taken as a key resource for business and different non-profit organisations since most of the world transformed from industrial age to the information age. And one of the most interesting fact is that according to Working Knowledge Research Centre at Boston College employees in organisations in different business areas tend to spend more than 80 percent of their time to elicit interpret and apply knowledge they have and only 17 percent of time for searching and organising information (Jacobson and Prusak, 2006).

Under the definition of Knowledge Transfer and Exchange, we have to say that these processes are acute for a variety of disciplines such as management, education etc. In fact some sources of information pointed out the difference between Knowledge Exchange and Knowledge Transfer, however in this study we will use the definition of Knowledge Transfer and Exchange as a *set of activities and different approaches that are used for moving the knowledge among individuals, organisations and other players who have interest or needs in it* (Zarinpoush, 2007).

There are five main elements of Knowledge Transfer and Exchange that Gowdy (2006) emphasizes in this process:

- **Audience** - it is important to define the target audience for Knowledge Transfer and Exchange in order to understand needs and easier to address the information to an appropriate side of the process (Williams Group, 2003)
- **Message** - the process of packaging and presenting fundings of study by researchers and its' impact on the practice use of it. According to Williams Groups, it is important to focus on 5Cs framework for creating the organising message: *Clear, Concise, Consistent, Compelling, and Continuous.*
- **Method** - it depends on the audience the message is for. However, Levis (2003) claims that the most effectively Knowledge Exchange and Transfer process is when there are using of multiple methods.
- **Messenger** - person or organisation that delivers the information to the audience
- **Evaluation** - the explanation of the purpose and possible effect of Knowledge Transfer and Exchange.

Speaking about barriers of Knowledge Transfer and Exchange, we have to mention that Dan Pauling (2015) argues that Knowledge Barriers in literature have to be overviewed according to three main points of view:

1. Lack of Knowledge about a particular topic depended on barriers
2. Lack of Knowledge depended on the level of Education in an area of interest
3. The problem of the specific individual or group of individuals that are not able to convert information to knowledge and utilize it.

The concept of Knowledge Barriers can explain why sometimes knowledge can be or transferred and help to suggest some solution for the problem of overtaking these barriers (Szulanski, 2003).

1.1.2 Essential Knowledge Transfer Process

In this section based on the literature review, we are going to examine the Essential Knowledge Transfer Process in term of Knowledge Management (Yahya, 2016). The main processes in Knowledge Transfer, that were identified, are acquire, convert, implement and store (Figure 1).
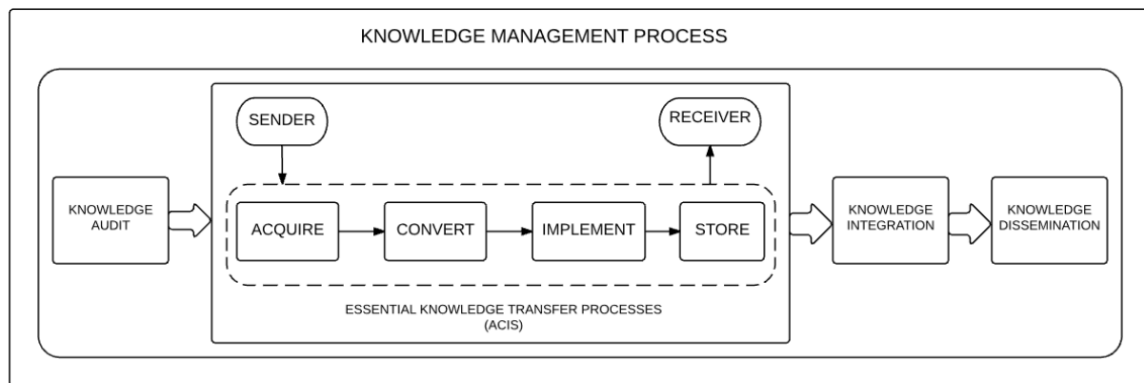
Figure 1 Essential Knowledge Transfer Process Model

Acquiring Process is the first stage of the Knowledge Transfer Process. It is important before any knowledge can be transfer from one individual or organisation to another. One of the most important issues here is to get the latest data in order to accurate knowledge. As Laframboise (2007), the ability to obtain knowledge from other external parties seems to be one of the most important issues of the acquisition process in this term. The matter is that it is quite impossible to complete the process of Knowledge Transfer in case the ability to obtain Knowledge is missed.

Moreover, the ability to understand the quality of Knowledge that is obtaining and choose the right Knowledge will have positive effect on the speed of Knowledge Transfer Process.

The second stage of Knowledge Transfer Process is the converting Process. As soon as individual, group of individuals or the organisation got the knowledge it has to be converted into understandable form, (it is not converting tacit knowledge into explicit knowledge). This process of converting or transformation process is the converting knowledge into the form of using the same language that can be understood by all parties in this process in order to successfully transfer and understand the same message. For the making knowledge accessible for the cooperation and other purposes, this process is essential (Hassan, 2013). In case of misunderstanding message by all parties involved into the Knowledge Transfer this process becomes useless.

Next stage is the stage of implementation is the process of transferring knowledge from the sender to the receiver. The implementation stage is finished when the receiver starts using the knowledge (Szulanski, 2000).

Finally, the Storing Process is the last process of Essential Knowledge Transfer Model. The matter is that this stage is missing in different other models on Knowledge Transfer and Exchange. However, Yahya (2016) suppose that this is very important process in Knowledge Transfer. In addition to it, Jasimuddin claimed that the importance of this process s very high in any knowledge transfer activity. It is more about storing of knowledge in the conceptual data model.

1.1.3 A knowledge transfer perspective on the research and teaching in higher education

According to Senaratne and Amaratunga (2010) creating knowledge through such tool as research and transfer it into teaching is the primary goal of any University. They take this relationship as symbiotic relationship between University staff research and teaching. At the same time there are five types of Research and Teaching (R&T) relationship:

1. **an impending divorce** - separate institutions exist for research and teaching
2. **a martial relationship** - research has more power of controlling the relationship
3. **a holy alliance** - research is generate an uncertainly, but teaching has to manage and address this uncertainty
4. **a scholarly relationship** - exists as separate but with overlapping scholarly activities
5. **a really useful link** - an interactive relationship (Badley, 2002)

In fact, the most effective R&T relationship is the situation when staff research is managed to benefit the student learning. It is beneficial for bot students and staff and moreover will improve knowledge development and learning inside the Universities. However as Jenkins (2003) says often there is no effective link and it is necessary to create it in order to organise useful and productive relationship.

Szulanski (2003) claims there are six main problems in knowledge transfer process:

1. The strength of relationship between students and staff - better relationship cause better result in knowledge transfer
2. It is bad idea to transfer knowledge direct to student and the knowledge has to be re-constructed in order to eliminate the problem of ambiguity (Rowland, 1996)
3. Students differs according to their prior knowledge
4. Reliability of research results
5. Motivation of both students and staff in term of knowledge transfer in order to create R&T link
6. Organizational context

All the factors and problems listed above are required to be taken into the account in order to transfer research into teaching effectively.

Under these circumstances Senaratne and Amaratunga (2010) suggested the development of framework to create R&T transfer (see Appendix 1). It is about RtoT transfer process.

In order to run RtoT transfer first we have to link students, researchers and the academic staff under the term of strengthen relationships and provide good quality of knowledge transfer. First activity is to review current research and teaching policies in order to understand the problems and standards of creating the R&T link. Then the review of staff recruitment and development strategies. Finally creating and maintaining interactive forums in order to use high technological tools in communication and improve the learning environment.

Start-up and Outcome activities related to kind of input and output in the RtoT transfer process. The most important processes are grouped under the term process specific element: facilitate culture, Integrated Project Work for the research experience, provide research knowledge and short courses in specific research area. This loop represents the learning cycles. To sum it up this framework is going to represent step-by-step algorithm for academic departments in order to transfer its research and fundings into the teaching process.

Finally we can argue that research-informed teaching is the core for transfer research into teaching in order to prepare qualified specialists and individuals who are able to continue the process of knowledge transfer.

1.1.4 The Concept of Knowledge Acquisition

Knowledge acquisition is defined as the process of getting knowledge and seems to be fundamental for the survival for the human and other things. However in this study we describe more complicated process that acquisition of properties like shape, size etc. At the first stage of Knowledge Transfer and Exchange process the acquisition means to implement complex coded knowledge for the sender and receive this knowledge in the understandable form by receiver, another party of this process (Tandon 2016).

Another definition of the Knowledge Acquisitions stage in Knowledge Transfer was done by Cheng in general the relation between one category of event and another (Kuhn, 2011).

Different techniques used during the Knowledge Acquisition Process (Nasuti, 2010):

1. Explanation Facilities - validating during knowledge acquisition phase, explaining the reasons for a particular question
2. Flowcharts/Decision Trees - during consultation used for verification of flows and branching
3. Decision Tables - verification of the process of decision-making based on the rules
4. Simulations - validating the results by comparing decisions making or different conclusions for the particular term by expert systems to others who used simulation for searching possible solutions
5. Case Studies - validating the results by comparing decisions making or different conclusions for the particular term by expert systems to others who used case studies for searching possible solutions.

As soon as knowledge is got, acquired or created it has to be organised in systematic form in order to store. According to Evans (2014) claims that knowledge assets should be stored in structured way that makes the process of manipulation, retrieving and sharing more efficient for all the parties of the process. In addition to it ethics play one of the most important roles in the process especially in the continual evaluation of different professional standards because cultural, economic and political issues can have negative impact on the field of study or further knowledge sharing and visualisation (McQueen, 2015). Jain (2016) supposed that individuals who

reorganising any data for further research or acquisition process can make this data as prove different wrong things by leaving out important information and use only part of possible data. This seems to be unethical and one party of the knowledge transfer process have to eliminate this mistake in their studies and cases. **<....>**

1.2 Overview the role of Universities in Growth and Productivity

1.2.1 Background

In Great Britain, according to the research, much attention is paid to innovative business and there is high rate of return from spending on innovations (Taylor, 2016). According to Taylor University is the thing to rise productivity and stimulate growth on the local market. He argues that Universities provide innovation ecosystems with different level of knowledge, space, talens and routes to finance. And on the other hand businesses require, in order to develop new special products, processes and services to keep themselves at the stage of competition, transformational knowledge.

Speaking of talent this is one of the main things businesses needs. There is high need in talented people with skills that can afford to use knowledge and make it beneficial for industry. Here we are talking about the ability of thinking laterally, ability to learn and adapt. And in order to achieve this goal Universities and employers have very close relationship and all processes are co-designed that allow to build in-house capacity in local market.

As it was mentioned before there is a gap of risk attitude of different sides of this relationship. Innovation as defined is connected with risk processes and at the same time requires strong financial support. That can be harmful to small businesses and here Universities can help small organisations to identify sources of finance and attract more funds from other side (Taylor, 2016).

In conclusion it seems to tend us to think Government Institutions at both the national and regional levels should take Universities as partners. Under these obstacles the range of innovation would rise and the ability of firms both small and large to stay competitive and profitable and at the same time develop local market. Taylor gives some recommendations to searching fundings and policies.

1.2.2 Universities and regional innovation ecosystems

According to Taylor (2016) Two-thirds of UK productivity growth in the period of 2000-2007 was to innovative businesses. Innovation allow businesses to become more resilient during the problematic periods of economic fluctuations, crises and survive when most non-innovative firms are likely going to fail. Taylor also argue that there are several reasons for regional innovations strategies for local firms. In other words he sees benefits like the development of competitiveness poles. Moreover such a strategy simulation innovation in small and medium Enterprises (SME) through University-enterprise and B2B networks and clusters. Third benefit is to prepare local publicity to more innovative way of running business through promoting entrepreneurship and new firm creation. The main idea here is to examination and researching new ideas and financial instruments, facilities and what is the most important - entrepreneurial talent. At the same time he assumes some risks and limitations of his study such as different approaches to regional boundaries, policy interventions, poor strategic management inside the firm and different regional and local policy systems.

He also sees the problem of knowledge exchange between Universities and other Institutions and supposes both local government and authorities have to look to existing best practices and support innovations.

1.2.3 Alliance Universities are sector leaders in rising mobility and absorptive capacity

The matter is that Entrepreneurial Universities understand the value of improving innovation skills and tries to increase the number of graduate startups. In order to stay competitive and grow SMEs have to hire employees that can apply all knowledge and be able to fast change particular things inside the company and processes. Alliance Universities improve mobility for industry staff to academia in order to improve the level of preparation of young specialists. According to the data 38% of new academic staff in UK came from industry. Due to this fact academics can clearly understand the issues businesses are facing and allows them to understand pitfalls and suggest possible solutions to contemporary problems. Moreover Alliance Universities delivers more than 20% of all UK Knowledge Transfer Partnerships (KTPs). Finally it must to be argued that this is the way by what more than 43% of UK sandwich courses were delivered. Universities are preparing new specialists for local SMEs and markets with improved skills companies need.

1.3 Information Exchange between Academics and Business, Public and Third sectors

1.3.1 Main concept

The research based on the data was gathered by Abreu M., Grinevich V. and Hughes A. shows there were multifaceted role of Universities in innovation stimulation and economic growth. However they pointed out that there was a gap in quantitative research if the interactions of Universities and external organisations especially due to wide range of disciplines.

Academics from all disciplines are involved into the process of data and knowledge exchange. Moreover knowledge exchange mechanisms differs according to the purpose and situation such as there could be patents, licences and at the same time a lot of other problem solving and community driven activities.

One of the common issues rising during the examination of this topic is the relevance of academic research activities to the wider social and economic use. There is also the opinion that all funds for the research have to be reallocate between more or less applied areas. However as Abreu M. argues this distinction between basic and applied research is overemphasised. The interplay in research activities between issue of use and fundamental understanding and its relative significance was compared to fundamental understanding by Stokes in 1997 (Figure 2).
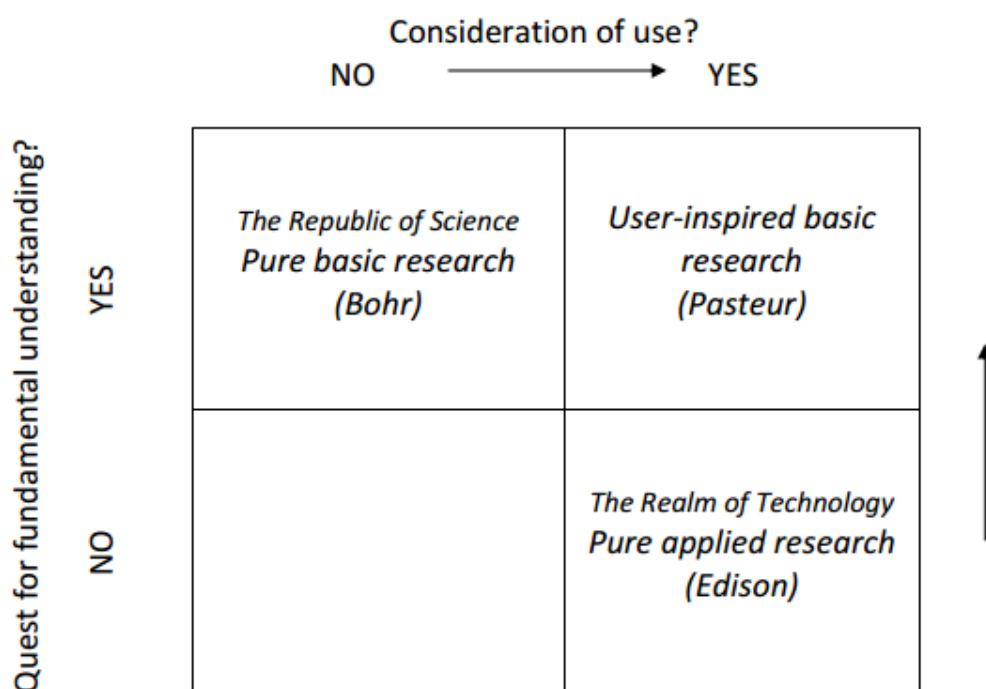

Figure 2 Stroke's Quadrant (1997)

There is quadrant diagram by Stokes (1997) above that allows to understand comparison between research that is have no ability to be used but has the pursuit of fundamental understanding (Bohr quadrant) with research that can only be considered in use (Edison quadrant). Pasteur quadrant combines both the pursuit of fundamental understanding and consideration of use.

