JYU DISSERTATIONS 49

David Kotthaus

Economic, Social and Stakeholder-related Analysis in Sport Facility Management

UNIVERSITY OF JYVÄSKYLÄ
FACULTY OF SPORT AND HEALTH SCIENCES

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Economic, Social and Stakeholder-related Analysis in Sport Facility Management

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ABSTRACT

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The importance of resource management has grown in recent years. Challenged by economic and societal changes, universities must think of new ways to gain requisite resources for research and teaching. The topic of this doctoral thesis belongs mainly to the field of social sciences of sport, as it deals with the importance of resource allocation in sports management at the University of Jyväskylä (JYU) in Finland, the University of Umeå (UU) in Sweden, and the German Sport University (GSU) in Cologne. The aim of this project is to ascertain whether these universities are able and willing to market themselves via their sport facilities. In terms of how the means of managing sport facilities can be improved—for example, possible extrinsic ascendancies of the private and third sectors—and how new sources of income can be created, this is a worthwhile case for analysis.

The theoretical framework is based on studies of entrepreneurship and stakeholder management, namely effectuation, knowledge intensive organisations (KIO), and knowledge intensive business services (KIBS), which were executed by Sarasvathy (2008), Yläranta (2006), and Mukkala (2011). The corporate strategy employed by the university determines which economic and non-economic input is going to be made to its shareholders, customers, and associated communities. Such an approach can be labelled as one that is adopted by KIO's. Further, KIBS is believed to be one of the main drivers of technological change and economic progress. The universities may act to fulfil a two-fold role: to serve as an external knowledge source and to contribute to innovations in their clients' organisations. Sarasvathy's (2008) studies of effectuation belong to strategic entrepreneurship. The logic of effectuation takes a set of means and focuses on selecting among possible effects that can be created. It implies improving the current product for the universities—for example, research opportunities—or finding a better system of 'producing' the particular product.

The data for this study was collected through 24 qualitative semi-structured interviews designed in biannual sessions between 2010 and 2012. The received data was examined through narrative discourse analysis (Viehöver, 2001), thereby allowing the interviewees a personal analysis. In attempting to see the world from the interviewees' viewpoints, it is also important to try and understand how individuals construct social reality in relation to their own interests (Sparkes, 2002). Inductive research can be considered to be more conjunctive with interpretative, qualitative studies.

The results showed that there are various money problems, lack of strategic management, and a potential research specialisation of universities within the next decade. Other potential revenue streams apart from sports facilities include the implementation of tuition fees, sponsoring from other universities, emergent orientation towards entrepreneurship by the universities, and the merging of campuses using joint venture strategies.

Keywords: sports facility management, human resource management, entrepreneurship, stakeholder management, domestic gross product, comparative study

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Finally, I would like to thank my parents and my brothers for their never-ending support throughout the entire process of this thesis, which began in April 2010. I am deeply thankful for my family’s help, guiding me through the very difficult times I had to face beginning in summer 2013 after the horrible diagnosis of a brain tumour in June and the tragic death of my older brother at the age of 33 only 3 months later. It is only with the help of my family that I have been able to overcome this loss and complete my work. Daniel, this dissertation is dedicated to you.

Jyväskylä 04.10.2018
David Kotthaus

ABBREVIATIONS

AH	Akademiska Hus
BLB	Bau- und Liegenschaftsbetrieb NRW (Building and Real Estate Management of North Rhine-Westphalia)
Ca.	Circa
CPI	Consumer Price Index
EC	European Commission
Ed(s)	Editor(s)
e.g.	For example; 'e.g.': abbreviation of Latin 'exempli gratia'
et. al.	And others; 'et al.': abbreviation of Latin 'et alii'
EU	European Union
GDP	Gross Domestic Product
GSU	German Sport University Cologne
HEI	Higher Education Institutions
i.e.	That means; 'i.e.': abbreviation of Latin 'id est'
IKSU	Idrotts Klubben Studenterna Umeå (Students' Sportclub Umeå)
JAMK	Polytechnic University of Jyväskylä
JV	Joint Venture
JYU	University of Jyväskylä
KIBS	Knowledge Intensive Business Services
KIO	Knowledge Intensive Organisations
NRW	North Rhine—Westphalia
NSO	National State Organisation
R&D	Research and Development
RTE	Return to Education
SCA	Sustainable Competitive Advantage
SU	Student Union
SYK	Suomen Yliopistokiinteistöt (University Properties of Finland Ltd.)
UEF	University of Eastern Finland
UU	University of Umeå
Vs.	Versus

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1 INTRODUCTION AND RESEARCH IDEA

The topic of this doctoral thesis belongs mainly to the field of social sciences of sport as it deals with the importance of resource allocation in sports management at the University of Jyväskylä (JYU) in Finland, the University of Umeå (UU) in Sweden, and the German Sport University (GSU) in Cologne. The research idea was developed on the change of ownership of university properties in Finland in 2010. This study investigates how the university can handle the new ownership of their sport facilities, beginning in January 2010, with the situation at UU and GSU taken as a comparison. This change of ownership is embedded within the new Finnish University Act (Laws 558/2009 and 1062/2010), which replaced the former one established in 2002 (Law 973/2002), and enables Finnish universities to have greater autonomy. This is possible as each university in Finland has been given a legal personality, either as a public corporation or as a foundation. The act also reformed the management of the universities, including the facilities used on the campuses. Until December 2009, the facilities of the Finnish universities were managed by a state-owned company called Senaatti Kiinteistöt OY (SK). In January 2010, these facilities were handed over to an organisation named Suomen Yliopistokiinteistöt Oy (SYK; University Properties of Finland Ltd.) SYK was founded in June 2009 and although it is run privately, it is still under control of the Republic of Finland. Within this organisation, the universities hold their share as owners and the actual distribution is as follows: the ownership of SYK is shared between SK (1/3) and the universities (2/3). JYU holds 8.6 percent of the total sum, which equates to a net worth of approximately €18 million. Due to good cooperation with the universities, on 16 April 2015, the Finnish state decided to add a sum of €150 million into the state budget to further strengthen the situation of Senate properties (Finlex 2002, 2010; Finnish Government 2009, 2010, 2015).

The rising energy and maintenance costs will make it more difficult for the universities to function in the future. After the law change in Finland, the universities are now responsible for their own budgets and this is not the responsibility of the state office of the Ministry of Education and Culture. However, the monies available for the annual budgeting plans might not be sufficient due to eventual Cabinet cuttings, thereby leading to fewer personnel and fewer facilities for usage. Therefore, in upcoming years, it is possible that these universities traverse new paths to be successful to require the monies. Thus, it is possible that universities become more business-oriented in the future; this can be with or without their sport and other facilities. This thesis investigates if and how this process can be achieved. Therefore, it is necessary that the available budgets and their influence on the management of sport facilities of the universities be understood to establish a correlation.