There was chosen a sample of 2170 of applicants that had to locate its' own research they participate in to one of the quadrant that are basic research (Bohr) - 27,6%, user-inspired basic research (Pasteur) - 29,7% and applied research (Edison) - 43%. There also was a question about the area of the research and it move us to the conclusion that the discipline of the research matters much in the consideration of use and fundamental understanding.

1.3.2 Interaction between Academic and External Organisation

According to D'Este and Patel (2007) there is variation in the ways academics and external organisations can interact. They considers different modes of interactions such as joint research, training, contract research, consultancy, meetings, conferences and creation of physical facilities. More than 50% of companies interactions are using more than three interaction modes (World Economic Forum, 2017).

As Dodgson (2005) argues the rate of using virtual modeling and simulation techniques is increasing now around the world and this fact stimulate business capabilities. This matter is reducing the need for physical prototyping and experimentations that at the same time allow businesses to save time and resources.

In addition to understanding and realising all knowledge-exchange channels and types of the firms one can understand the importance of different Universities in stimulating local and regional markets as a single separate player. But on the other case there range of potential barriers in the term of cooperation and collaboration of Universities and external organisations, partners. Usually there are lack of information about both sides of cooperation that means that partners cannot imagine what are the real goals and perspective of each other and often tend to focus on different goals (Lambert, 2003). As he argues the main reason is the lack of skills and understanding both academic and business environment.

Moreover another barrier also should be considered as important one that is mismatch in timelines because Universities often is trying to operate with longer time scales than businesses need. At the same level of cooperation there are also such problem as differences in culture and language, Intellectual Property (IP) issue and asymmetry of information (The University of Edinburgh, 2016).

1.3.3 Modes of interaction and factors affecting the choice

As it was mentioned above there several main modes of interaction between Universities and External Organisations such as consultancy projects, graduate and student placement in the company's, recruitment and staff development, networks, licensing and technology etc (Hughes, 2016).

Consultancy projects is the process where an academic researcher is working on the project of interest to a particular company in order to achieve or to help in achieving a company's goal. The problem is usually identified with the company and it is more on a personal basis than any research project with the institution as collaboration.

Time to time Universities place graduates or students in companies. Individuals spend a big period of time inside the company with academic supervisor in a particular corporate culture and environment. Normally student is running an academic research about the topic company is interested in.

The Recruitment and Staff Development mode differs from normal context of graduate recruitment where company has a deliberate role in developing of a particular program towards its objectives.

There are also one possible interaction through formal and informal networks where strong academic involvement.

And the last of most common interaction modes is Licensing and technology that is usually offered by University with keeping rights of origin in order to conduct any academic research. There is an agreement between University and External Organisation about future rights and titles of the technology or project. Company and University under this interaction mode are making collaborative research.

Under the topic of choosing the interaction mode we have to argue that usually it is influenced by the nature of the projects and both Universities and Companies often have no controversial discussions about this. The modes available to the external organisation with the objectives of targeted staff development or the recruitment of staff with a particular skills are limited.

Speaking of mode interaction choosing we also have to mention costs of collaboration that also can have negative effect on the decision making.

1.3.4 Further Information

According to Abreu M. (2003), Universities and Academies play very important role in the stimulation and development of national and regional economies. Moreover the technology transfer is one of the main aspects of the knowledge exchange process. At the same time this process take a long time and can cost much more than expected. This fact make knowledge Exchange difficult for small and medium enterprises (SMEs).

Speaking of relationship between academics and businesses we have to point out that the goals and interests aligning take time to understanding by parts of the relationship and it takes even more time and energy to involve parts in trust. Finally there are range of barriers to cooperate because of difference between academics and businesses. We have already mentioned lack of knowledge about potential partners, their possibilities and their final goals and ways for achieving.

1.4 Knowledge exchange in dialog with SMEs, government and higher education

1.4.1 The LEAD program in UK

In UK some time ago the program LEAD was launched. LEAD is the program concerning the leadership and management program that involved 25 owner-managers of different small and medium enterprises around the Northwest region of England. Main financial support this organisation took from the Regional Development Agency and main goal of LEAD was to stimulate regional economic development. In addition to it Smith (2006) pointed out one more objective of this program that is to rise regional productivity, competitiveness and skills within the topic of the SME sector and in particular within separate companies.

LEAD is supposed to work under the concept of networking learning that is considered as innovative way of learning. This concept of networking learning is situated learning theory under what learning is done by participation in certain activities. Here the concept of collaborative learning takes part. LEAD is supposed to give an opportunity for learners to learn from each other with less teacher participation (Jones and Steeples, 2002).

LEAD is launching the integrated learning model that requires the delegates to engage with different quests and ideas in different situations, gather knowledge and then bring it back to the businesses.

The article of Smith focused on three main aspects those are knowledge exchange in dialogue between government, the university and SMEs, innovation it this process and innovation as a result of leadership development.

1.4.2 LEAD role in knowledge exchange

The economic development and social returns from investments depend on the transferring the knowledge and skills between Universities and external institutions (Lambert Review, 2003). Three types of stakeholders are involved into this process such as government, SMEs and Universities. Under the cooperation with LEAD in average small business enterprises raised its' turnover by 200 thousands pounds per annum (Wren and Jones, 2006).

The function of Universities is to work in its' own market segment and local and regional companies through knowledge exchange. However the activity of Universities and SMEs in this question still remain unclear.

1.5 Russian Practices of Knowledge Exchange between Universities and SMEs

1.5.1 Vision on the perspectives of economic development.

According to Lapin (2008) contemporary stage of World Development is highly connected with the set of different processes of globalisation as it is characterised by strengthen relations and connections in main areas of economic, political and social lives. Basic issue here is the reorganisation of use main drivers of economy such as capital, labour, resources, knowledge and technology. However they pointed out as one of the most important thing influences the economic situation is the development strong global information nets that help to support the knowledge exchange between Institutions and Industries and collaboration in such spheres as technical, cultural and in business. Authors are sure that under this aspect there is the fundamental base for economic development by development more innovative vision for managing business that is created by knowledge creation sector.

Fedorova M. and Senyak Y. (2011) created the list of reasons for strengthen national innovative system and creation "economics of knowledge":

1. Internal organisation of country, region or smaller segment in the area of fast reaction to the external and internal economic changes. It is connected not only with the ability

of creation new technological solutions but also the ability of manage economic situation in order to change its option towards support innovative environment.

2. Regionalisation of innovation politics has a strong connection with the innovative development of global economy. They are sure that the century of standards and transnational companies are gone and nowadays knowledge-intensive and non-standard production is taking leading role with the direction to creation and adaptation new product technologies.

3. Due to the fact of high cost of innovative technologies creation new technologies has to be in the strong connection with adaptation and monetization them because there is risk of adaptation these technologies by other sides that had no involvement into the development.

4. Technology diffusion is also core aspect in this issue because of the fact that the sharing new technologies with the regional and national enterprises has a positive effect on the economic situation in the country.

5. One of the most important issues that has to be mentioned as a reason for strengthen national innovative system is the knowledge exchange between scientists and entrepreneurs and right focus of research directions, results reviews and changes of development directions.

Taking into account such circumstances Goldstein (2007) argues that the close relationship between creators of intellectual property and technological resources in face of scientists and businesses taking very important role both in the success of innovative thinking and stimulating economic situation.

1.5.2 A Regional Approach of Industry Restructuring in Tomsk Region

Information exchange issue would be described based on the example of Tomsk economic and educational situation here. According to Gregor Ramsey (2008) employment service and the educational system ought to have a symbiotic relationship. Despite the fact that the article is written in 2008 the topic is still acute nowadays. One of the main weaknesses of Tomsk education provision was the extent of the level of worker training from the professional point of view. The matter is that workers are in the risk of inability to find a job because of increasing level of required skills and knowledge argued by employers. But at the same time there is situation when more qualified and skilled workers have to take job that does not need a particular skills because of the absence of other available work. This fact leads to the problem that students are not trying to

become high skilled professional in one particular area but do their best to get many different skills in variety of different areas in order to guarantee themselves the future working place.

Under these circumstances vocational education courses and training have the higher priority among students as it develops practice-orientated education. Vocational education tries to be as close as possible to the industry reality and making people to be able to cope with social and employment uncertainty.

Fortunately, despite the fact that some industries do not perceive themselves as understanding other industries, in case industries see that any particular university is providing it with the high skilled working force it takes the opportunity of getting such new employees as more valued than raw materials for manufacturing (Gregor Ramsey, 2008).

As Vladimir N. Kisselev (2008) argued the Tomsk Science and Technology (S&T) complex was created more than one century ago and was main education and research centre of Siberia. It included the Russian Academy of Sciences, Russian Academy of Medical Sciences and a broad variety of universities, science research organisations and its branches (institutes, laboratories). It is important to point out that all of the educational organisations and institutions that were included into the S&T covered technological and scientific area of education. It seems that technological area is more practical than other such as business and it possibly was more acute and relevant that time.

The problem of providing interactions between business and university organisations in order to share knowledge and develop R&D departments and processes two solutions were suggested. First is about having Timsk representatives participate in the work and business processes in the industry but it seems to be inefficient. Another solution that Vladimir N. Kisselev (2008) takes as "one of the the most promising" is to connect different innovations structures like technoparks, innovative centres and federal organisations in the region.

Nowadays there is different programs of informations exchange in the region. For example under the coordination of Tomsk S&T Park many local innovators and entrepreneurs took a part in the international projects and programmes like USAID, TACIS and Morozov's Project.

1.5.3 Technoparks and its' impact in Information Exchange

Anton Belih (2008) also mentions Tomsk S&T Park as one of the first and important organisations in Information Exchange issue in Russia but at the same time he speaks about the list of organisations in Moscow that are or close to technoparks. These organisations cannot be

Technoparks in the full meaning of this word but has many features in common for example "Severnii", different complexes in Zelenograd, Strogino, Chertanovo and Koguhovo.

In March 2006 Russian government accepted the program of development technoparks in the country under which they have to be appear in range of regions. Technopark here is the special territory complex with high technology level of organisations involved into cooperation with the main goal of development, commercialisation and adaptation of innovations. Such organisations provide different areas on business, laboratories and institutions with high level of Information Exchange and stimulate society to create new innovative companies. The main purpose of technopark is the support of small and medium enterprises in the country. However technoparks in Russia works in a different way than foreign analogues do. That means that agreements usually signed with big companies for the period more than five years that eliminate the opportunity of using them for the small and not such finance supported companies even if they are high innovative and have big potential.

1.6 Knowledge exchange and acquisition gap

The information exchange gap here is the main topic should be concerned. The Gap of Literature review that there is lack of information about Russian practices of knowledge exchange process and management. This is the reason why we deeply consider the British Practices. The reason for that is to realise the ability to apply all results to Russian market and stimulate small and medium enterprises to behave more innovative and to develop the process of transfer.

We can see the need of Russian market in such organisation as LEAD however if case the situation of companies rejecting in the participation with Universities stay the same one would have problems in applying his/her skills in the professional area. In other words in further research we have to examine different specialities of local market, perspectives of both academics and businesses and their goals.

Moreover one of the main gaps in the literature review is the timeline of the researches and articles. This area is fast changing and even the article of 2011-2012 can be already inappropriate to use. However the review of these researches and articles shows that there are still some common concepts and based on these concepts we can manage a discussion, make a research and offer the recommendation in order to solve the problem of Exchange Information in Russian market as a whole and as a regional view.

1.7 Research gap and research questions

The analysis of many contemporary materials and papers related to the topic of *Analyzing barriers in business knowledge acquisition processes* shows that bridging gap in information exchange and acquisition processes would be core aspect in the future success of companies and achieving competitive advantage through innovations and so on.
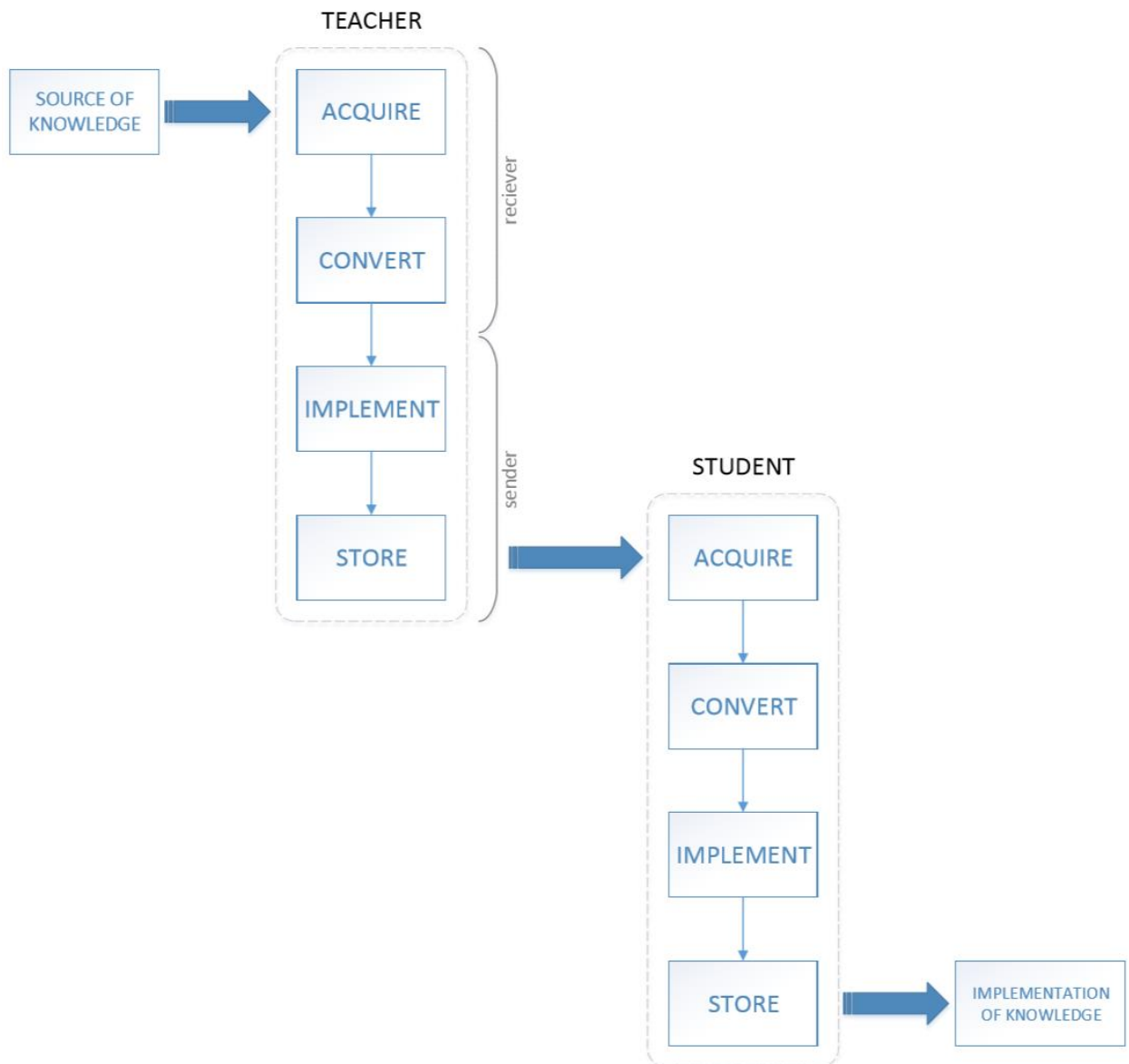

Figure 3 The process of Knowledge Transfer in term of Business Education in University

On the other hand the main problem here to understand what actually cause problems in the process of Knowledge Acquisition by student and what ways of solving this problem is appropriate for current Russian market and Academic industry.

In case the description of the problem is from the bias of teachers and students it has to be understood that in the process of knowledge transfer teacher send the knowledge that some time before he/she acquire from somebody. In other words teacher plays an important role in the process of business knowledge acquisition of student and badly prepared both theoretically and practically teacher can cause the problems of misunderstanding and wrong implementation of knowledge (Figure 3). It can be called Knowledge Transfer Cycle.

According to the literature review it is understood that the least researched topic in the term of Knowledge Transfer process and Problems of Knowledge Acquisition is the Lack of practical Knowledge in Universities student can get (Figure 4).
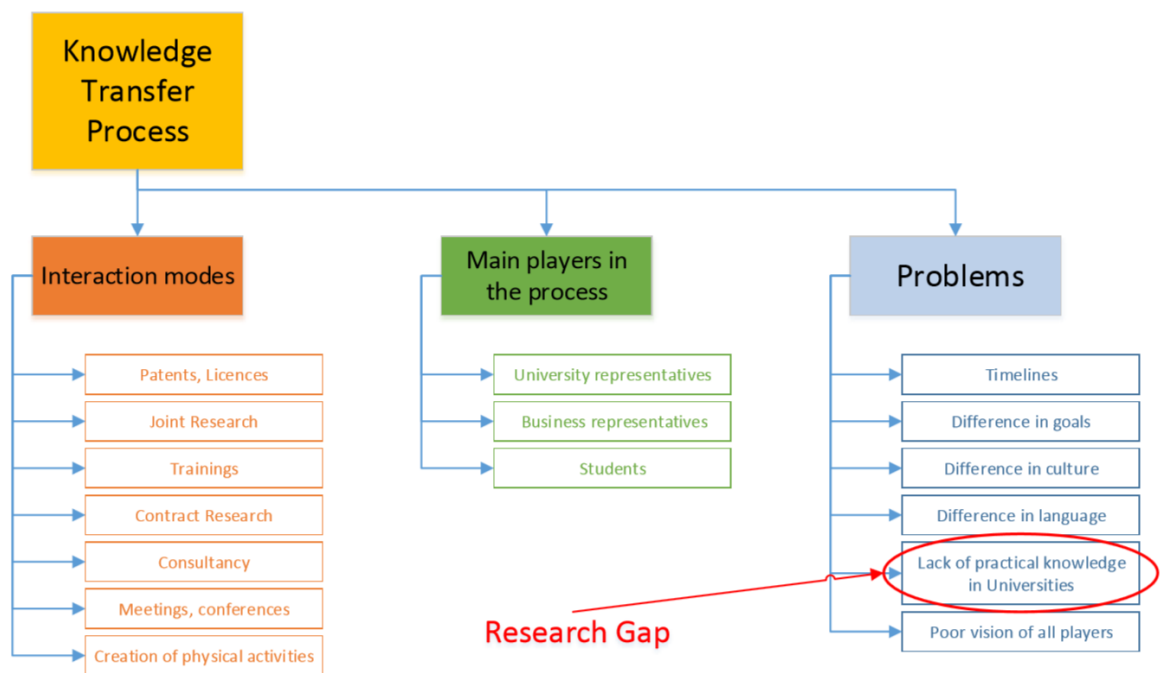

Figure 4 Research Gap based on the Literature Review

Lack of practical knowledge in Universities seems to be not the problem of interaction between administration and business organisations in term of knowledge transfer but also the problem concerned the teachers' preparation and students attitude to this issue. Below there is description of this problem in details (Figure 5). Lack of interaction between teachers and business organisations causes the lack of practical knowledge of teachers and then in the Universities. In this case students are not practically well prepared and business organisations do not want to interact with them (see Appendix 3, interview 2). Lack of interaction between students and business organisations also lead to the problem of practical preparation of students and knowledge realisation and implementation.

Based on this statement it is acute that this paper aims to run more deeper research of these core questions in order to formulate direct recommendations to a particular area such as information exchange in business area.
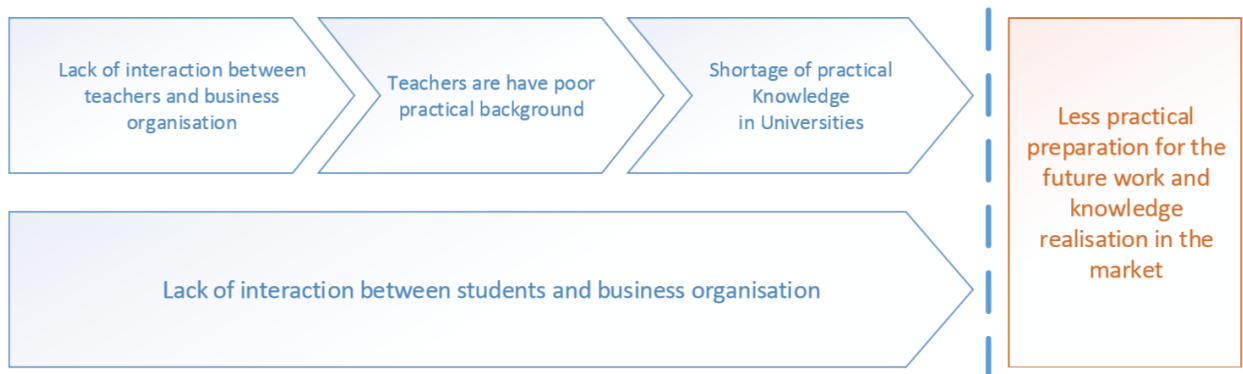

Figure 5 Lack of Practical Knowledge Problem in Universities: causes

This paper considers such research questions as:

● What is the proportion of teachers-practitioners and teachers-theoreticians in management departments of Universities in Russia?

● Are there enough Practical Knowledge Students get from the Knowledge Acquisition Process in University in case of lack of teachers-practitioners?

● What interaction processes students and teachers are involved in?

● What are the problems of students and teachers in Knowledge Interaction processes with business organisations?

● What are possible solutions of problems listed above?

Summary of Chapter 1

The Knowledge Exchange is the two-way stream of people and ideas in the term of research environment and wider economy (Beaumont, 2016). It is also contributed to national economy situation and has strong impact on the process of increasing the level of people's lives. In this study mostly the Knowledge Exchange process between Academia and Industry is examined. In fact University and its' possibility to Knowledge Exchange with Business Organisations plays core role in the local stability and national competitiveness on the global market.

Under this study different types of interactions in term of Knowledge exchange are looked through such as:

- Joint Research

- Trainings

- Contract Research

- Consultancy

- others

However Knowledge Exchange process is becoming a problem on the contemporary Russian market because of misunderstanding issues between main players of this process. The matter is that different people are looking for their own advantages from Knowledge Exchange in different timelines. For example while business organisations are waiting the progress in short-term and fast profit from knowledge exchange possibilities, Academia is working in long-term perspectives by offering innovative technologies and management ideas. In general main problems of Knowledge Exchange are following:

- Timelines

- Difference in goals of players

- Difference in cultural aspect and "language" of communicating

- Lack of Practical Knowledge in Universities

- Poor vision on perspectives of all players

In seems Lack of Practical Knowledge Acquisition in Universities is described less than others especially in the sphere of management. In fact Russian Government sees the problem of Knowledge Exchange in the technological area and there are already accepted projects with the government support that is solving this issue. Government helps business organisations and Universities to communicate under the term of different Technoparks and these two areas have very strong interaction between each other. On the other hand the situation on management is opposite. As it is supposed that lack of practice knowledge exchange in the Universities is one of the main causes of this fact it is essential to analyse what role teacher plays in this process and if there are enough teachers that are able to share this practical knowledge students and business organisations need.

The matter is that Knowledge Exchange and Acquisition Problem in management is not being solved by Technoparks and basic platform for preparation of qualified managers in Universities and teachers' experience sharing; only solution is to provide students with more teachers with big baggage of practical experience and knowledge or creation a particular interface for these processes.

It is supposed that under this study it is reasonable to analyse the barrier of Practical Knowledge Acquisition such as wrong proportion of teachers-practitioners and teachers-theoreticians in the process of Education and Preparation future managers that is core reason for nonconformities of preparation level of managers to current economic environment and employers' expectations.

2. RESEARCH FRAMEWORK FOR ANALYZING BARRIERS IN KNOWLEDGE TRANSFER AND ACQUISITION PROCESSES

In this chapter the research model and its' methodology appropriate to the stated research questions and main goals of the research will be described. Also research approach, data gathering and its' analysis will be considered in details.

2.1 Research Methodology

In order to understand core reasons for information exchange gap between Academics and Industry Institutions in the market and also to point out main difference between expectations of both sides of this process it is important to choose an appropriate research method. According to Merriam-Webster, methodology is the set of methods and rules those are aimed to help in finding the solution for a particular research question. The research questions stated in this study can be analysed by both Quantitative and Qualitative research methods. However these two types of research can describe the problem in different ways and help to understand the problem from three main players in Information Exchange that are students, teachers (Academia) and business organisations (Industry).
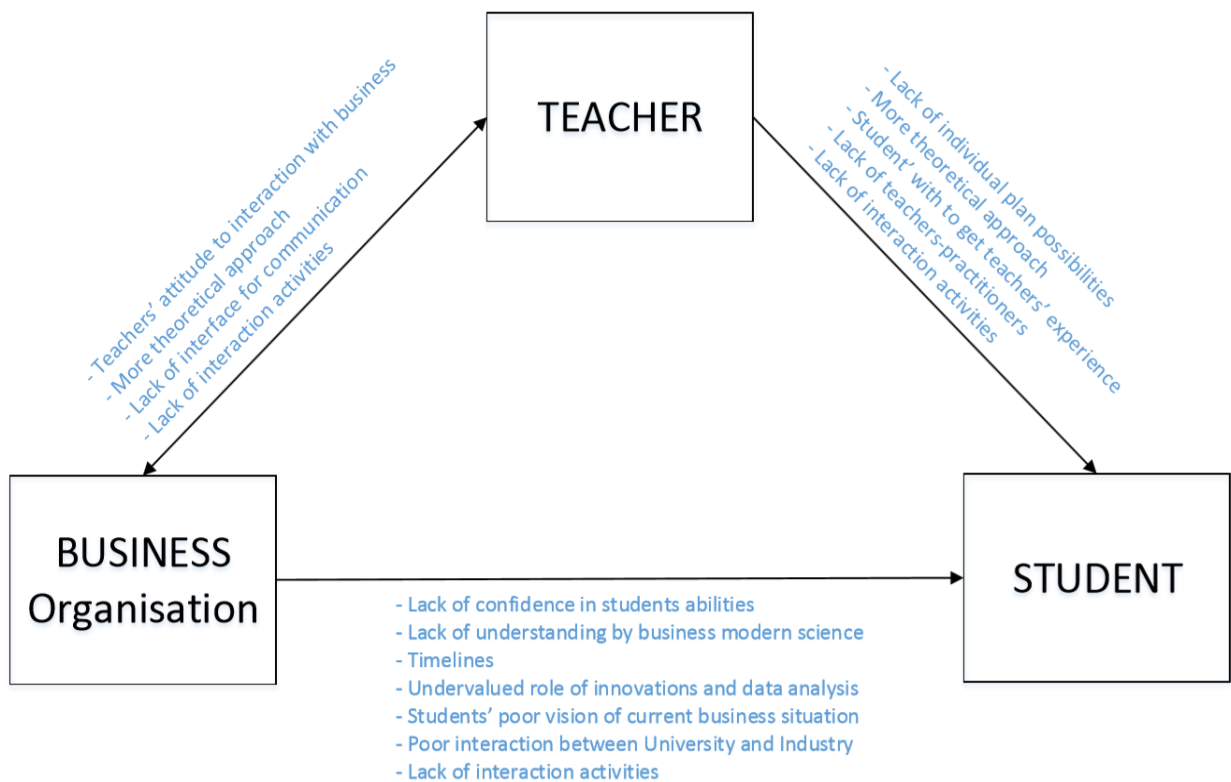

Figure 6 Knowledge Transfer Problems between three main players in the process

During this study three research methods are used in order to get a deeper understanding of research questions and possible solutions. First two are the content analysis and interviews that allow us to gather more qualitative data. And third one is the survey spread among big sample

chosen from students learning management in Universities of Saint-Petersburg. Last research methods gives an opportunity to have data analysis based on the bigger amount of participants. These research despite the suggestion of problems' solutions would help to right understand the problems of interaction between three sides in the context of Knowledge Exchange that were mentioned above: students, teachers and business (Figure 6).

2.2 Content Analysis of Teaching Staff

In order to analyse the proportion of teachers-practitioners and teachers-theoretician first step is to clarify what features the judgment if the teacher is practitioner or theoretician is based on. One of the main tools for this purpose was the analysis the contemporary relationship between a particular teacher and business; and at the same time his/her working experience and his/her publications. Publications were analysed by keywords. Moreover the list of disciplines teacher manages in the University was overviewed to understand if he/she has to give more theoretical or practical knowledge in the boundaries of studying subject.

However there are also limitations of these type of analysis that forced us to use interviews as a tool for further and deeper understanding the problem:

- inability to analyse the method of teaching of most participants due to time limitation
- inability to have strong believe that teacher under the discipline supposed to cover principles and basic knowledge does not give practical knowledge based on it own experience or knowledge not connected with contemporary business situation on the local market
- inability to fully analyse the content of all publications
- inability to find information about all participants covered all aspects of his/her life including all working experience, achievements and etc.
- missed facts or data about participants on the web-sites of Universities and databases.

To come back to the content analysis the sample of about 70 leading teachers is taken. These teachers are of management disciplines with different science degrees of 3 big Universities in Saint-Petersburg those are Higher School of Economics Spb branch, Saint-Petersburg State University of Economics and State University of Aerospace Instrumentation (Figure 7). Database is created and connected with profiles of all participants online in order to analyse their

publications by keywords, experience and CVs to judge if they are teachers-practitioners and teachers-theoreticians.