The theoretical scientific framework of this research is based on studies in entrepreneurship, stakeholder management, and the idea of effectuation to be tested in sports development with important assets of the sports economy and sports management. To be more specific, the particular area of study is resource management—particularly in terms of sport facility management with a smaller input of human resource management—and, finally, individual development that takes into consideration regional and local economic, human, and social circumstances in business administration into consideration. This includes the regional labour market as well as migration issues and regional economic disparities. In these areas, the backbone of this dissertation can be found in scientific studies done by Sarasvathy (2008), Yläranta (2006), Mukkala (2011), and Barney's (1991) **R**esource **B**ased **V**iew (RBV). Here, it shall be analysed whether or not the theoretical models of **K**nowledge **I**ntensive **O**rganisations (KIO) by Yläranta and **K**nowledge **I**ntensive **B**usiness **S**ervices (KIBS) by Mukkala fit with the entrepreneurial business approach of the effectuation model invented by Sarasvathy (2003) and, thus, adopted to the described situation within this dissertation of the three selected universities and their potential striving towards a more business-oriented development, primarily based on their sports facilities (Suomi, 1998; Suomi et al., 2012; Suomi, 2015). The aim of this project is to ascertain whether the universities are able and willing to market themselves via their sport facilities by investing applicable solutions, for example, through an enhanced research approach within the sport facilities. Further, an attempt is made to discover possible business-oriented means for a university by mainly targeting their sport facilities while evaluating the possibility of establishing themselves as contenders in the modern local and international market.

To gain comparable data, other international higher educational institutions were included in the research process, making it a three-case study in particular. The sport facilities from the University of Umeå (UU) in Sweden and the German Sport University (GSU) in Cologne were selected to compile a comparative study for three different, but still similar cases which is explained in the chapter concerning the three cities, universities and their sportive background as well as in the purposes of the study. The methodology of this investigation is mainly based on a qualitative method, namely narrative discourse analysis, by using 24 sampled semi-structured interviews with carefully selected interviewees within the field of sport sciences, economics, and the facility managers of the three selected universities, all dealing with management, marketing, facilities, construction, sales, and leadership aspects. The use of narrative discourses based on Viehöver's (2001) study allowed the interviewees to present a personal viewpoint based on their perceived realities of the situation.

In the Federal Republic of Germany, the financing issues of the universities are under the ruling of each state, for example, North Rhine-Westphalia (NRW) or Bavaria, as well as under the assistance of the Federal Government. The current German law came into force on 11 December 2014 and is called 'Hochschulpakt 2020'. The law regulates the future orientation of the universities. In each state, there can be slight differences depending on the current circumstances. The GSU is located in NRW, and for this state the law is laid down in GV. NRW. S. 547 (HRK 2013, Regional Government of NRW 2014, German Government 2014). Like in Finland, tuition fees are currently not in force in Germany. In Sweden, universities are organised and financed through the government, mainly through taxes and based on the laws passed by the Swedish parliament (2nd chapter of 8 § 2000:605 and 2007:515). Since 2011, tuition fees have been collected from all students outside of the EU/EEA area, with the exception of Switzerland (Swedish Government 2000, 2007, 2015). The inclusion of tuition fees can be a reliable source of income for the universities, which was unveiled in the research process. Supplementary data was collected from the local governments in the selected cities and municipalities, including from the responsible sport offices in Jyväskylä, Umeå, and Cologne. Former studies (Kotthaus, 2009) and visits to Sweden provided useful knowledge on various local and regional circumstances; in addition, ongoing contact with various people within the university and the local community in each town helped immensely in providing this dissertation a necessary and solid foundation.[1]

The results of this study add to the scientific fields of business administration, finance and marketing strategies (of universities) based on sport facility management as well as social sciences of sport in regard to the role of the students' sport culture as one of the main users of the sport facilities, and finally, the implementation of KIO and KIBS as entrepreneurial and stakeholder-based theories' into sport sciences.

[1] The same background regarding information collection can be stated in case of the GSU, as Cologne is the hometown of the author and GSU the university where he obtained his first Master's degree.

2 PURPOSES OF THE STUDY

2.1 The research background

As marketing and innovation can lead to the exploration and exploitation of more sources of necessary income (monies), the universities need to use these two functions. Therefore, the main purpose of this study is to answer the following question: What kind of business orientations are likely to happen in upcoming years within JYU and the other two counterparts, UU and the GSU? Finnish law requires that companies earn money. By failing to do so in three consecutive years, they must be closed. This does not apply to universities, as they are not originally designed to function as companies; however, the required monies are more difficult to obtain due to the dependency on funding through the state and external institutions. During research for this study, it was revealed that the involved universities have various problems related to management, such as marketing, risk management, and resource management. The actuality of the topic in combination with the unique position of JYU in Finland in terms of sport sciences makes the research very specific. Human resources as well as sport facilities are concentrated in this place, not only in the field of scientific research but also in the fields of elite sports (e.g. Finnish Foundation of Olympic Sports KIHU), sport planning, health sciences, and administration. Thus, it is the main practical purpose of this thesis to investigate a possible orientation of the universities towards business by focusing on the sport facilities. The major area of this dissertation focuses on regional and local interests of the universities, as including national aims and policies would cause the research field to become too large.

With regard to economic purposes, it is important to analyse and improve the effectiveness of resource usage in difficult economic situations, particularly with regard to the entrepreneurial conditions within universities, a criticised by Geissler, Jahn, and Haefner (2010). They argued that while universities are able to create ventures like science parks, the offset usually targets objectives at a more advanced “venture creation stage” (Geissler, Jahn, & Haefner 2010, p. 12).

They added that the drawback is how various university members (students, staff, teaching personnel) experience “these structural elements and how those perceptions influence their view on entrepreneurship at their institution” (Geissler, Jahn, & Haefner 2010, p. 12). Due to the change in ownership and the urgency of requiring the monies for JYU, the organising and potential leasing of sport halls for users could be the beginning of new management methods to earn or save monies. However, due to different laws in Finland, Sweden, and Germany and the various economic situations and circumstances in each country, a comparison is difficult. Moreover, the current economic crisis in Europe could influence the manner in which facilities are managed and the business orientation of the universities as a whole. In all three selected countries, the economic downturn has been visible over previous years. After the economic shock in 2008, the inflation rates have shrunk, thereby leading to a risk of a deflation; thus, there was a standstill in investments of both state and private businesses. Such a situation may cause problems with the facility management, future investments of potential stakeholders, as well as a brain drain on the potential regional labour market for the universities. Based on studies by Schellhaaß (2011), the state funding in Europe for universities partially evoked by the economic recession and, thus, a lack of money, has been reduced; this has led to a rather low basic standard of the research sectors. Thus, third-party funds are being increasingly welcomed by universities all over Europe. This area covers several aspects such as a) strategic management, b) risk management, c) planning, d) stakeholder models, e) creating partnerships, and f) synergies.

In case of a successful orientation of the universities towards a more entrepreneurial and stakeholder-friendly approach, regional and local investors might be interested in buying the knowledge the university has to offer. Knowledge and products incorporate tangible and non-tangible assets. They have to be sold internationally or commercially in a domestic environment to produce economic growth, otherwise one form of investment simply replaces or ‘crowds out’ another. Programmes run and students produced are also other means to raise monies, particularly the ones featuring international participation as they provide additional revenue. The selected universities in this study might also be more active with companies and other institutions in order to organise, for example, more efficient research and teaching and to attract investors to their sport facilities. For example JYU is, as the main owner, using EduCluster Finland Ltd. (ECF) and its network for selling their education services globally, thereby making it a business dealing with foreign universities and attempting to establish synergies.

With the possibility of having facility management as an upcoming economic factor, it is necessary to optimise this to its maximum potential to generate the desired output and to place the university in a better position. What needs to be investigated is whether the university must be more active with companies, sport federations, and other institutions (e.g. the private and third sectors) in order to organise more efficient research and teaching, so that customers pay for these services. However, in terms of Finland, a greater change might be needed in the current laws—even more than that in 2009 and 2010—regarding the usage of the facilities and the abilities for universities to be more market-oriented, when the current operational system with SYK was implemented. Currently, these facilities are managed by three organisations (Aalto University Properties, Helsinki University Properties, and University Properties of Finland), which are under the control of SYK (KTI, 2010). The new Finnish government (since April 2015), under the governance of Prime Minister Juha Sipilä, is currently attempting to go more towards such a direction. There are no comparable localities in terms of sport sciences in Finland in opposition to JYU; thus, research is needed in this field in order to analyse and improve the new upcoming situation for this university. Potential law changes would also be necessary in Sweden and Germany to enable UU and the GSU to adopt a business-oriented direction as well. According to Breuer (2014) and Karp (2014), such an orientation would lead to a complete new field in terms of business and management orientation (e.g. business through sport facilities) and, thus, requires a careful implementation of a developed business plan. However, such an approach needs to be critically tested and evaluated in practise before it can be called a successful option (e.g. through small-scale research projects).

Finally, it is of major importance to note that the tested approach of using sport facilities as a *'business vehicle'* for universities does not necessarily imply this is to be the only solution the universities do possess to improve their financial situation. Other approaches may e.g. include a stronger inclusion of the state with a reconstruction of the financing systems or different ownership strategies such as joint ventures.

2.2 The role of sport

The comparison of the three cases of JYU, UU, and the GSU makes this thesis a cross-cultural study with the addition of the political context. Based on the theories propounded by Keats (2000), those studies can be categorised into three different types. "One is looking for a universal explanation of some aspect of behaviour, for example to find whether some trait, relationship or developmental trend occurs in a similar way or has a similar function in a wide variety of cultural contexts. A second concentrates on bringing out the culturally specific aspects, contrasting two or more cultural groups. The third is concerned with the interaction of people from differing cultural backgrounds" (Keats, 2000, p. 81). An interesting addition to this approach was made by Naumann (2000) who stated, "'in principle, there is no difference between comparative cross-cultural research and research conducted in a single society. The differences lie, rather, in the magnitude of certain types of problems'", only to add that "comparative research is more of a perspective or orientation than a separate research technique" (Naumann, 2000, p. 401). Hughson, Inglis, and Free (2005) agreed that due to the fruitfulness in the ethnography of sport, it is very suitable for cultural studies. Patry and Dick (2002) ascertained that every scientific research implies a comparison in whichever way, such as with persons, data, observations, and how they fit in scientific or subjective theories, facts with ethic requests, or comparisons of the research with personal experiences.

The debate of how sport can be treated within the economy and as an industry has been discussed for a number of years. Stotlar (1998) argued that sport is not a homogenous industry; the people operating in the sports sector have to be able to place their own company or organisation into definable fields and specific market segments. He stated that sport is placed in a sector that is very intensively competitive for scarce resources such as money, personnel, and infrastructure. Gholamzadeh (2016) argued that sport is a dynamic industry and research regarding every field is important in order to understand fluctuations and detect potential changes. As universities need to serve the public in terms of improving research and teaching, it is necessary to focus on the interests of the customers and stakeholders, particularly locally and regionally. The economic value of sport has been backed up by numbers over the last years. Based on data from the European Commission, sport has a share of 3% of world trade in 2010 (total amount of $6.6 trillion; equalling €4.48 trillion), which in return equates to a sum of approximately $200 billion (€150.832 billion) (Szymanski 2010b). Inflation-wise (adjusted to November 2016) the sum changes from $200 billion to $220.17 billion, respectively, to $7.27 trillion. This, in return adjusted to the €, which lost about 30% of its wealth in comparison to the $, equates to mean sums of €198.22 billion and €6.55 trillion.

In Germany, the share of sport was approximately 3.7 percent of the GDP back in 2008, validating the huge role of sport in this country. For business regarding sport facilities, its construction, and the factor on the business figures, Breuer, Wicker, and Orlowski (2014) stated that in Germany for the year 2008, € 7 billion were used for only building new sport facilities. Based on the total sum of construction investment in Germany in 2008 (€231.65 billion; inflation-adjusted billion on 22 January 2016), this equates to 7%. With regard to the entire volume for building, maintenance, and running costs of sport facilities in Germany, the sum rises to €22.6 billion, which in turn is on par with 9.7% of the total investment. Newer numbers have not yet been analysed, but a standstill is likely due to the long economic crisis (Breuer, Wicker, & Orlowski, 2014).

Hallmann and Petry (2013) argued that there is a strong need of inventing a theoretical approach to analyse different sport systems, finance, participation, and the national sport policy. In addition, more comparative studies in this field are much needed to obtain deeper insights regarding strategic management in sports and a successful long-term policy. National sport systems have a diversity which is important to understand and to separate. It is necessary to examine closely the different sport systems in Germany, Finland, and Sweden, and the traditions within each country as well as the local and regional circumstances for being able to understand the respective sport policies. In Finland, as well as in Sweden for UU, the orientation of JYU is heavily influenced by national policies, whilst in Germany it is under the rule of the state government—in this case

North-Rhine Westphalia (NRW). The three universities need to acknowledge the regional and local policies within their cities and regions as it could support their business development efforts and lead to a closer connection to the societies. Hallmann and Petry (2013) concluded that based on a study by Heinemann (2005), in terms of sport the cultural values, the political circumstances and the historical contexts have to be acknowledged in order to understand the evidence and differences in national and regional sport systems. Such differences include the need to distinguish between commercial and non-commercial intentions of sport systems and their tendency towards business (Hallmann & Petry, 2013).

Andreff (2011) mentioned that in comparison to Middle European (Germany) and Northern European (Finland and Sweden) countries, the United States (US) has a much larger sector for commercial sports than all the European countries together. Many sport participants at the grass roots as well as many small sport associations make the US model a pyramidal structure. In the US, the top sports leagues NBA; NFL, NHL, and MLB are closed and there is no possibility to get promoted. The level of employment in the US sport sector is approximately 0.3/1.000 inhabitants with much more private business, also in the scientific sector. In comparison, the level of employment in the European sports economy varies between 1.5 (Portugal)–6.5 (Netherlands) per 1,000 inhabitants, thereby leading to significant public employment in addition to a huge voluntary sector. Approximately 450,000 people in Germany work in the sports sector in comparison to approximately 1 million in the US (Andreff, 2011). In Finland, the number is smaller due to the lower number of inhabitants, but according to Gholamzadeh (2016) the figures for this country are impressive (see Appendix Table 1). Despite the economic crisis the overall number of people working in the sports industry has increased by approximately 5,000 in the period 2002–2011. A total number of close to 20,000 people equates an average of 3.7 per 1,000 inhabitants, which leads to a place in the upper field in Europe compared to the numbers provided by Andreff (2011). However, in terms of voluntarism, this number is still relatively small—30,590 jobs in voluntary work for a full-time equivalent in Finland as estimated by Andreff (2011). The number in Sweden is approximately per 3.6 per 1.000 inhabitants (Andreff 2011).