		возраст	должность	стаж	карьера	публикации
	Высшая школа экономики Спб					
1	Антипов Евгений Александрович	29	доцент	6	теоретик	6
2	Беляков Владимир Григорьевич	57	доцент	35	-	33
3	Белякова Наталия Юрьевна	-	доцент	1	-	0
4	Боровская Ирина Леонидовна	38	доцент	10	теоретик	8
5	Веретённик Елена Вадимовна	29	преподаватель	5	теоретик	8
6	Воробьев Павел Федорович	45	преподаватель	2	практик	2
7	Григорьева Виктория Николаевна	34	старший преподаватель	4	практик	14
8	Грищенко Татьяна Юрьевна	47	доцент	28	теоретик	8
9	Дедова Мария Александровна	29	преподаватель	5	теоретик	19
10	Заздравных Евгений Александрович	29	преподаватель	2	теоретик	9
11	Зеленская Елена Михайловна	27	преподаватель	3	теоретик	4
12	Кайсаров Александр Александрович	55	доцент	17	теоретик	14
13	Коптелова Александра Витальевна	31	Старший преподаватель	8	теоретик	0
14	Корчагина Елена Викторовна	41	профессор	13	теоретик	18
15	Курылев Андрей Владимирович	52	доцент	15	-	-
16	Кудрявцева Елена Игоревна	51	доцент	19	практик	29
17	Лукинский Владислав Валерьевич	41	профессор	16	теоретик	65
18	Матецкая Марина Владимировна	35	доцент	12	теоретик	25
19	Мкртчян Тамара Рубеновна	38	доцент	8	теоретик	7
20	Микитьянц Кирилл Сергеевич	52	профессор	26	теоретик	107
21	Новаторов Эдуард Владимирович	52	профессор	22	теоретик	68
22	Плахотник Мария Сергеевна	42	доцент	11	теоретик	33
23	Покрышевская Елена Борисовна	32	доцент	6	практик	27
24	Рудченко Вероника Николаевна	35	доцент	9	теоретик	25
25	Санникова Юлия Сергеевна	30	преподаватель	3	практик	3
26	Светуньков Сергей Геннадьевич	56	профессор	37	теоретик	42
27	Серова Елена Геннадьевна	57	доцент	24	теоретик	28
28	Стрекалова Наталья Дмитриевна	61	профессор	35	теоретик	37
29	Тимофеев Константин Николаевич	61	доцент	8	теоретик	1
30	Трабская Юлия Георгиевна	38	доцент	10	теоретик	15
31	Хорева Любовь Викторовна	58	профессор	26	теоретик	20
32	Чуланова Галина Юрьевна	56	доцент	26	теоретик	18

Figure 7 Data base of teaching staff from Universities of Saint-Petersburg

In details the process of analysing if a particular teacher is teacher-practitioner or teacher-theoretician is described in Appendix 2. The Flow Chart shown in the Appendix 2 allows one using only information gathered from content analysis assume what type of the teacher is. All possible limitations were taken into account.

Finally it is expected to create a pie chart where one can see the proportion of teachers-practitioners and teachers-theoreticians in Universities of Saint-Petersburg.

2.3 Qualitative Interviewing with Teachers of Business Schools

Qualitative researchers usually use the type of interview that characterized as increased level of flexibility and lack of structure (Bryman, 2001). It is aimed to give the researcher the view in-depth by non-directive, informal and open-ended questions. According to J. Manson (2006) all qualitative interviews has some core features in common:

1. International exchange of dialogue
2. A thematic, topic-centered, biographical or narrative approach but with flexible structure
3. A perspective about the topic in order to researched understands that the information he/she gets from the interview is relevant to the research question.

In order to run the interview with teachers representatives from Universities of Saint-Petersburg working in the Departments of Management the semi-structured interview was chosen. Semi-structured interview is the set of predetermined questions fit to the topic of the research, based on the answers of representative sample in order to identify main factors, variables or attributes for further analysis (Schensul, 1999). The reason for that is the possibility of giving the interviewees according to the topic more flexibility to answer in different ways and give more details suitable for the research. And finally two ways of managing interviews were chosen: telephone-interviews and e-interviews (Lewis, 2006). The matter is that the respondents that supposed to be interviewed are taking very high position in the Universities' lives and in process of education at the same time, they have different conferences and business to do that is why they have no time for informal meeting and giving interview face to face. The most convenient ways for them were e-interviews with the ability to give answers in typed way. Some respondents possible will be interviewed by telephone or by Skype that also allows to overtake some obstacles that can appear such as geographically or time zones difference, has low cost, ease of access and eliminate variety of issues of physical interaction (Hanna, 2012).

For the interview teachers from the data base created before were chosen on the random basis in order to see the picture in details and from the point of view of current teaching staff representatives.

Deeper understanding of teacher's perspectives seems to be very complicated because it supposed to be analysed through interviews and finally the aim of it is to conclude if contemporary teachers in Universities are the same option about Knowledge Exchange problems as this study

claims or not. Interviews in this study are the set of open-ended questions that allows to get deep qualitative data and point out features and issues real teachers take as problems in knowledge exchange. The matter is that teachers play very important role in Information Exchange between Academics and Industry because they are kind of connecting stage between students and business in context of higher education.

First of all interviews are aimed to give us the image of teachers' attitude towards practical and theoretical knowledge and at the same time give us the opportunity understand what role they are playing in the process of knowledge exchange to their mind. Second issue that is interested if teachers are up to date with the information according business situation. It is also necessary to find and emphasize the possible problems and obstacles these teachers see in knowledge exchange they are involved. And finally understand what reasons can have teacher that affect his/her possibility of renew knowledge about nowadays business processes and environment. All questions described in details below:

How do you understand the term "Knowledge Exchange"?

This question is main issue to understand if answers of this interview can be used for the research. In case teacher understands the term "Knowledge Exchange" in different way as this study undertakes his/her answers cannot be used because they will be already irrelevant.

What role, to your mind, a teacher of University plays in the process of knowledge exchange between student and business organisations?

In order to get prove for the model of interaction of teachers, students and business organisations it is tried to gather more information from the participants. What is more it is important to know an opinion of qualified and experienced individuals in this area and check the model for different missed features.

What are you doing in order to be up-to-date with current business situation on the market?

Analysing of current teachers interactions with business and knowledge sources he/she uses in order to be qualified and up-to-date prepared specialist. This questions is more about

sources of information both formal and informal participant has. To know them in order to prove that our judgment if teacher is practitioner or theoretician is essential for this research.

What knowledge exchange processes are you involved in? (consultancy projects, contract researches, trainings etc.)

The understanding of all interaction that teachers are involved in under the term of Knowledge Exchange with business organisation is important in order to understand how different leading teachers in this area interact with industry. As it was mentioned above teacher plays an important role in the educational process of a particular student and under these circumstances one can understand how this teacher get the knowledge base and experience in term of working in business and how he/she transfer these knowledge to student. Moreover taking into account all possible types of interaction with business teacher involved the quality of business background he/she has can be understood and it can be claimed if teacher is giving more practical or theoretical knowledge to students.

What do you think the problem of knowledge exchange between students and industry?

Under the topic of "Knowledge Exchange" it is acute to pay attention to the issue of different obstacles or problems student has in knowledge exchange process. In addition to it sometimes teachers' and students' perspective to this problem different as students see the problem in educational system but teachers understand that the problem in students, their character, lifestyle and wish to study and getting experience. It seems to be useful to overview all possible problems that can appear in answers for this question. It is expected that participant uses his/her huge experience and knowledge discuss this issue from both Academia and Industry sides.

In case there are those, in your opinion, what obstacles in process of knowledge exchange with business organisations teacher of University can face to?

In case there is some obstacles teacher face to during the process of knowledge exchange it is important to mention and discuss them in this study. Main reason for that is this can bring

causes or even solution for the problem of knowledge exchange. It could be different types of interaction. We can analyse what tools of knowledge exchange teachers are lack of and what they wish to see an appropriate mechanism of information transfer from sphere to sphere for both academic and business use.

How old are you?

The age is more important for the statistical reasons then for the main research because there is a suggestion that more young teacher can have a bit different points of view for the topic of knowledge exchange, the need to improve the process and increasing number of teachers-practitioners.

All data got from interviews is going to be analysed and results will be described in Chapter 3. But it is reasonable to say that to analyse "Knowledge Exchange" process and these research questions from teachers' point of view only are not confident. Because of this fact the online survey for students of management department runs and described below. The scripts of interviews is attached in the Appendix 3 with names and position of each participant.

Finally it has to be mentioned that there are some limitations of the qualitative interview described above. The main issue is sampling for this method of the research. Because this method is time and energy consuming separate individuals from all the population have to be chosen based on opinion of which we would manage our research in one or another way.

2.4 Survey Among Students Studying Management and Business Disciplines

It is keen need to understand the difference between the expectation of students and what they actually have when they are involved in the educational process in the University. In fact according to Babbie (1990) survey research is a specific type of field study aimed to get data from a sample of individuals have much in common chosen from the whole population. Main way to do it is questionnaire. Speaking of study design the cross-sectional survey is preferred for this research. Using this type of survey the estimation of the causal impact of lack of teachers-practitioners in the University on the students feeling about their preparation for the future job becomes possible (Blalock, 1972). Moreover it allows to cover more respondents and eliminate all different negative factors that can affect the study though anonymity.

As soon as the type of survey is defined sampling for this research can be started. Because of the inability to cover opinions of all population it was decided to take sample of 90 students of Saint-Petersburg Universities studying disciplines strongly connected with management and business on the random sampling basis (Figure 8).

Age	18-22 years old 37%; 23-26 years old 62%; 27-30 years old 1%
Gender	Male 54%; Female 46%
Civil status	students with part-time and full-time jobs
Education	students ofManagement and Economic Departments of Higher Education Institutions in Saint-Petersburg

Figure 8 Sample characteristics

The web survey with the forms for ranking and scale from (1 - strongly disagree to 5 - strongly agree), with some question where respondents have to choose one or several answers was created.

This survey was shared online among students who take a business education in the Universities of Saint-Petersburg. For those who cannot answer online due to some technical reasons the hard copy of survey was handed in.

Based on the research questions and the main goal of the study 7 main questions were asked respondents in order to generate an overall picture of student opinion of Knowledge Exchange process between University and Industry in terms of Business, understand main issues of teacher-practitioners and teachers-theoretician in Educational process and students' expectations. All questions are described in details below:

How old are you?

The age of participants is useful for getting statistical information about the majority of students take a part in this study. Moreover according to their age one can see what level of higher education they are getting now, for example, bachelor degree, master degree or PhD. One answer out of four. **Possible answers: 18-22, 23-26, 27-30, >30.**

Do you know the meaning of the term "Knowledge Exchange"?

This is important issue to understand how many students understands what is the "Knowledge Exchange". In case they do not know this term they will be informed about the meaning and core features of "Knowledge Exchange". Moreover it will help to create overall picture of understanding ratio. **Possible answers: Yes/No**

I think I am fully ready for further work in Business Area.

This question help to understand if students feel themselves ready for working in Business Area after graduation. The fact that students already have an experience of internship and working in real business organisation must be taken into the account. They also have to imagine what actually they will do in the office. Moreover according to the answer one can judge how much practical knowledge and skill students get in the University. However the threat of this study can be individual features of their character such as laziness, wish to study etc. Scale based question. **Possible answers: 1 - strongly disagree to 5 - strongly agree.**

What interaction of Knowledge Exchange with Business organisations do you involved in?

There are different interactions between University and Business Organisations and student is able to choose any of them and to be involved in them. The reason of asking this question is to understand by what ways student is preparing for the working in business organisation in future. In addition to it according to the answer to this question it can be decided if the University gives more opportunities for such interaction or student is looking for them himself. At the same time we can see what types of interaction under the term "Knowledge Exchange" with business University offers. There are 4 different variants of answer offered where participant can choose some. There are also variant as "other" in case participant wish to mention any other type of interaction he/she possibly is involved in. **Possible answers: consultancy projects, trainings, contract research, internship, other.**

I think the teacher plays an important role in the preparation process of student for the further work.

Here participant express his opinion about the rightness of this statement. It supposed to be teacher plays an important role in the preparation process of student for the further. Under the discussion of importance of providing University more teachers-practitioners and problem of Knowledge Exchange it can be claimed that one of the connection stage in this iteration process is teacher. And it is important that participant understands that. Scale based question. **Possible answers: 1 - strongly disagree to 5 - strongly agree.**

Who do you prefer teacher-practitioner or teacher-theoretician?

The information would be got from this question is much important for our study. Uneder the analysis in which ratio of teachers-practitioners to teachers-theoretician in the current department of management and business education in Universities of Saint-Petersburg the opinion of students about who they prefer to see as a teacher in University is also should be discussed. This question is more about ideal pictures of teachers-practitioners and teachers-theoretician, however it have to be mentioned that there are some limitations such as the teaching mode of different individuals, style of teach and the subject because sometimes the subject supposed to be theoretical and given basic knowledge and for that case tether-theoretician is more suitable for that. Moreover there are more teachers-theoreticians than teachers-practitioners in the University (it will be described in Chapter 3 based on the content analysis). Finally based on the gathered data the bar chart is constructed in order to visualise the result of analysis and show the preferences of students in this issue . Scale based question. **Possible answers: 1 - teacher-theoretician to 5 - teacher-practitioner.**

I think in my University there is enough practical knowledge teachers give to students.

Amount of practical knowledge students gets in the University is analysed be this question to know how students are prepared to the work in contemporary business organisation. There are many Universities in Saint-Petersburg and some are provided their students with high amount of practical knowledge but some giving mostly theoretical information. Under this study it is supposed that this is the effect of the poor interaction between Universities and Business Organisations and in order to understand if students suffers from lack of practical information the

question is raised. As Universities and its' teachers are supposed to be core stage of interaction between students and Business Organisations in term of "Knowledge Exchange" it is important to see the overall picture based on the opinion of sample of students getting higher education in Saint-Petersburg nowadays. Scale based question. **Possible answers: 1 - strongly disagree to 5 - strongly agree.**

I plan to continue studying and connect my future life with work as scientist.

This question helps to understand if students tend to continue their study in the University or not. The matter is that some Universities believe that theoretical knowledge much more important because students have to study basis approaches in order to become qualified scientists in the area. This is one of the reasons why there are more teachers-theoreticians then teachers-practitioners in the Universities. However in case students tend to get the degree and then start working in the business they would face to current problems of business environment on the market and possible more practical knowledge in this area would be more useful. The fact is that theoretical knowledge is more useful for scientists and people who is going to get further science degree in the University but one has to not forget about the majority of students that expect to get more practical knowledge in order to make the process of adaptation and working in the market easier than it supposed to be. Scale based question. **Possible answers: 1 - strongly disagree to 5 - strongly agree.**

Summary of Chapter 2

In this chapter is discussed types of research methods used for this study. They are: content analysis of teaching staff of management and business education departments in the Universities of Saint-Petersburg, interviews with randomly chosen teachers out of the sample of 70 individuals from 3 big Universities in Saint-Petersburg those are Higher School of Economics Spb branch, Saint-Petersburg State University of Economics and State University of Aerospace Instrumentation and the survey that is spread among students of Universities studying management and other business disciplines.

First the model of interaction in term of Knowledge Exchange between Universities and Business Organisations is offered. It consists of three core players: students, teachers and businesses. Some different problems all three main players face to during the interaction with each other were mentioned.

Second the content analysis of teaching staff, its stages and main issues for analysis was described. Database of all 70 teachers of three Universities mentioned above was created and connected with profiles of each participants in order to check publications, working experience and CVs.

Third the qualitative semi-structured interview as a type of research method was described. The interview is managed by emails, telephone and Skype calls. All questions and their main goals mentioned and discussed in details. Scripts for these interviews attached in the Appendix 3 with name and position of each participant.

Finally survey that is spread among students in order to finalise the picture of Knowledge Exchange process between students and Business Organisations is described. The main goal of this survey to get the information of students vision to this question and add some details to the interaction model of Knowledge Exchange offered in the beginning of the Chapter 2.

By analyzing data gathered by these three research methods one can judge if the Knowledge Exchange between Universities and Business Organisations has problems and in case there are some based on our findings (described in Chapter 3) The solution and recommendations taking into the account most limitations of this study can be suggested based on the results.