2.3 An comparative international study

Comparative studies must be handled very carefully. It is difficult to compare three different countries due to their different social, political, cultural, and economic backgrounds. Other varieties between these countries are cultural mores (habits, patterns, attitudes, and ways of living), governmental constitutions and, finally, their different structure in sport. Therefore, as Gratton and Jones (2004) argued, "sport, as a whole, can be seen as an interdisciplinary subject" (Gratton & Jones 2004, p. 73). The various perspectives may include, for example, a sociological, economic, or psychological approach. In recent years, the value of sport has risen in the modern society. This interest can be found in many different sectors such as media, economy, and politics. Authors have used the term 'involvement' to describe sport fans (Bahk, 2000; Shank & Beasley, 1998). The construct of involvement is defined by Shank and Beasley (1998) as the perceived interest in and personal importance of sports to an individual. Wernecken (2000) described sport as a "multifaceted mass phenomena, with various challenges and functions, with differentiating contents and manifestations" (Wernecken, 2000, p. 16).

Despite the different facets, sport in general still has much congruence, even at the international level (Hoffmann-Riem, 1988). Tokarski and Steinbach argued that sport "is the biggest social movement in Europe and a uniting element of the nations with an elementary value" (Tokarski & Steinbach, 2001, p. 54). König (1999) defined sport as a part of "our everyday culture" (König, 1999, 14). In Northern Europe, the public generally loves sport activities. In recent years, the trend has even grown wider as a so called "omnivorousness", a tendency of liking a wide spectrum of leisure and consumption activities (Thrane, 2001). However, criticism has also been published. Scambler (2005) widely complained that there is an approach in Western civilisation of selling off of school playing fields and reforms made to curricula that marginalise sports. He argued that because of such occurrences, the youth would no longer recognise sport as an important factor in life.

Regardless of all the possible differences, it is likely for the JYU, UU, and the GSU to draw individual conclusions from the results and to improve the aspects of sport facility resource management, human resource management, business orientation, and strategic management based on foreign examples. This is validated by Atteslander (2006), who argued that among intercultural questions, it is not only the quality but also the comparability of the received data that diminishes. Merkens (1997) found that a generalisation is dependent on the quality of the data. A scientific value of the research is reached once it is possible to compare the results to other suitable examples. The decision to choose UU and GSU as the other sources, apart from JYU, is mainly based on several similar circumstances in terms of economy, sport structures, the role of Umeå and Jyväskylä as regional centres, planning, and facility management. Other variations between the selected countries and cities are cultural mores and political environments. Jyväskylä is also considered the cultural and educational centre of Finland, as there was the first Teacher Training Centre in the world founded in 1867 by Uno Cygnaeus, which only employed the Finnish language. Moreover, due to the fact that Jyväskylä is the only university in Finland where it is possible to study sport science, there is a relative lack of comparable universities in Finland. In addition, the main users of the sport facilities in each university of this study are students. The new strategy for the future needs to be re-evaluated as it may change in case of new leadership. In November 2017, Prof. Keijo Hämäläinen was appointed to serve as the new rector of the university. The GSU is the largest pure sport university in Europe (current rector Prof. Heiko Strüder, serving since 2014), while the UU (current vice-chancellor Prof. Hans Adolfsson, serving since 2016) is famous for its sport faculty as well as its behavioural and economic research departments. This makes it possible to include a comparison of the student sport culture in three different countries into the study and formulate research questions.

The research topic is an important one to investigate, because in the actual situation of interconnectedness of major resources (facilities, finance, and human), it is necessary to discover the optimal efficiency for eventual improvements. These improvements must be implemented by all three universities, and can be made in various fields, ranging from strategic management to sport planning and communication issues. This assumption is based on studies by Shilbury (1998), who stated that sport-related strategic management covers many variants of organisational life and scientific disciplines such as leadership, human resource management, cultural studies, and organisational effectiveness. To improve the effectiveness of universities in terms of their means of managing sport facilities, how to deal with new situations—for example, possible extrinsic ascendancies of the private and the third sector—and how to create new sources of income, this is a worthwhile case for analysis. Apart from the risks associated with a business orientation within knowledge organisations discussed by Breuer (2014) and Yläranta (2006) and Rothberg and Erickson (2005), there are also aspects in terms of business through sport facilities of the universities. Martin (2006) mentioned the risk of outsourcing, a process which was noticed during the research process in all three universities. Poor services and the lack of control by owners can lead to huge disadvantages and can compromise user confidentiality. Thus, business services that are organised and executed by the universities need additional control. Redlein (2004) argued that in case of potential investors, their interest is always to strive for profit and enhanced performance. Such an occurrence might lead to a lack of control over what property managers initially had determined as their goals.

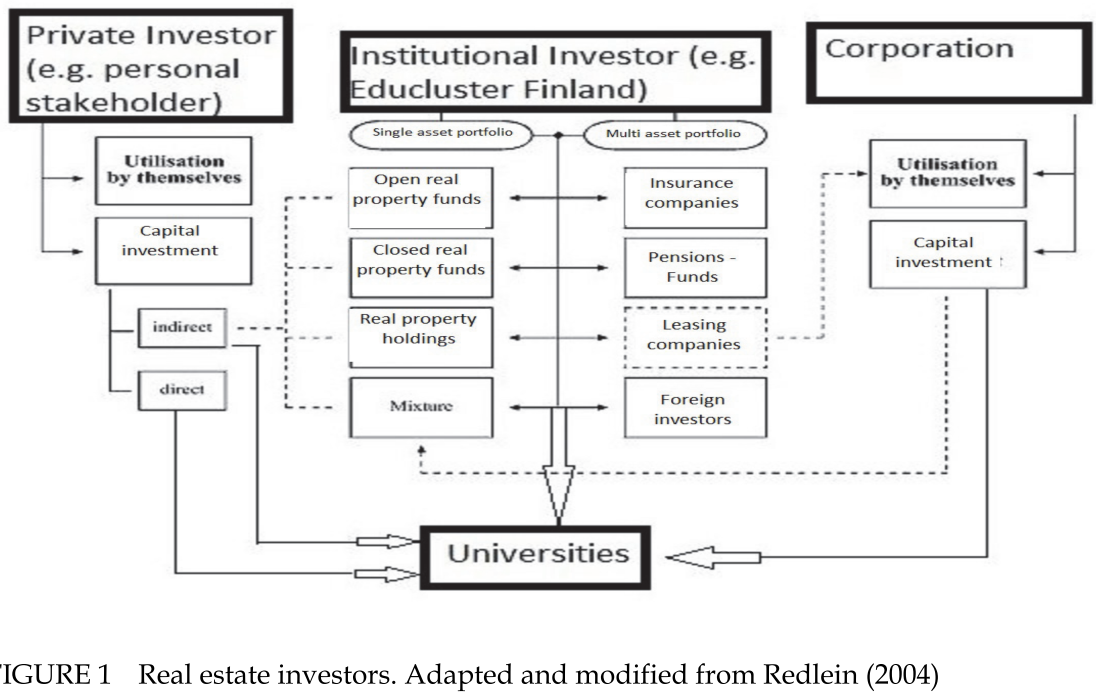


FIGURE 1 Real estate investors. Adapted and modified from Redlein (2004)

The figure shows a potential future risk regarding facility management if investors have excessive influence, thereby leading to a high risk of dependency for the donor. Money sources are multiple, but each needs to be checked by the receiver with a possibility of formal rejection. Currently, there remains a lack of information on the alliance of universities and businesses as well as the role of universities on a national scale and position in Germany, Sweden, and Finland. These deficits will be attempted to be filled by acknowledging the potential problems which might occur within the purview of property management, such as those mentioned by Martin (2006) and Redlein (2004). According to Merten and Teipen (1991), the selected objects of this survey, namely the JYU, UU, and GSU, are suitable for pre-investigations in areas with a relative lack of basic knowledge. Therefore, this research can be considered as an explorative study.

2.4 Regional and local development

2.4.1 The development of stakeholders

Serving as a stakeholder for the JYU, there are several possible regional options. The first one would be the Jyväskylä Regional Development Company Jykes Ltd. Their main tasks are the development and modelling of enterprises in the region and helping during the innovation processes of these enterprises. The second task is to create preconditions to a successful, ground-breaking operational working environment. For the universities as higher education institutions, JYKES serves as an inventor of a knowledge-based economy, in accordance with the theories of Yläranta (2006) and Mukkala (2010, 2011). In order to be a competitive force in the market, there is a need to combine know-how and education as a foundation for KIO and be utilised for sport facilities. Another possible stakeholder for JYU is the City of Jyväskylä. As such, it is able to create business interactions between regional forces and companies. This gains importance if the university and the city interact with the municipalities within a possible business relationship (OECD 2013). Other important features of the City of Jyväskylä as a major stakeholder for the university are the students as a major work force, also for KIO and KIBS, as well as the ability to work as a connector between other research institutions such as Agora Centre, Viveca, or the Nanoscience Centre. Other options as a potential stakeholder include the Jyväskylä Science Park, the Regional Council of Finland, and the Employment and Economic Development Centre of Central Finland.

In Umeå, the amount of money the university could earn is very small as there is not much industry or private investors, apart from Akademiska Hus (AH) or the Baltic Group. Other possibilities are *Västerbottens Idrottsförbund* (Sport Federation of Västerbotten) or *Umeå Kommun* (Commune of Umeå). Therefore, for the UU, it is very important to understand the stakeholders and to be understood by them. Universities in general need to be clearer and more informative about what they can do, what they want to do, and what they have to offer. This implies that they cannot market themselves falsely. Otherwise, the stakeholders might expect too much, and the cooperation will fail. To analyse the situation of the UU with regard to an entrepreneurial approach through sport facilities, there have to be cluster solutions like those between Västerbotten's idrottsförbundet, Umeå municipality, the university, Västerbotten's landsting (Västerbotten's county council), the regional hospital, and other actors within the sport, health, and leisure fields.

Umeå does have a lot of small players such as IKSU, which is in a very tight unison with the university due to ownership of their sport facilities. This leads to the so called '80–20 rule' within the UU. Approximately 80% of the income comes from the smaller players. However, this might change, as IKEA opened a store in Umeå in 2015, which could also lead to some collaboration in the form of sponsorship (e.g. interior equipment). However, any eventual sponsor and big players like IKEA will search for benefits. As Renard and Sitz (2011) investigated, from the perspective of maximising return potentials, the requisite criteria of a solid investment return and fulfilment of strategic goals have become even more important for eventual sponsors under the circumstances of the ongoing financial crisis. They argued that "it is rare to find a good mix of fair return on investment, value creation and alignment of the sponsor's strategic goals in comparison to the amount of money invested. In addition, these criteria have become very important especially in times of financial crisis when every cent should be spent wisely in order to maximise return potentials" (Renard & Sitz, 2011, p. 121).

The GSU must attempt to get more closely connected to possible stakeholders, like sport clubs or sport organisations, to use their facilities as there are numerous possible options available. Some incentives and marketing purposes need to be meshed together as well. In the past, the GSU had the classical stakeholder list including students, alumni, and different sport organisations. However, prior to this study, there was no clear concept underlying it. New concepts are necessary, for example, with the training academy ('*Trainerakademie*') of the German Sport Federation, which is located on the campus of the GSU. The current strategy of the GSU does not involve the facilities of the university as a tool for business orientation, but rather a strategy integrating the IT segment, which implies a part of the infrastructure of the university. Shibin, Shibina, and Kuklin (2011) found that it is necessary to keep infrastructure in a good shape. Such infrastructures in critical condition have an effect of differentiation (a tendency of the elements of the system to produce functional and structural diversity) as well as liability (mobility of the element while keeping the system in a stable structure). Otherwise, an intensification of damaging factors may occur, such as a) low efficiency of the management system (as a result, prevalence of destructive factors over factors that comprise the system), b) breach of law of proportionality (a sharp decrease in the quantity of elements required for the system's functioning and an increase in the quantity of useless components), c) shortage of external and internal resources, d) bad conductivity of channels for substances, energy, information, and, finally, e) a mismatch of goals of the system elements with each other, and their mismatch with system goals (Shibin, Shibina, & Kuklin 2011). Therefore, it is necessary for the universities to focus on the development of sufficient infrastructure and sport facilities.

2.4.2 Establishing national, regional, and local connections

The universities must strengthen the connection to their urban and also rural partners, thereby implying a stronger connection within the region itself. This is particularly important for Jyväskylä and Umeå as regional centres. It also applies to the GSU, although potential partners and stakeholders in Cologne are more likely to come from the urban sector than from the rural due to the size and possibilities of the city and the GSU.

A strategy to build effective and sustainable rural-urban partnerships

Strategy pillar	Recommendation	National government	Regional government	Local government
Greater understanding of rural and urban conditions and linkages and better integration	Understand the different potential and challenges of urban and rural areas, through the use of robust evidence (production of data at the appropriate spatial level).	✔	✔	
	Encourage greater integration between urban and rural areas through better access to services, jobs, and amenities.	✔	✔	
	Use the rural-urban governance framework to help identify the different types of partnerships in the territory and to better target support.		✔	✔
Address rural-urban challenges with a functional approach	Look beyond city-centred labour markets and embrace a wider set of rural-urban interactions.	✔	✔	
	Encourage territories to identify their strategies around functional geographies where urban-rural interactions extend beyond administrative boundaries.	✔	✔	
	Promote the use of flexible planning tools able to encompass a space of functional relationships between urban and rural areas.	✔		
Encourage the integration of urban and rural policies by working towards a common national agenda	Promote the use of common policy instruments to address potential conflicts and trade-offs between urban and rural agendas.	✔		
	Encourage the participation of different government levels in rural-urban partnership, to achieve a better policy integration.	✔	✔	✔
	Ensure alignment between regional strategies and plans devised locally to facilitate wider stakeholder involvement.		✔	✔
Promote an enabling environment for rural-urban partnerships	Develop trust and a shared vision of the territory by promoting pilot projects on easy "win-win" issues, education initiatives, and dialogue facilitators.		✔	✔
	Ensure that the legal and political framework does not prevent the creation of rural-urban partnerships	✔		
	Encourage co-operation between rural and urban actors through appropriate incentives (e.g. platform for dialogue, financial incentives, etc.).	✔		
	Encourage the involvement of relevant urban and rural stakeholders by promoting a fair partitioning of voting rights within the partnership			✔
Clarify the partnership objectives and related measures to improve learning and facilitate the participation of key urban and rural actors.	Set clear and realistic objectives, tailored to the specificities of each place, to motivate urban and rural actors.			✔
	Set the criteria for the use of effective monitoring without discouraging urban-rural co-operation (e.g. using a small number of indicators; tailoring the evaluation to the scale and scope of the rural-urban partnership; promoting open data).	✔		
	Facilitate the exchange of good practices and knowledge acquired though the rural-urban partnership.	✔	✔	
	Assist rural-urban partnership to assess their results and provide information and knowledge about the territory	✔	✔	

RURAL-URBAN PARTNERSHIPS: AN INTEGRATED APPROACH TO ECONOMIC DEVELOPMENT © OECD 2013

FIGURE 2 A strategy to build effective and sustainable rural-urban partnerships. Adapted and modified from OECD (2013)