3. MAIN FINDINGS ON THE KNOLEDGE EXCHANGE AND ACQUISITION

3.1 Content analysis results

Based on the content analysis of the teaching staff from 3 big Universities in Saint-Petersburg those are Higher School of Economics Spb branch, Saint-Petersburg State University of Economics and State University of Aerospace Instrumentation it is able to say that there are much less teachers-practitioners then teachers-theoreticians (Figure 9).
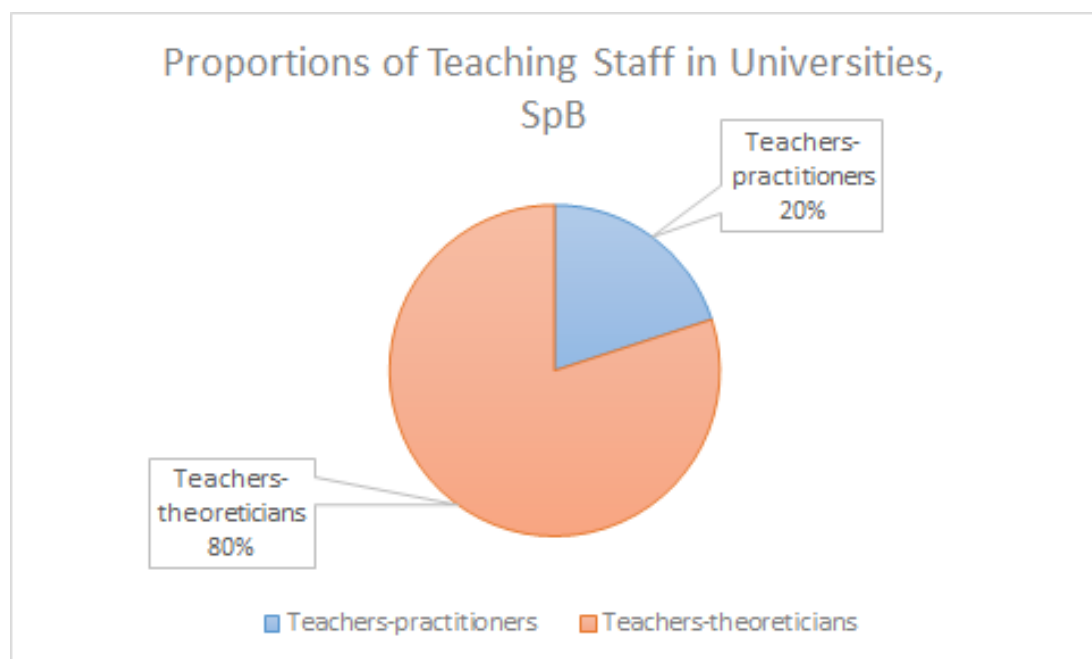

Figure 9 Proportion of teachers-practitioners and teachers-theoreticians in Universities SpB

Only 20% of sample of 70 people are teachers-practitioners. As it was mentioned above all possible limitations were taken into account and it is tried to make confident analysis of teachers and their works, publications. In case teacher qualified as theoretician then he/she obviously has no clear connections to business, teaching more basic subjects or make more theoretical publications then practical (based on keywords analysis). To come back to the model of Knowledge Exchange Problems between three main players in the process: students, teacher and business; it can be claimed that problems like lack of teachers-practitioners, interaction activities and prevalence of more theoretical approach are still acute in current situation. It seems students have problems in adaptation process on the working place because of these three factors.

However in the interview Valerii Katkalo (Kondratieva, 2008) argued that there is a myth that all practice of business education is founded across practical business approaches. Based on foreign business schools experience there is no such teaching staff where major part were teachers-practitioners. There are many possible way of interactions between student and business organisation despite teachers-practitioners such as special courses, guest lectures, projects. What is more according to Valerii Katkalo this is one very important issue concerns teachers-theoreticians in business schools. There are some set of requirements for them under which they have to know how business works, decision-making processes, research and development problems in current business situation. Many of them are the part of different consultancy projects. In case of professional schools of business where core disciplines are marketing, corporate finance and strategic management we have all to understand that people with clear vision on contemporary business are required but not "book" teachers. Based on cases of well-known outstanding business gurus such as M. Porter, Kotler they all became famous after they wrote their books-bestsellers based on the understanding logic of business and trend but before they organised business organisations and start working in business environment (Kondratieva, 2008).

On the other hand it is important to clarify what Valerii Katkalo said. The interview was given in the term of Graduate School of Management where according to the criteria of this study (Appendix 2) even each teacher has practical background and involved in such Knowledge Exchange processes like consultancy project, contract researches and etc. - teacher takes as practitioner. But the interview is not fully concerns usual Universities in Saint-Petersburg. The matter for such statement the result of content analysis that shows most teachers are not willing to be up to date with current business situation. Some teachers are not involved in any Knowledge Exchange processes with business organisations, some teachers (according to the interview, see Appendix 3) are conservators in teaching style and prefer to teach based on book they read before.

Finally the number of teachers-practitioners or teacher who can give any practical knowledge or theory implementations are very low. It can lead to some problems in students preparation, level of education and Knowledge Exchange processes between Academia and Industry. According to content analysis it seems very qualified teachers in theoretical aspects of science can give very poor knowledge of practical implementation of such knowledge to students.

3.2 Interview findings

Besides the fact that the content analysis of teaching staff is run and according the results one can already make some conclusion in order to deep understand the problem some participants chosen on random basis from database of teachers were interviewed (Figure 7). As it was

mentioned above the scripts of interviews is being able to see in Appendix 3. Main findings of interview are discussed below.

Respondents helps to clearly understand common view on the term "Knowledge Exchange" and to create final picture of current interaction between Academia and Industry in the process; and emphasize problem concerned knowledge transfer from one institution to another.

Teacher is playing an important role both in the educational and knowledge exchange process. And teacher is the connection between student and business organisations in the process because theoretical background, experience and practical knowledge teacher are able to share are core issues student expect to get from University.

Unfortunately based on the answers of respondents it is going to be proved that there is a problem of being up to date with current business situation, but all participants tend to be involved in different interaction and experience sharing processes to improve their practical skills. But because of the fact that they were quite doubtful about their colleagues who works in other Universities one can suppose that there is different situation in Universities: in one the problem less acute in other it is becoming keen issue required solution.

Main problems respondents see in the process of Knowledge Exchange between students and business organisations:

- Lack of confidence in students' abilities
- Students' way of behaviour
- Lack of understanding among business organisations about the possibilities of innovation, modern science, the role of experiments etc.
- Level of students' preparation in case of both theoretical and practical knowledge
- Poor vision
- Universities policy about attendance and in-class assignments
- The attitude to knowledge exchange of business organisations

And finally it should be pointed out that main problems of teacher interaction with business organisations for Knowledge Exchange and sharing experience despite the fact of teachers attitude to practical knowledge, type of teaching and wish to have relationship with business is - lack of an interface for communication of firms and teachers as experts. In other words this means lack of different professional, scientific practical conferences, or even IT interface/platform for knowledge exchange.

The age of respondents was at the range of 28 to 68 years old and one can understand if the age is connected with the opinion of teachers. It is reasonable to say "no", because whatever the age is, participants are giving different answers that means that age even if connected with their opinion difference has very low impact on this research.

3.3 Survey results

The sample of students asked the survey is consists of 90 respondents mostly at the age of 18-26 years old studying management disciplines in Universities of Saint-Petersburg. Then according to their age we can conclude that they are studying bachelor and master degrees (Figure 10). That means that the information about Knowledge Exchange processes they are involved in can be got and their feelings about interactions with business organisations and practices from the beginning stages of Higher Education level become clear. There were no participants over 30 years old answered the survey questions.
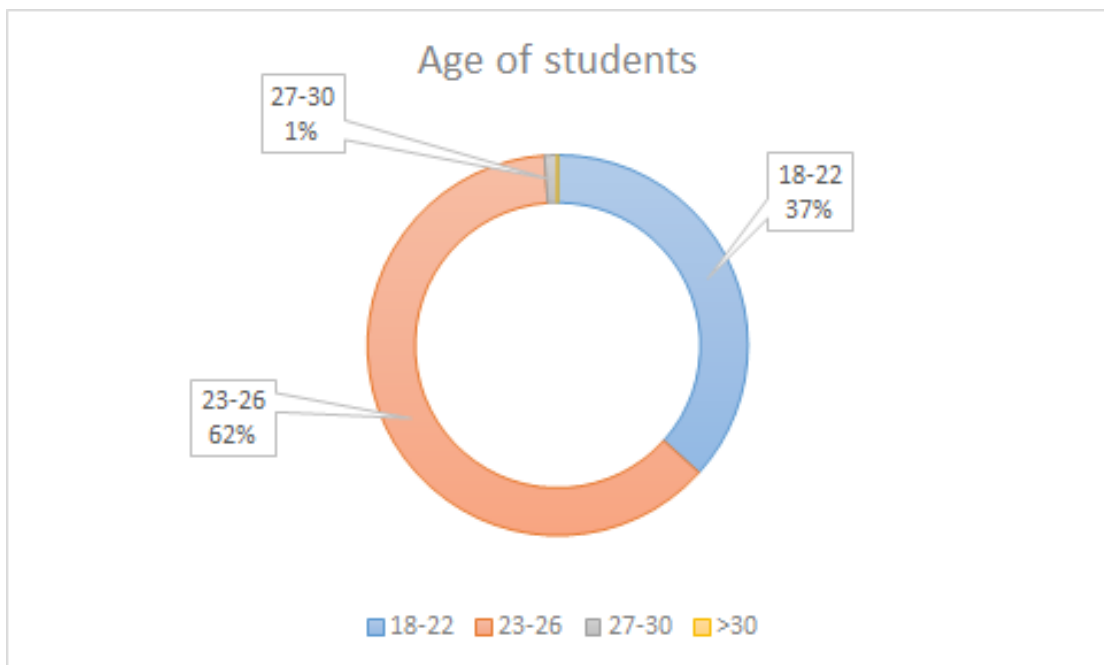

Figure 10 Average age of students taken part in survey

It is reasonable to mention that the majority of people knows the meaning of the term "Knowledge Exchange" and understands what types of interactions they can be involved in during the study. They also understands that there are three sides of the process such as students, teachers and business organisation. In fact 84 people out of 90 are fully informed about main features of Knowledge Exchange and are able to answer all questions of survey in confident way. To those people who does not know the term "Knowledge Exchange" it was explained in detail in order to put them at the same conditions like others and make our sample representative (Figure 11).
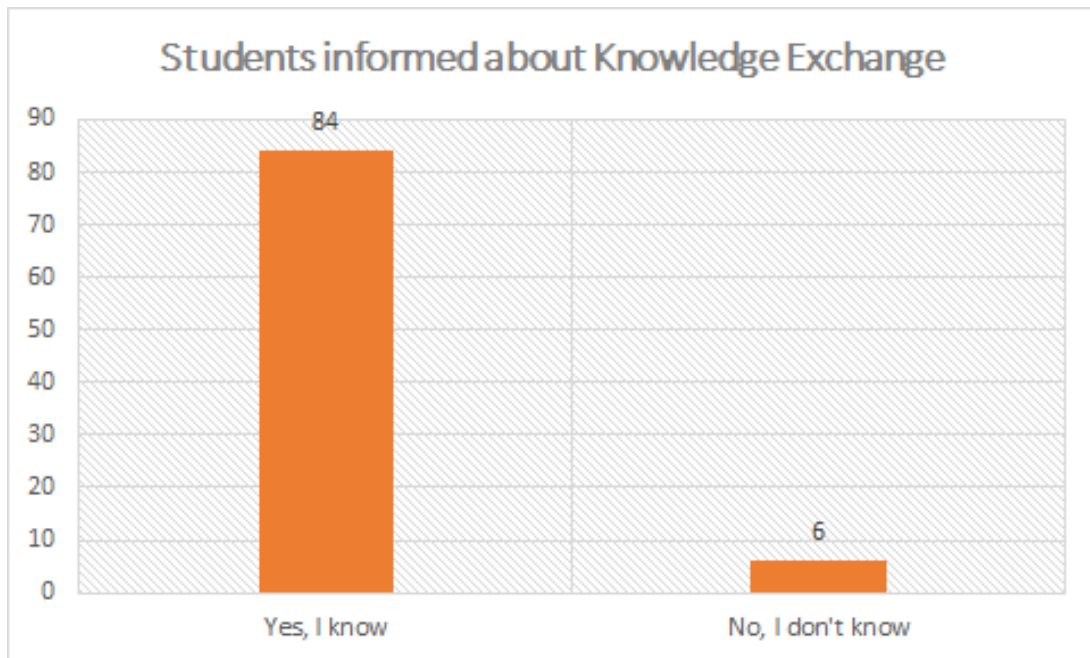
Figure 11 Students informed about the term "Knowledge Exchange"

Next question is aimed to gather information about students feelings of their preparation level for future working in business area after graduation. Taking into account the fact that Universities have different interactions with business organisations and usually make student to take a part into different internship this study is going to analyse if it is enough. In case there is no contribution with personal characteristics of students and their possibilities to work during the study processes this study can say that majority of sample feels themselves more or less ready for future career in business sphere exactly after graduation (Figure 12). To remind for the reader the less prepared students asked to rank this statement as 1 - strongly disagree (not prepared), more prepared 2 - strongly agree (fully prepared). Under these circumstances we can see that only 10% of respondents are not ready to their mind (9 out of 90 that ranked as 1-2). Nobody can judge if students got this preparation in the University or not but everybody can suppose that University and their teachers played their role in this process.
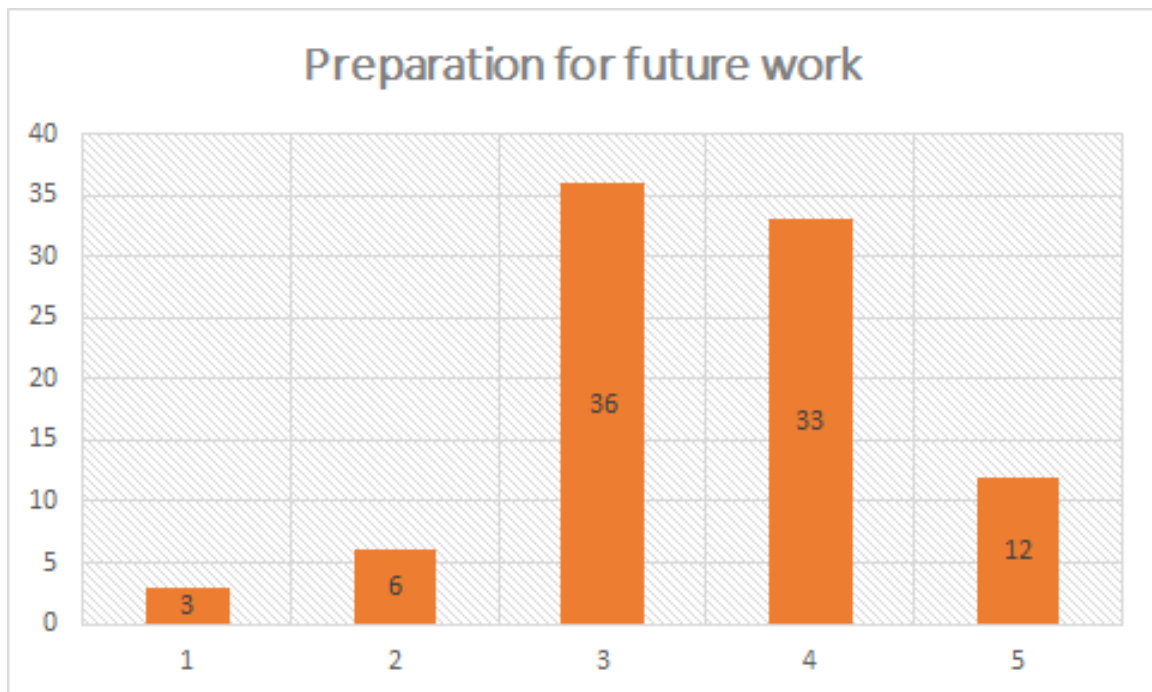
Figure 12 The level of respondents preparation for future work in Business Area

Next thing that has to be understood in case major of sample feels themselves prepared for the real work in business and they are sure that they have enough knowledge and practical experience in what Knowledge Exchange processes they are involved in. According to the data got from this question it can be understood if the University gives opportunities to its' students participate in these processes. As main variants of questions for these question were offered: consultancy projects, trainings, contract researches, internship and students were also had an opportunity to mention other interaction types with business organisations (Figure 13). As all participants were able to choose several answers it is seen that majority of students 80% (72 out of 90) took a part in different internship and possibly because of this Knowledge Exchange interaction got their major practical knowledge base. This proves that students has an experience and vision how business works and because of successfully passed internship can feel themselves ready to work in real business environment. A bit less part of the sample 60% took a part of variety consultancy projects (54 out of 90) that means Universities have some interactions with business organisations in order to give students the opportunity to understand the business environment before graduation and check all theoretical knowledge got from educational process on the practice. It also can mean that business organisations already go to the direction of understanding the importance of scientific research and modern science itself. They tend to provide students with relevant information about their company, financial statements, organisational features and etc in order students analyse them theoretically and offer any solution for problems company faces to.