The universities have various options for being more effective in business partnerships. The work cannot be done by the universities alone; they need the effective help of the local and regional governments to create solid and reliable partnerships, which they in return could use to sell their knowledge, again creating the linkage between the theories of Yläranta (2006) and Mukkala (2010, 2011) regarding a knowledge-based economy featuring knowledge-intensive organisations. Additionally, this would move the universities into a role of being entrepreneurs; this would put the theoretical approach of Sarasvathy (2003) into practise by using her definition of the *patchwork quilt* principle, implying a means-driven action by creating something new with existing means by, for example, cooperating with stakeholders which may include private ones. Possible key-partners for businesses are elaborated in the following figure:

Possible key partners in rural-urban co-operation and role of the private sector by purpose of the partnership

Category of purposes	Key purpose of co-operation	Key possible partners	Role of private sector
Economic development	Territorial promotion	Government authorities (national, regional, local) Chambers of commerce Private businesses Civil society (associations, etc.)	++++
	Supply chain	Government authorities (national, regional, local) Chambers of commerce Private businesses Universities/research centres Civil society (associations, etc.)	++++
	Urban agriculture	Government authorities Farmers Universities/research centres Civil society (associations, etc.)	++++
Natural assets management	Management of water sources	Government authorities (national, regional, local) Chambers of commerce	+++
	Biodiversity	Governmental authorities Universities/research centres Civil society	++
	Land-use management	Local authorities Universities/research centres	++
	Landscape and environmental preservation	Government authorities (national, regional, local) Civil society	++
Service provision	Transport	Regional, local authorities Private businesses	++
	Healthcare, social care, education	Regional, local authorities Private businesses Civil society Universities/research centres	++
	Waste disposal	Regional, local authorities Private businesses	++
Political relevance/ access to funds	Political relevance/visibility	Local authorities	+
	Advocacy for funding	Local authorities	+

FIGURE 3 Possible key partners in rural-urban co-operation and the role of the private sector by purpose of the partnership. Adapted from OECD (2013).

Such economic partnerships need interdependency, creating a local and regional wheel of business. This possibility needs to be considered carefully by the universities to use the full potential of stakeholders in their proximity (see Appendix Figure 1) The effectiveness of the cooperation between the urban and regional areas can help to generate more economic attractiveness and develop worthy companies and generate entrepreneurial innovativeness, which is important for cities such as Jyväskylä and Umeå. The *Organisation for Economic Co-operation and Development* (OECD) argued that "governments should set up a framework to help local stakeholders co-operate outside the constraints imposed by administrative boundaries" (OECD, 2013, p. 16).

2.5 Criticism of the study

As the selected area of investigation touches upon the idea of how universities can interact with businesses and marketing-driven approaches, it leads to the question of whether that is even possible and desired by single departments, faculties, and the university as a whole. In upcoming years, the feasible inclusion of the public, private, and third sectors into the process will be important to follow in the future due to the complexity of the business sector (Breuer, 2014). Another criticism can be found in the lack of consistency of within organisations dealing with intensive knowledge; therefore, this has consequences for their management, as Yläranta (2006) argues. Thirdly, within such organisations, knowledge is often dormant. According to Rothberg and Erickson (2005), the members' assets beyond their current duties are often hidden and, thus, often not fully exploited. Based on this argument, it is important for universities to carefully analyse their resource allocation (human, time, and money) in order to be more effective.

3 STATEMENT OF THE PROBLEMS AND RESEARCH QUESTIONS

The main research questions of this study deal with the potential inclusion of KIO and KIBS into the economy of the universities and address the role of sport facilities in the universities in general and for serving business purposes. Additionally, the role of the sport culture of the students and the usage of saved monies within the budget will be examined. These areas are divided into different subtopics in this dissertation. The following are the two questions that deal with the theoretical models used in this dissertation; these are needed in order to develop and compare new scientific theories of value: 1) Can the adaptation of KIO and KIBS be useful for universities to be successful in businesses? 2) Could the model of effectuation be implemented in future strategic management models by using the university as a replacement for a company? With regard to the potential business interests of the universities, it will be tested whether 3) do universities have the ability to become and function as 'sellers' of knowledge in terms of business and 4) are the universities willing to become and function as 'sellers' of knowledge in terms of business? In the context of this research, these first four questions are necessary to enable a grounded analysis of the business potential and possibilities of the universities within the three selected case studies.

Based on a specific situational analysis of each university, the investigation then attempts to connect these business potentials (as examined in questions 1–4) towards the sport facilities of the JYU, UU, and GSU. Therefore, the next research questions are 5) What kind of role do sport facilities play in general for the university? 6) Which special kind of role do sport facilities play in the university's economy? 7) Is it more suitable to use sport facilities for research or teaching issues for a future business strategy?

A third part handles the issues of the students as the main users (e.g. lectures, courses) of the sport facilities and how the students' sport culture can affect business ideas. Therefore, it will be discussed 8) how the students` sport culture in the three different countries looks in comparison to that of sport facility users, and 9) does the students' sport culture have any effect on the potential future business orientation of the universities despite students usually being poor customers?

Finally, the last research question deals with the potential usage of saved monies (e.g. through a better energetic use of the sport facilities) and whether it is used to improve the sport facilities or to hire new personnel: 10) Can the universities save some money over the evaluation period and will that money be spent on personnel or to improve the standard of the existing facilities?

These research questions have been selected as suitable to test the potential business orientation of the JYU, UU, and GSU with a special focus on their sport facilities as well as their main users (students). The suitability was also checked through comparisons to other studies in the same sector, for example, Rafossa and Troelsen (2010) as well as by executed pre-tests with the interviewees to guarantee a general understanding of the selected topics and questions.

4 THEORETICAL FRAMEWORK

The theoretical framework of this doctoral thesis is placed in sports development. To be more specific, the particular area is resource management in sports, particularly in terms of facility resource management with assets of human resource management, individual business development (local, national, and international), and strategic management with the aim of having better efficiency within the own-business, in this case a university, which is considered a knowledge-intensive governmental organisation. In this regard, prior scientific investigations—for example, Kotthaus (2009)—have revealed several problems such as communication and facets of effective resource management. Thus, the research approach and theoretical framework are mainly based on the results and theories of these studies, presented below, due to their strong connectedness with effective resource management. Since it is tested whether the universities might desire a stronger commitment towards stakeholder management and entrepreneurship through sport facilities, both issues are included within the theoretical framework to provide a solid scientific foundation for the upcoming analysis and assumptions. The main theories adopted and tested in this dissertation are based on Yläranta (2006) and Mukkala (2011). In addition, the theories of effectuation, resource-based view (RBV), and real options logic—based on the studies of Sarasvathy (2001, 2003 & 2008), de Mel (2005), Wiltbank, Dew, Read and Sarasvathy (2006), Dew, Read, Sarasvathy and Wiltbank (2008), amongst others—can provide a solid scientific backbone to explain the potential connections stakeholder management and entrepreneurship.