Only 17% of respondents (15 out of 90) are involved in professional trainings and 7% (6 out of 90) in contract researches.
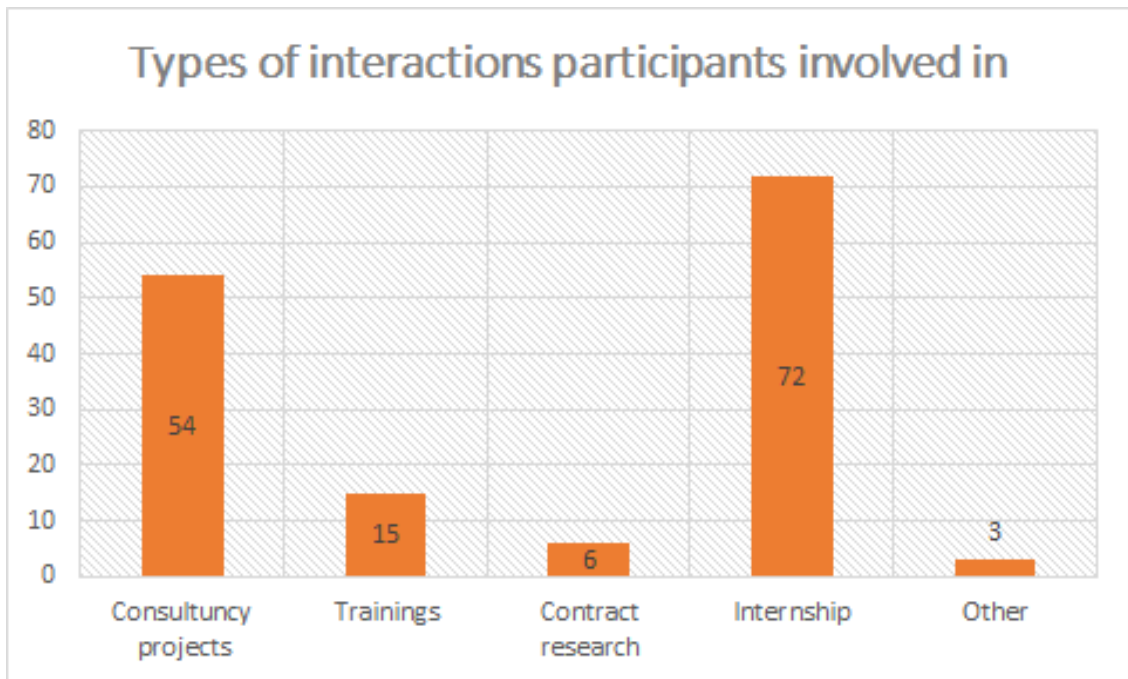

Figure 13 Types of Interactions participants involved in

Based on this research it can be seen that students have enough possibilities to be part of Knowledge Exchange processes and business organizations tend to help them by giving an opportunity of having internship on the real workplace, taking a part in business researches and consultancy projects. Of course, University also plays an important role in this interaction by helping students to find internships and giving theoretical knowledge. Under these circumstances the question if teacher plays an important role in the process of Knowledge Exchange is becoming more acute. It seems to be so but the opinion of students have to be analysed.

The same sample of 90 people was asked to rank the statement "I think the teacher plays an important role in the preparation process of student for the future work" from 1- strongly disagree to 5 - strongly agree. The matter is that the majority of 97% (87 out of 90) are sure that teacher does play an important role in this process (Figure 14). That means that students see teacher as a person who is very important for them not only in the Educational process but also in the process of sharing practical knowledge useful for future working.
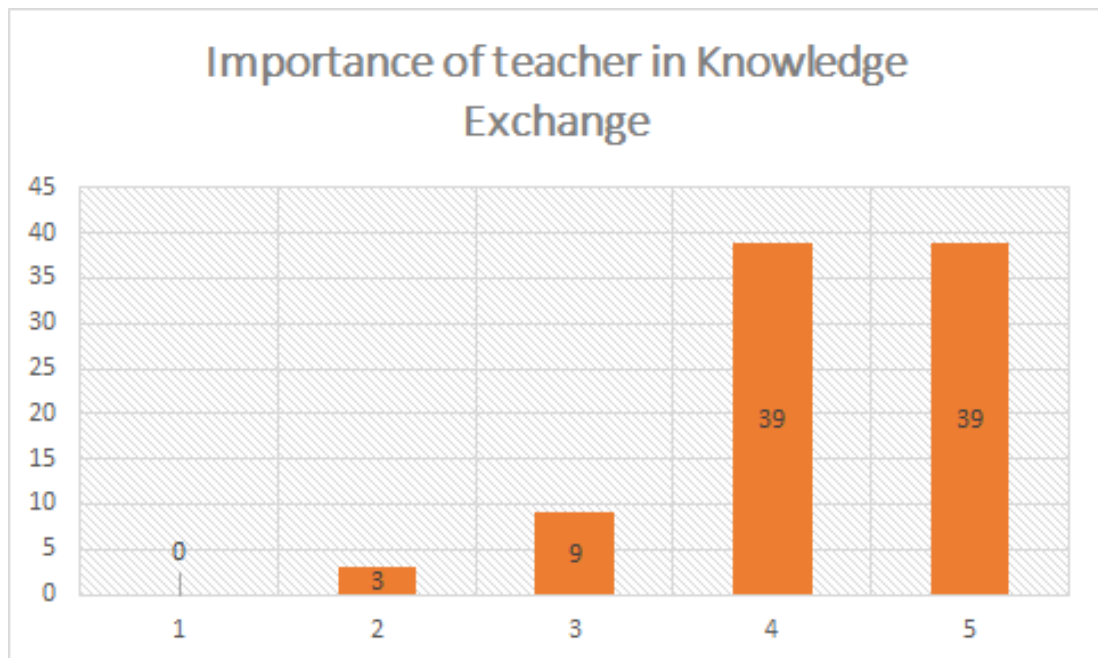
Figure 14 Importance of teacher in Knowledge Exchange from the opinion of respondents

Here the question "What type teacher is more preferable by students in term of getting business education?" is raised. The issue is that an important role that, to students' opinion, teacher plays in Knowledge Exchange make the question of interaction process more keen than before. The matter is that there are two different types of teachers described in this study: teacher-practitioner and teacher-theoretician. Before the drawing the line between these two terms and claim main features used for deciding to what type a particular teacher is referred to. Respondents were asked what teacher they prefer to see as their mentor and 83% (75 out of 90) said they would prefer teacher-practitioner to teacher-theoretician; 10.5% (9 out of 90) are able to accept both types, and 6.5% (6 out of 90) tent to choose teacher-theoretician (Figure 15).
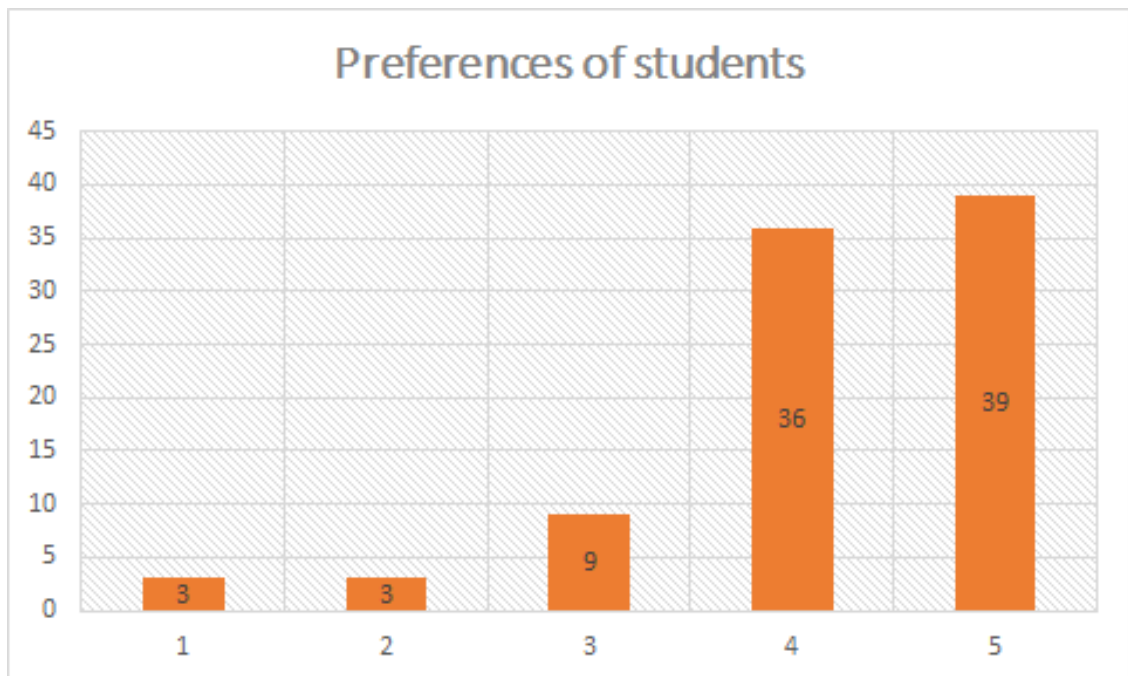
Figure 15 Preferences of Students. (teacher-theoretician - 1; teacher-practitioner - 5)

Based on previous question reader can only see what type of teacher is more preferable by students. On the other hand in the section of content analysis the teaching staff in Universities consists of teacher-theoreticians and teachers-practitioners was discussed and got the result that only 20% of contemporary teaching staff are practitioners. The problem that students expect to have more teachers-practitioners on their study but on contrast they have more teachers-theoreticians was faced to. It is important to say here again that this study takes as teacher-theoreticians participants that have no clear connections and interactions with business organisations due to different reasons. On the other case teachers who are involved in Knowledge Exchange processes such as consultancies, researches, business data analysis are already in the group of teachers-practitioners. According to what was said before this study is interested in question in case of such proportion of teacher-practitioners and students' expectations if Universities are able to give enough practice knowledge to their student as they want. We asked the sample of 90 individuals studying management disciplines in Universities of Saint-Petersburg to rate the statement "I think in my University there is enough practical knowledge teachers give to students" (1 - strongly disagree; 5 - strongly agree) and get the following result (Figure 16).
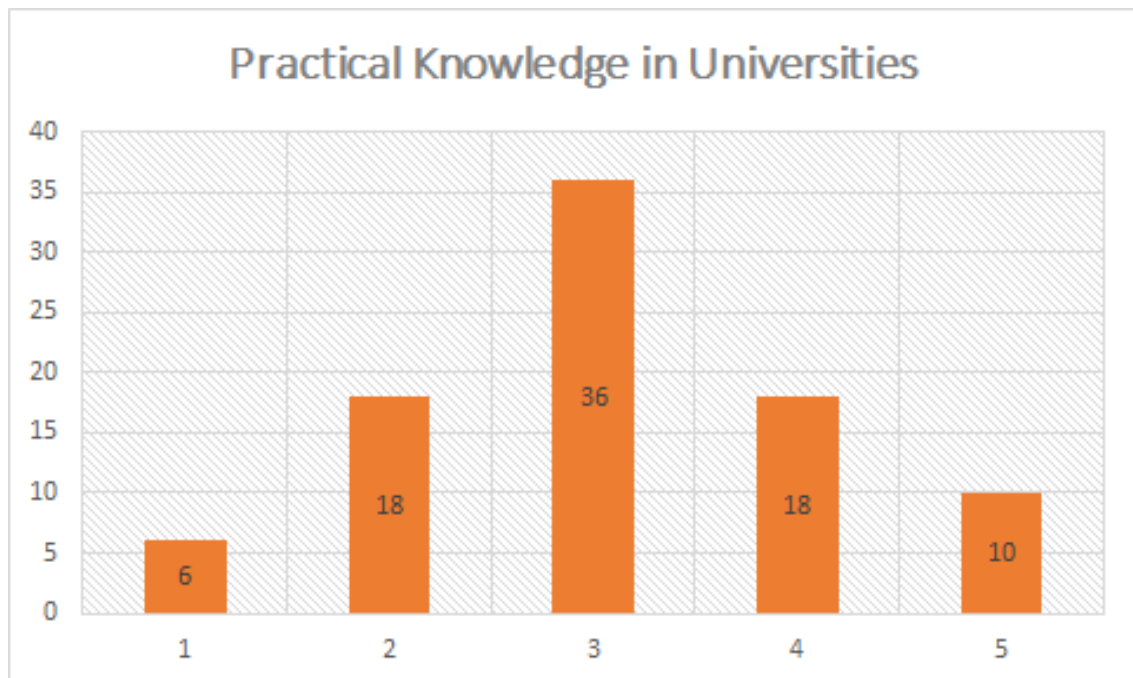
Figure 16 Practical Knowledge given to students in Universities (1 - not enough; 5 - quite enough)

As one can see on Figure 16 31% (28 out of 90) students suppose that they are giving enough practical knowledge in University by different Knowledge Exchange interaction with teachers and business organization and it seems they are not in keen need of more interaction ways. 40% (36 out of 90) in the middle that means they are not sure if they have enough practical knowledge and it is obvious that they require more possibilities of Knowledge Exchange. Others 29% (24 out 0f 90) are sure that there is not enough practical knowledge in University they are able to get. To conclude we have enough reasons to claim that 69% of students are not practically prepared enough and need additional practice knowledge. The reasons for that could be:

- Lack of teachers-practitioners
- Lack of interactions with business organisations
- Inflated expectations of students
- High requirements of business organisations for students preparation level
- Lack of understanding theoretical approaches and its' use