4.1 The social capital

In this study, the use of social capital, which refers to social skills in organisations such as universities, is of great importance. Williams and Chinn (2010) linked human capital closely to social capital and argued that good human resource management in combination with fluid marketing and communication is essential to be successful. In terms of a sport economy, they described it in their model by using a communication wheel between the sports organisation, for example a sports faculty in this case, and the consumers, who are the people who would be interested in the sold knowledge of the university. Such a concept is directly linked to the concept of social capital. Adler and Kwon (2002) argued that social capital is obtainable not only for groups but also for individuals, and it is engineered by the contents and configuration of the social relations of the actor. The effects are derived by the information, solidarity, and ascendancy made available to the acting person or group. In this case, the social capital provides opportunities for community building, enhancing customer base, and customer loyalty—for example, through the use of social media channels for work and communication (WhatsApp, Facebook etc.)

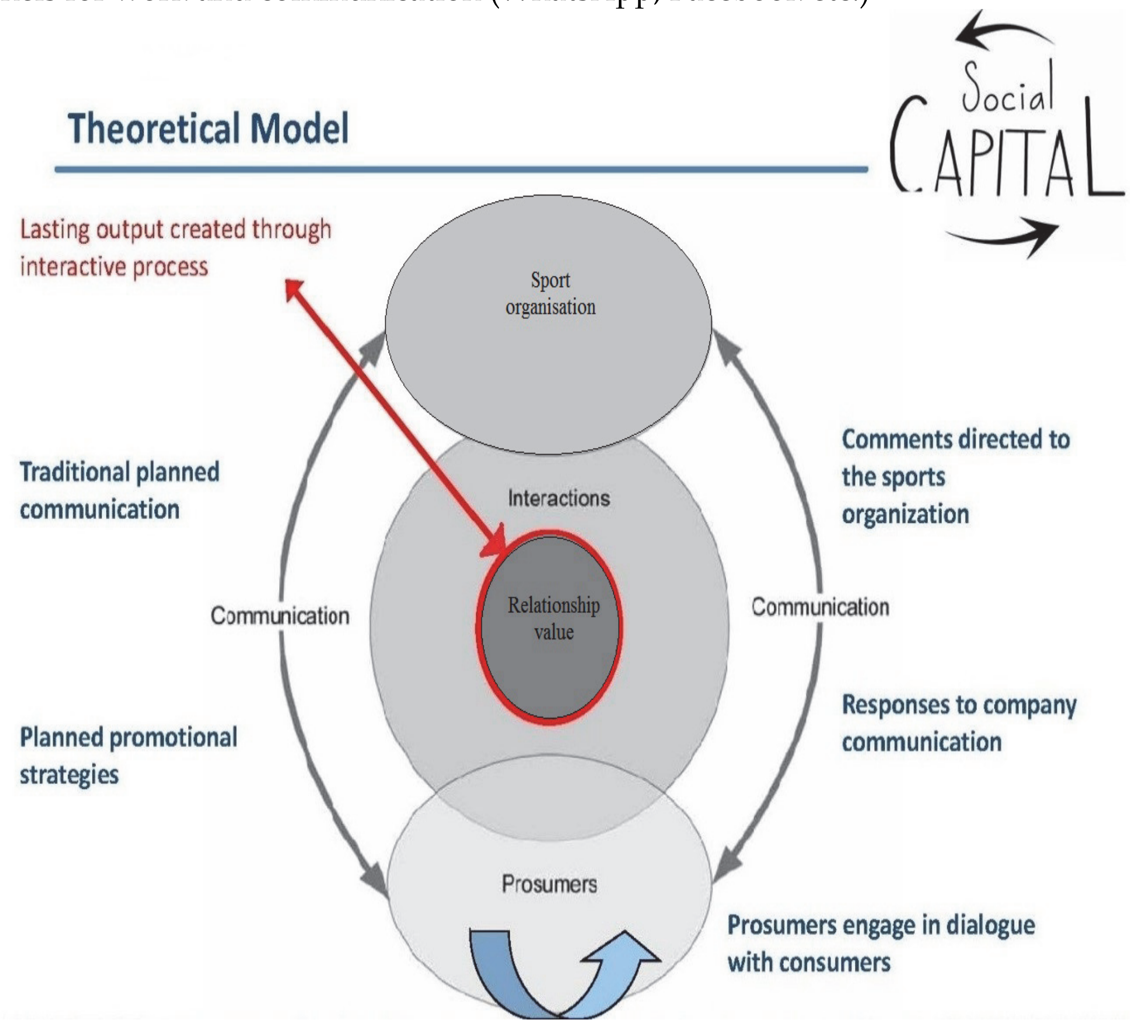


FIGURE 4 Meeting relationship marketing goals through social media: A conceptual model for sport marketers. Adapted and modified from Williams and Chinn (2010)

A company is not interested only in hiring a professional worker; improving the desired output is an ongoing process between the employer and the employee by developing the interactions amongst those involved (Armstrong, 2006; Old, 2004). Based on Maier and Fröhlich's (1992) study, personnel have three different dimensions. These are a) the time needed to hire these people, b) the quantitative dimensions (the amount), and c) the qualitative dimension (how good). The issue of quality of the personnel is also linked to the aim of giving the personnel incentives that they must achieve, a goal to reach. Culkin and Kirsch (1986) stated that "the guiding force that gives human resource planning and organising its direction, is the achievement of goals. Goals are the broad guidelines that provide overall direction" (Culkin & Kirsch 1986, p. 42–43).

The comparison of a university with a company may not seem obvious at first thought, but the universities also need to maintain and to improve their status in the competition with other scientific institutes for research and teaching. Therefore, universities might need to learn how to act and understand how companies work. According to Kotler (2003), "a company's organisation consists of its structures, policies and corporate culture, all of which can become dysfunctional in a rapidly changing business environment." He added that while "structures and policies can be changed (with difficulty); the company's culture is very hard to change." (Kotler, 2003, p. 68). Kotler insists that changing a corporate culture may lead to trying out new strategies, which may lead to new success. If a university is likened to a company, it is also necessary to take the leading boards of a university into account as they basically serve as executive managers. Slack and Parent (2006) argued that managers need to understand organisation theory to be better managers as it provides them important guidance to create an appropriate structure of the firm. Based on studies of Maus (1996), it is important for companies to acknowledge the wishes of their customers, as customers have to be happy with the product they want to buy. In terms of universities, it defers to a variety of active and potential stakeholders and how to link those more closely to university business activities, which also includes potential sport facility related-actions.

Another research by Chelladurai (1999) discovered the individual differences in human resources—their strengths and weaknesses. It included human resource practices, ranging from job design, leadership, to performances and rewards. In particular, leadership plays an important role in the effectiveness of resource management and business orientation. It is important to take the needed costs into consideration to be able to become more business-oriented (Bergin, 2005; Cuthbertson & Nitzsche, 2004; Barro & Sala-i-Martin, 1999). In terms of personnel's performance, any eventual changes within the managing system are of high value, as found by Taylor, Doherty, and McGraw (2007). "According to Carnall (1990), employees and volunteers will go through a 'cycle of coping' with change; one that can have important implications for their self-esteem, motivation, and performance" (Taylor, Doherty, & McGraw 2007, p. 271).

In addition, in today's 'consumer culture', the social effects of sport on the society must be taken into consideration. According to Horne (2006), "consumer society may be the golden age of friendship (taken from Aldridge, 2003, p. 109).

In this context, leisure has become more central to life in advanced capitalist societies. There is more time for leisure, more spaces—stadia, sport centres and fitness clubs—more disposable income spent on leisure and greater amounts of interactive service work, some of it in leisure. Sport is a part of this—even as it is increasingly deployed as a promotional vehicle for consumer culture" (Horne, 2006, p. 164). Assuming sport is a tool for improving business in various areas, Horne's theories must be acknowledged, particularly from the viewpoint of health and nature sports, which both require suitable infrastructure and in terms of health sports usable sport facilities.