Finally to come back to the idea that University would better to give more theoretical information and practical knowledge students can get from future workplace it is suggested that the same sample is answering last question. Students were asked if they are going to continue their future with science and further studying. It matters much in case they do and get more theoretical educations than practical one. Theoretical education seems to be reasonable if students do not plan to go in business organisations for working and hope to get practice knowledge later during further

education by different interactions with business we discussed before. The results are shown on the Figure 17 below.
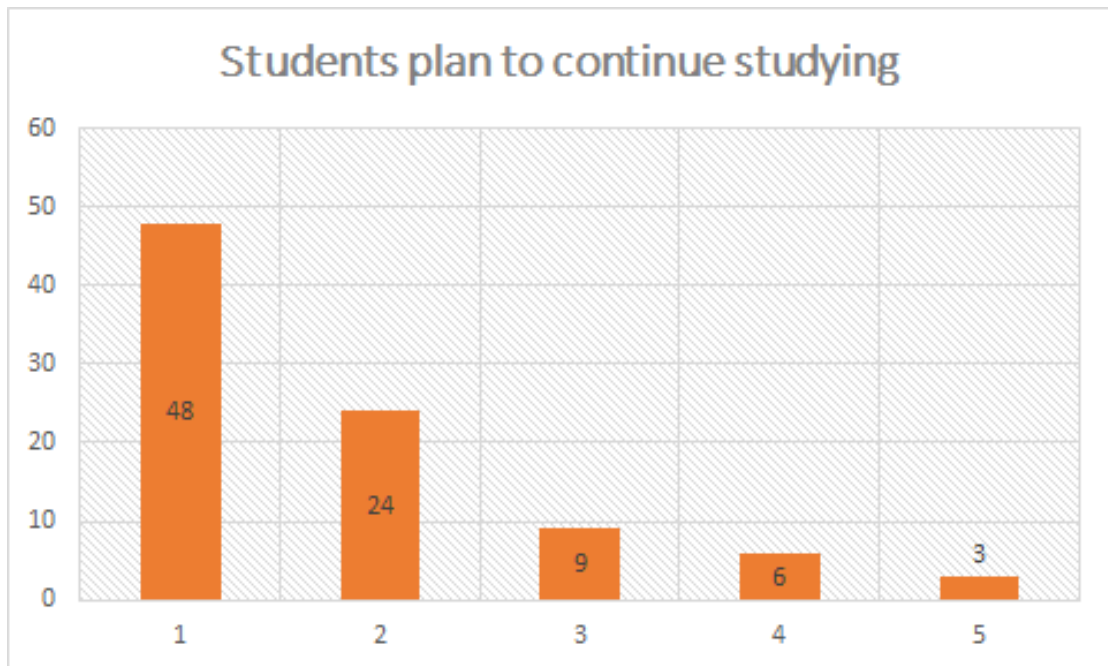

Figure 17 Students plan to continue studying (1 - don't plan to continue studying, 5 - plan to continue studying)

More than 90% of respondents are sure that after graduation they will not continue studying and go for the work in any business organisation and only 3% (3 out of 90) strongly believe that they would go for the next stage of educational degree. The the question if students need so much theoretical knowledge as they get in the Universities in case only small percent of students are going to continue studying. It does not mean that Universities should not give theoretical knowledge at all it means that it would be reasonable to:

- increase the amount of practical implementations of theoretical information students get
- increase the number of Knowledge Exchange interactions between Universities and Business Organisations
- make teachers-theoreticians become involved in these interactions in order to share their practical knowledge they would get from that
- increase teachers-practitioners in teaching staff
- increase the number of guest lectures and invited managers as teachers from business
- increase level of practical interactions between teachers and students

- launch the program/interface allowing three main players of Knowledge Exchange process such as students, teachers and business professionals to interact with each other more deeply.

3.4 Managerial implications

Based on the gathered results of this study and all possible features of the Knowledge Transfer Process it can be clearly seen that the problem in the interactions are the fault of all parties involved in the process. The fact that student is not prepared well from the practical background affects the willingness of business organisation to have any knowledge transfer interactions with her/him. Partially the cause of bad practical preparation of the student is the either bad knowledge transfer process between teacher and student or inability of teacher interact with business in an appropriate way or the wrong way of coding knowledge by teacher or business organisation.

The aim of this study was to understand the influence of teachers-practitioners proportion in the level of practical preparation of students. It is understood that teacher in the University obviously has to have the valuable practical background in order to explain his/her students how to use theoretical knowledge they acquire in the lectures in the real business situation. Even if teacher cannot or do not want to have strong knowledge transfer interaction with business such as to have own company or be employed in the particular organisation on the regular basis he/she would be better to have such interaction as contract research, consultancy projects etc. According to the interviews it can be argued that some teachers are not involved in such processes at all and then are not able to give students up-to-date knowledge about current business situation. The changes can be done is such areas:

- changes in the employment policies in Academia
- changes in the format of Education process
- changes in process of Education

In general it would be recommended, based on this study, Academia to:

- look for more knowledge transfer interactions with business organisations
- explain to students the importance of knowledge exchange processes
- even not hire more teacher-practitioners but make teachers-theoretician be more involved in the practical knowledge transfer in both sides: to business organisations and to students.

- manage more professional and scientific conferences in order to make business organisations understood the importance of science in future success

Students to:
- be more interested in the getting practical knowledge
- not miss guest lectures and other practical knowledge activities
- be involved in different knowledge transfer activities like internship

However these recommendations seems to be very general and can be given by one who understand the problem. The main issue that according the research and interviews one can also argue that Academia are not for the idea of hiring more teachers-practiticians and teachers in their sides often either do not want to have interaction with business or cannot do that because of their attitude, professionalism and vision. The matter is that the issue is how to solve the problem of lack of practical knowledge in Universities without hiring more staff in Academia and with the interest to that from the business organisations' sides.

One of the possible solution to this question can be the business strategy simulation interface that is increasingly popular in the Business Education abroad, for example in the University of Nottingham. It is called CAPSTONE. The idea of this interface is to give to students the opportunity to train and check all their theoretical knowledge getting in the University through taking part in the virtual business simulation. There are huge variety of activities student have to do: accounting, financing, R&D decisions, marketing, investing, etc. The process will be described in details below in this paragraph. However there is the keen problem of CAPSTONE that this interface based on the static scripts without any changes year-to-year and there are already a lot of answers in the Internet for the getting the best result in this business strategy simulation. This study suggests to create Russian analogue for this business strategy simulation with some changes in the techniques and organisation processes.

First of all in case of lounging business strategy simulation interface in the process of knowledge transfer there would be one more party (Figure 18). It is already looked through the interactions teacher-student, business organisation-teacher and business organisation-student. However with this new player "Simulation Interface" this study suggests the appearing new interaction with existing three parties through this virtual interface. Business organisations, teachers and students will have the access to this interface with different capabilities within.
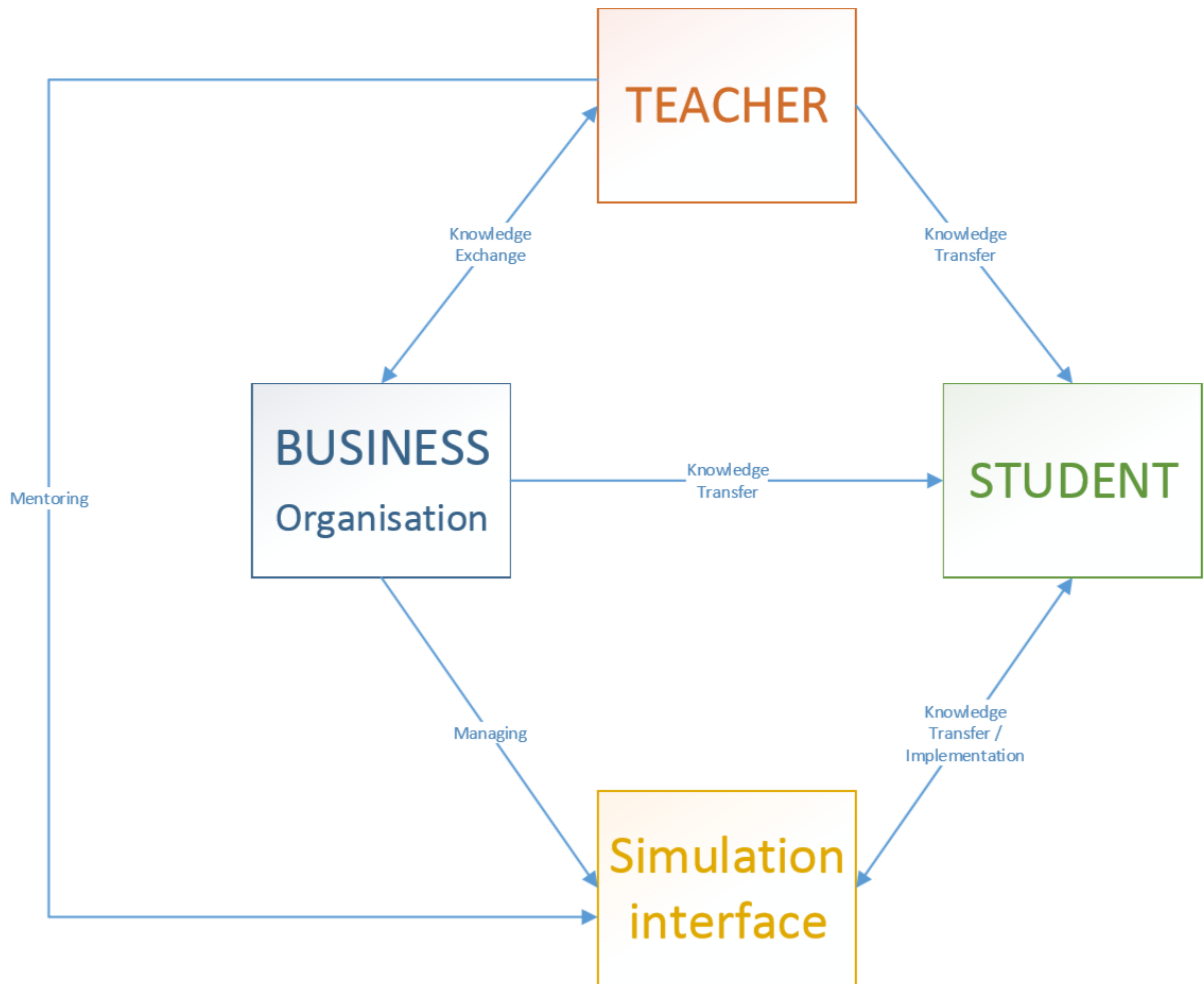
Figure 18 The model of Knowledge Transfer Interactions in case of Simulation Model occurs

The detailed description of the working model and key features:

1. **Market Simulation** – it is dynamic process that is controlled by scripts in the interface. The main issue here that the audience is divided into some teams illustrated separate organisations and then all of this teams are doing the same business, developing the same product and has the same budget. These teams is organising the virtual business environment and the action of each team in different departments such as finance, R&D or invest would have effect on this virtual market, for example, decrease in market share, sales, stock price etc.

2. **Mentoring** – in order students are confident about what they are doing they would have teacher in the role of mentor who is going to show a particular direction of the companies development.

3. **Managers** – real companies (partners) would be the managers of different events like crisis, collapses or other possible business situation. Customer and their preferences simulation.

4. **Timelines** – the simulation runs some time such as two weeks and students supposed to have a part in this simulation as a real managers in real work. One real day would be one virtual years. And in the end of each period each team would get the reports from different departments, analytical data about the situation on the market and financial statement of competitors. According to income of this period they are able to decide if they need increase production, issue additional stock or take a loan in the bank.

5. **Investing Capabilities** – each team are able to buy stock of competitors if they wish and get additional finance from dividends. Moreover then they will have the right of voting in the decision-making process in the company as an investor.

6. **Strategies Opportunity** – each team can choose their own corporate strategy. They can decide if they work aggressive or passive, tend to take luxury product market share or cheap etc.

7. **Real reaction** – in case of any company bankrupt they are out of the game.

8. **Interesting solutions** – team are able to behave on the market as they want. They are even allowed to organise alliances, behave with the goal of becoming monopolist or a small organisation. The main goal to be stable and profitable company but the way of achievement this goal is up to the each team.

9. **Case Study Analysis** – based on the actions done by each team and their competitors one can analyse all mistakes, what was right or wrong and how they could avoid this.

This business strategy simulation can give student the practical understanding of what knowledge he/she gets and how it can be used. This interface can solve the problem of lack of practical knowledge in the Universities through giving the opportunity of students work in virtual business environment that was created by themselves. Moreover in case teacher has poor practical background he/she can use theoretical knowledge in order to mentor teams. And there is a deep involvement of business organisation in the process.

On the other hand it is important to mention some limitations of this solution that should be taken into the account in case of business strategy simulation:

- Teacher-mentor can face to the problem of lack of information about all business processes mentioned in this simulation interface

- Business organisations can fake customer preferences in not systematic or logical way
- Business strategy simulation interface is giving practical knowledge about basic business processes and market competition with the students with the same level of preparation (without simulation of entry to the market and without taking into the account possible experience, difference in the company organisation and etc. of real company on the market)

Finally it is supposed it would be a good opportunity for teachers, students and business organisations to develop their relationship in term of knowledge transfer process. Moreover it can solve the problem of lack of practical knowledge in the Universities and poor practical background of teachers, overtake the obstacle of reluctance to knowledge transfer and interact with Academia by business organisations.

3.5 Limitations and future studies

As different other studies in this area with the chosen sample from the huge population this study also has some limitations that should be taken into account before any judgments and suggestions can be made. Those are:

- the inability to be sure if the teacher is practitioner or theoretician even according to the framework shown in Appendix 2.
- the inability to fully analyse the style of teaching of particular teacher and cover each individual in the population in Saint-Petersburg and in Russia in the whole due to time and resources limitation
- the practices and the format of education vary depends on the region
- hardness of analysing the problem deeper from all parties of the process: students, business organisations and academic staff
- inability to measure some sort of features of the problems such as behaviour of students
- the chance of representatives told lie during the interviews and surveys
- undervalued modern science from the side of business organisations and managers
- the reputation of the University and the business organisation can have negative effect on the interaction between them in term of Knowledge Transfer and Exchange Process

Speaking of future research it is going to be reasonable to run more deeper analysis of teaching staff by analysing the style of teaching, all activities and CVs, and base on the bigger sample than this study did. In fact this study is analysing the problem only from student's and teachers' bias however there is the need for future research in order to create more detailed picture of barriers in the interactions between Industry and Academia to analyse business organisations' role in the process. Finally analysis of advantages and disadvantages of launching the business simulation interface this study offers as one of possible solutions is important side of future studies.

Summary of Chapter 3

In this chapter all findings on the Knowledge Transfer and Exchange Process were described and analysed. The problem that the amount of practical knowledge student acquire during the educational process is small because of the lack of practical background teachers have and bad quality of interaction between Academia and Business Organisation was proved by different research methods mentioned in the Chapter 2.

The content analysis of teaching staff of the management and business departments in the Universities of Saint-Petersburg shows us that there are only 20% teachers in total who have any practical knowledge to share with students and about 80% are teachers-theoreticians who prefer to teach basing on the theory and books.

Secondly, the interviews with randomly chosen teachers from the sample for the content analysis were run. According to interviews one can understand the current business teachers understand the issues and obstacles of education process and see the need to suggest the solution, however not everybody are willing to do any steps for realising the idea. In Appendix 3 there are the scripts of interviews. The problems respondents sees in the current Knowledge Transfer and Exchange Situation are:

- Lack of students' confidence and their behaviour towards Knowledge Exchange Interactions and other educational activities
- Poor vision, policies and lack of understanding about advantages and disadvantages of these processes

After the content analysis and interviews there was a survey spread among students of Business Disciplines in the Universities of Saint-Petersburg. There were suggested some recommendations for solution this problem with taking into account all possible limitations of the study described above.

One of the most interesting solution suggested in this study is the creation the analogue of international business strategy simulation interface. It is able to give the ability to student to implement all theoretical and practical knowledge in different ways without any risks for the real company and with the mentoring teacher and his consultation. In case this interface will be fully adapt for Russian market it can solve many sides of the problem of Knowledge Transfer and Exchange between Academia and Business Organisations.

Finally limitations of this study were examined and the recommendations for future studies listed in the last paragraph. According to these recommendations future researcher can organise his/her study in that way in order to cover this topic more deeper and analyse bigger sample for more reliable results.

CONCLUSION

This study was aimed to analyse different barrier in Knowledge Acquisition process in term of getting business education in Russia from the perspectives of teachers and students. Firstly range of Knowledge Exchange interactions between three main players in the process such as students, business organisations and teachers were identified and analysed.

In order to answer research questions content analysis of activities of 70 current teachers of Higher Education Institutions in the direction of management was launched. In addition to in taking into the account all limitation to deep understand the perspective and the attitude of teacher to Practical Knowledge Exchange processes and barriers randomly selected teachers from the sample of 70 mentioned above were interviewed. In order to compare results of previous research with the students' opinion the survey was spread among 90 current students of Higher Educational Institutions.

Finally according to the research results and suggestion got from the interviews the range of general recommendations for the solution this issue was offered. Moreover the model of Business Simulation Interface for the Russian market was suggested and described as possible solution to the problem.

All limitations for this study and suggestions for further research also were described.
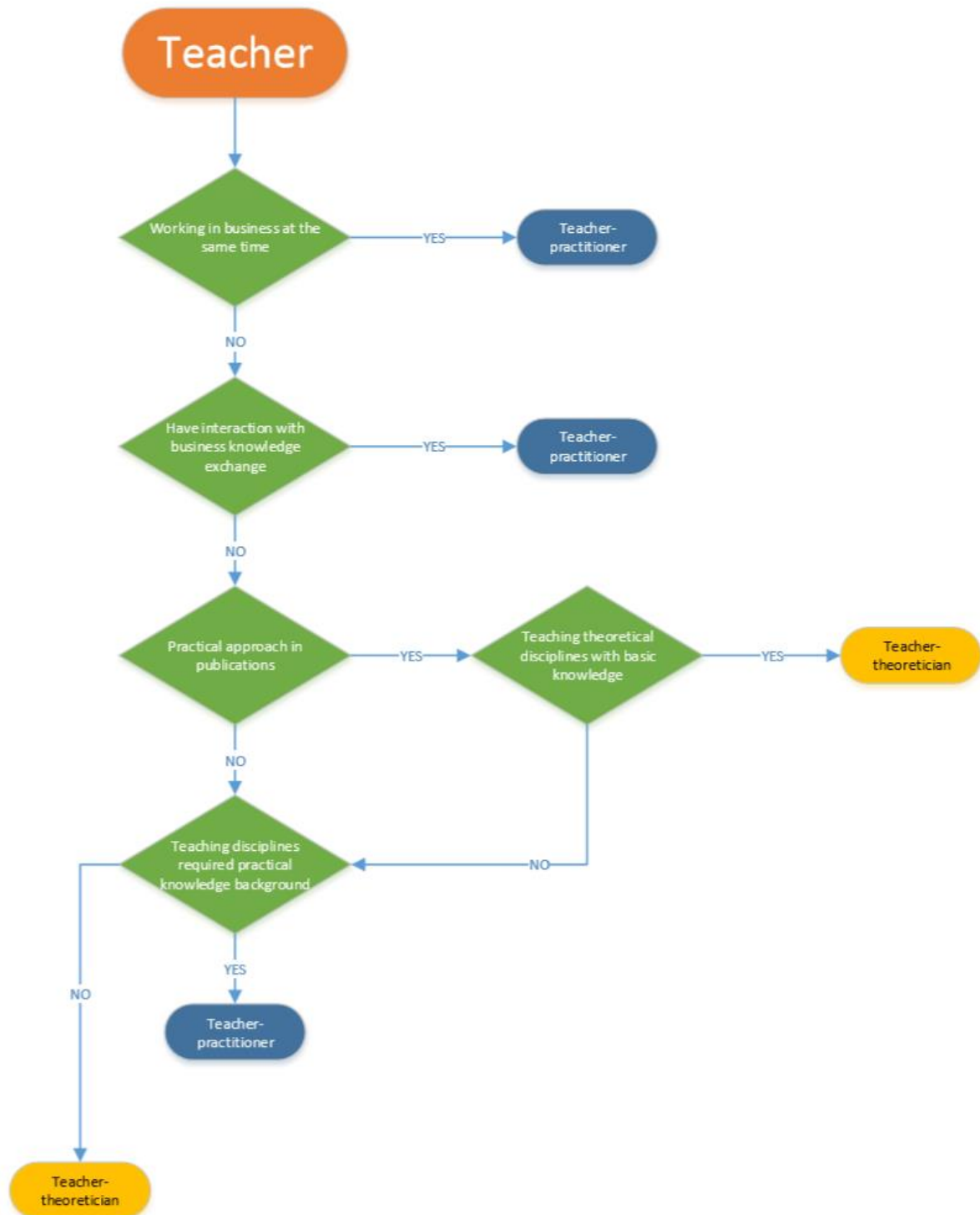
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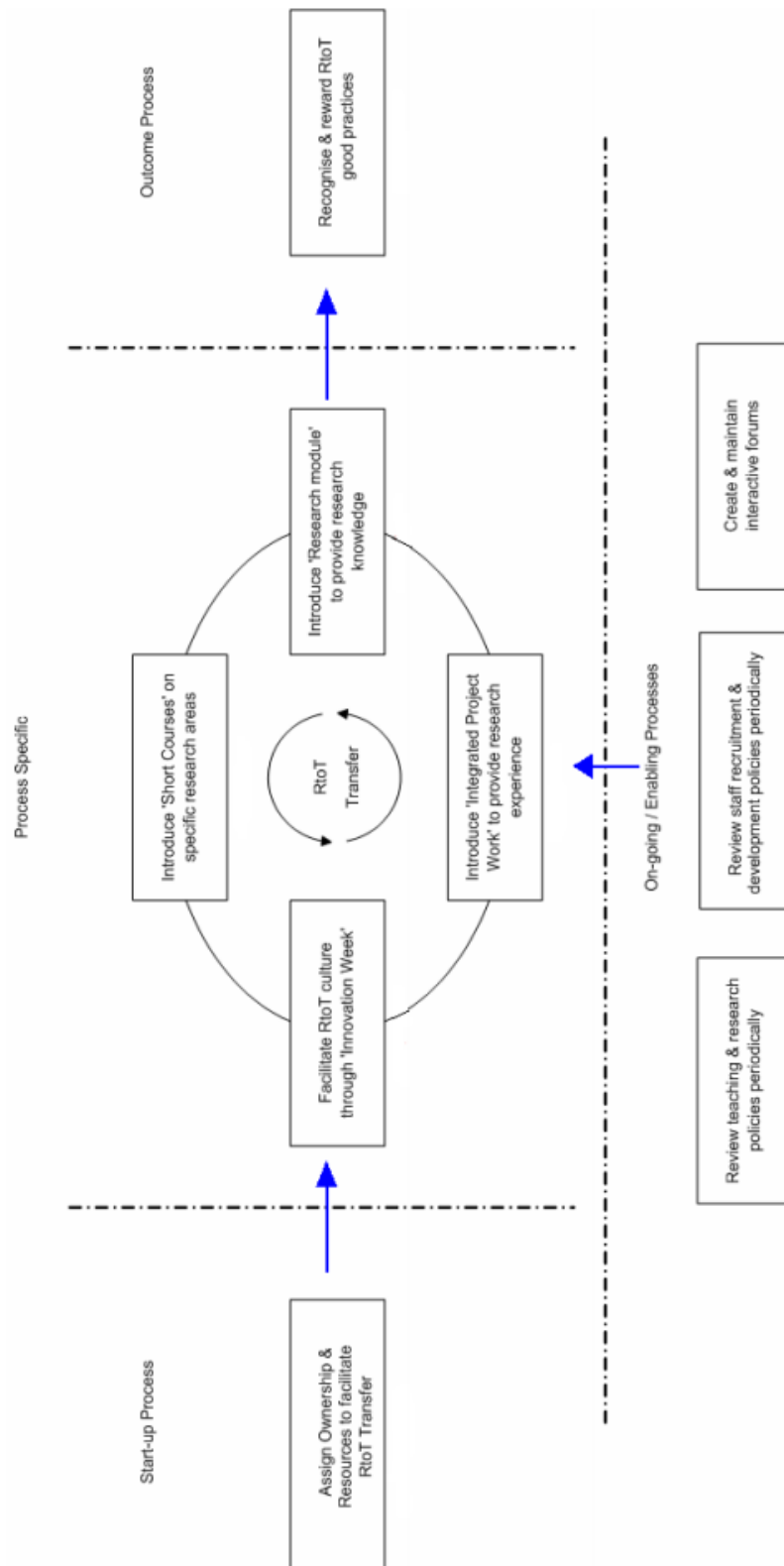
Framework to Transfer Research into Teaching in Higher Education Institution, Senaratne and Amaratunga (2010)

Appendix 2

Process of Analysing if a particular teacher is teacher-practitioner or teacher-theoretician:

Appendix 3

Interview Script 1:

Evgeny A. Antipov

Associate Professor of HSE Campus in St. Petersburg / St.Petersburg School of Economics and Management / Department of Management

1. **How do you understand the term "Knowledge Exchange"?**
   - *Literally: the exchange of knowledge between two or more subjects*

2. **What role, to your mind, a teacher of University plays in the process of knowledge exchange between student and business organisations?**
   - *The teacher should bring to the student the idea that not only the organization will give the student some knowledge specific to their market, but, more importantly, the student should show what he can bring. First of all, due to the help of the teacher, the student should master new methods, research results, etc.*

3. **What are you doing in order to be up to date with current business situation on the market?**
   - *I work with companies, analyzing their data. I'm interested in news from some of the markets that interest me (real estate), but not deep.*

4. **What knowledge exchange processes are you involved in? (consultancy projects, contract researches, trainings…)**
   - *Sometimes - I conduct trainings (1-2 times a year), weekly - contract studies, data analysis for companies (evaluation of the effectiveness of the new menu, analysis of interrogation data, etc.)*

5. **What do you think the problem of knowledge exchange between students and industry?**
   - *The students lack of confidence in their abilities. Failure to understand that the strategy of "everything I will learn in the workplace" does not work if they want to be truly competitive. To do this, you need to offer your own development. Often, there is a lack of understanding among business organizations about the possibilities of modern science (data science, management science, etc.), the role of experiments, data analysis, etc.*

6. **In case there are those, in your opinion, what obstacles in process of knowledge exchange with business organisations teacher of University can face to?**

    - *The <u>lack of an interface</u> for communication of firms and teachers as experts.*

7. **How old are you?**

    - *I am 29 years old.*

Interview Script 2:

Grigorii V. Bespalov

Senior teacher of Saint Petersburg State University of Aerospace Instrumentation / Department of Entrepreneurial Technology

1. **How do you understand the term "Knowledge Exchange"?**

    - *I suppose it is more about one directed stream of knowledge. I suppose teacher here is more like mentor. When students come to the internship place and go deep in business processes this is the element of Educations and Knowledge Exchange. In case we imagine ideal picture of this process we would have: student (who study in the University and gitting knowledge and experience from the teacher), teacher (as I told before in role of mentor) and business organisations (that attract students in order they will be able to use all knowledge they get from the Educational process in the practical environment).*

2. **What role, to your mind, a teacher of University plays in the process of knowledge exchange between student and business organisations?**

    - *Well, this is quite difficult question. Matters much from what side we will discuss this question because not all teachers connected with practical knowledge. In case we are talking about teachers-practitioners they are kind of connection between students and business organisations. This is the person who understands how business works and can help students with advice etc. In case we are talking about "classical" teacher with theoretical background only I do not know, this is difficult to say anything.*

3. **What are you doing in order to be up to date with current business situation on the market?**

    - *In fact I am businessman so I am always in this environment.*

4. **What knowledge exchange processes are you involved in? (consultancy projects, contract researches, trainings…)**

   - *Well in case you mean processes of interaction between Universities and Business. As a teacher of High Level of Educational Organisation I am not involved in different iterations of Knowledge Exchange. I would say I am opposite version of this process. In other words I am businessman who is teaching in the University at the same time.*

5. **So in this case you take yourself as a teacher-practitioner?**

   - Yes, teacher-practitioner.

6. **What do you think the problem of knowledge exchange between students and industry?**

   - *I suppose first problem could be the level of preparation of students that come to the internship. Unfortunately, many Universities have problem that its' Education process is strongly theoretical and there are very few cases solved during the process of Education. So that students have very poor vision about current business situation and have more theoretical background so business organisations has to work a lot with this issue. In fact students coming to the workplace are not ready enough to immediately participate in current real projects because they are lack of skills, knowledge and adaptation. We have to spend a lot of energy in order to adapt students to current situation in business and this is not only problem of graduates but also with interns and etc. In addition to it not all business organisations are ready to work with students on the early stages of their career. So I would say there is a problem of creating communication and relationship between Business Organisations and Universities in term of practical aspect of Education, internships; then students are not confident about different issues especially from the practical side.*

7. **In case there are those, in your opinion, what obstacles in process of knowledge exchange with business organisations teacher of University can face to?**

   - *I suppose this is the problem of teachers in general because they often behave in conservative way and do not want to contact with business organisations. I would say they are kind of "cabinet people" who tend to judge about business situation according theoretical approach and books they have read before about a particular problem. However now this problem is solving in one way or another, for example, many Universities forced teachers to create strong relationships with business organisations. In general there is "formalised" approach to the contact with*

business that is the problem. The matter is that teacher are not looking for any interactions with business. I would say business in this case much more flexible because as employers we are interested in attracting qualified specialists but not people that we have to teach for some time. Business is ready to work with students but not all Universities are ready to offer any possibilities to do it. In other word Universities offer to students individual plan of study in case they are going to work at the same time according their current specialty. But when student finds job both Universities and teachers creates different obstacles to work such as compulsory attendance and assignments during the lectures without opportunity to hold in it later.

8. **How old are you?**
   - *I am 50 years old.*

Interview Script 3:

Nadegda N. Pokrovskaia

Associate Professor of St.Petersburg State University of Economics / Department of Sociology and HR Management

1. **How do you understand the term "Knowledge Exchange"?**
   - Knowledge Exchange is quite complicated process of transferring the information from the person or organisation who is coding the information with her/his own opinion to the person or organisation who needs this information for further use and implementation. Knowledge Exchange is two-sided process but unfortunately this is not usual issue for current education process. I want to mention the problem of misunderstanding during the process of Knowledge Exchange in case of teacher would give the information in the wrong way it can be understood and implement in the wrong way.

2. **What role, to your mind, a teacher of University plays in the process of knowledge exchange between student and business organisations?**
   - The teacher here is more like mentor and the person who make a borders for students in the process of Knowledge Exchange in order student understand, implement and structural analyse knowledge in the right way.

3. **What are you doing in order to be up to date with current business situation on the market?**

   - Read everything I can find mostly in Google and different news portals.

4. **What knowledge exchange processes are you involved in? (consultancy projects, contract researches, trainings…)**

   - I take a part in different master classes as a spectator. As a teacher I organise conferences with such companies as IBM and others, basically administrative processes. I work with business incubator based in our University. And speaking of business incubator I can say that there are more business representatives and potential investments than ideas and projects these investments can be financed.

5. **What do you think the problem of knowledge exchange between students and industry?**

   - To my mind it is impossible to make business organisations become involved in the process of education. And one of the most important problems is the low attendee of students to different conferences we organised. As for me my problem is misunderstanding of what actually business organisations need. It is also difficult to deep understand all motivators and causes in process of choosing future workers during the interviews because of personal features and preferences. I suppose I am more like mentor and I cannot say if I am teacher-theoretician or teacher-practitioner.

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