4.2 The resource-based view (RBV)

The importance of resource management in terms of the possibility of gaining superiority over rivals in the market has become increasingly important for scientists. Facility as well as human resource management is often labelled under the RBV of the company. "The processes by which resources or competencies generate competitive advantages are complex and continue to attract the interest of scholars in fields like organisational economics, strategic management and marketing" (Fahy, Farrelly, & Quester, 2004, p. 1014). The RBV belongs to the field of organisation theory and itself is based on a classic study by Barney (1991), which is strongly connected to the importance of resource usage. The ones the companies (universities) have to offer should be difficult to be duplicated; these are firm-specific assets. It is assumed that this model is applicable in Finland, Germany, and Sweden—stakeholder management and its conjunction with universities and knowledge-related businesses due to the interaction with the **V**aluable, **R**are, **I**nimitable and **O**rganisation (**VRIO)** model, presented in the figure below. The model has been developed to effectively exploit resources. If the university needs to know which resources and capabilities would lead to either strength or debility, a resource-based analysis can help to identify the single assets. Thereafter the necessary strategies to become more effective can be implemented. The framework for this analysis is based on the VRIO model, which goes back to another classic study by Barney (1997).

<table>
<tr><th>Valuable?</th><th>Rare?</th><th>Too expensive to imitate?</th><th>Exploitable by the Organisation?</th><th>Competitive implications</th><th>Economic performance</th><th>Strengths or Weaknesses</th></tr>
<tr><td>No</td><td>-</td><td>-</td><td>No</td><td>Competitive Disadvantage</td><td>Below normal</td><td>Weakness</td></tr>
<tr><td>Yes</td><td>No</td><td>-</td><td rowspan="2">to</td><td>Competitive Parity</td><td>Normal</td><td>Strength</td></tr>
<tr><td>Yes</td><td>Yes</td><td>No</td><td>Temporary competitive advantage</td><td>Above normal</td><td>Strength and distinctive competence</td></tr>
<tr><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Sustained competitive advantage</td><td>Above normal</td><td>Strength and sustainable distinctive competence</td></tr>
</table>

FIGURE 5 Gaining and sustaining competitive advantage. Adapted and modified from Barney (1997)

Based on this model, the universities need to test for their research and available resources as well as where potential business can be conducted through sport facilities. According to Priem and Butler (2001), the RBV of strategic management brings the focus back to resources as important antecedents to the products and performance of the organisation. As a response to Priem and Butler's (2001) study, Barney (2001) added that the RBV enables the compilation of verifiable numbers and prepositions in order to check the recoverability of the employed business strategy. This topic is also strongly interconnected with stakeholder management and entrepreneurship, as solid resource management is the major asset for being a successful entrepreneur. Jackson (2001) put it together in his definition of a resource: "A resource is an aid or a support that you can draw on to assist you to achieve something" (Jackson, 2001, p. 229).

Thus, the RBV assumes a) a resource and/or capability heterogeneity: different firms possess bundles of different resources and capabilities and b) a resource and/or capability immobility: some of these resources are inelastic in supply or too expensive to copy (Montgomery, 1992). Based on de Mel (2005), the "RBV theory states that the firm's strategy and success are based on its assets, skills, abilities and knowledge within the firm" (de Mel, 2005, p. 21). If those resources are used wisely, the firm, in this case the universities if seen as such, can gain a competitive advantage due to their uniqueness in comparison to other competitors in the same field. Based on this assumption, firms appear heterogeneous with regard to their own available resources. RBV is a strategic choice as it can improve the ability of the deciding managers, such as the university board, to identify any possible tool which could help to improve the strategic setting and foster dynamic capabilities for getting a higher return on investments (de Mel, 2005). The sustained competitive advantage in competition among business rivals can only be attained if the main resources and capabilities are employed to be turned into something of value. However, no sustained advantage can last forever, as de Mel (2005) stated using Gunther et al.'s (1995) study. Therefore, to use the RBV as a worthy asset, flexibility is a must. The advantages itself must have a special value: they need to be rare, non-substitutable, and simultaneously difficult to copy by business rivals. The competitive advantage in businesses is also based on how the stakeholders are treated, namely the relationship of the firm with their most important people (Meixell & Luoma 2015). Too much pressure by the stakeholders that is felt to be sufficiently serious can also lead to a downturn in the supply chain, causing an economic slowdown. Taking this as a potential negative factor of the business plans of the universities into account, a carefully treated equilibrium is needed to avoid any negative influences. This is also valid within the sport sector (including sport facilities) due to their enormous business potential (Ferkins & Shilbury, 2015).

The available resources in an organisation are limited. Various stakeholders have different needs and values which may cause a highly imbalanced distribution of resources, thereby leading to their bad management and, thus, making it impossible to achieve the original business plan (Howitt & McManus, 2012). In universities, various faculties could merge their resources and build a stronger force for research projects. The university faculties and departments need to be aware of their capabilities and identify areas where external specialists are necessary. In return, this implies the need of the university to function as a firm. Nummela, Saarenketo, Paavilainen-Mäntymäki, and Puumalainen (2010) argued and criticised that particularly in terms of internationalisation, the knowledge available for decision-makers (e.g. the university senate) is limited; however, simultaneously, an internationalisation is important to be successful. Thus, there is a risk when universities decide to function as firms.

Based on the study of Fahy, Farrelly, and Quester (2004), the firm shall seek to obtain a sustainable competitive advantage (SCA) in the market. This gives the firm the possibility of collecting above-average returns on the desired market share and return on investment. This leads to the question of how to maintain the advantages gained. "The RBV contends that the answer to this question lies in the possession of certain key resources and that an SCA can be obtained if the firm effectively deploys these resources in its product markets" (Fahy, Farrelly, & Quester, 2004, p. 1016–1017).

4.3 Stakeholder management and entrepreneurship

The importance of stakeholder management and entrepreneurship is tested during the research process: whether a higher degree of inclusion of stakeholder management and entrepreneurship within the daily operations of the universities' sport facility management might be inevitable in the future, and whether the desire for a stronger commitment within business should not merely remain successful but also expand.

4.3.1 The origins of stakeholder management

Yläranta (2006) argued that "stakeholder management is an approach to strategic management which emphasises the crucial role of different stakeholders—not only that of shareholders" (Yläranta, 2006, p. 15). According to Daumann and Römmelt (2013), the first definition of the term stakeholder was given by the Stanford Research Institute (SRI) in 1963. According to the institute, a stakeholder is defined as "[…] those groups without whose support the organisation would cease to exist" (Daumann & Römmelt, 2013, p. 28). The original list by the SRI included shareowners, employees, customers, suppliers, lenders, and the society. Currently, the list of potential stakeholders to a university, a research institute, or another scientific organisation may vary a lot and depends on the local circumstances. It ranges from customers (e.g. students) to employees (personnel), to the local and regional communities and up to the other competitors in the market, which implies other universities not only in the country but also in the international sector. Yläranta (2006) used a classic definition by Freeman (1984) to provide a more precise description of the term stakeholder:

> "A stakeholder in an organisation is any group or individual who can affect or be affected by the achievement of the organisation's objectives." (Yläranta, 2006, p. 15)

What all definitions have in common is that without a steady assistance from all possible stakeholders, the organisation itself would fail to subsist. Another definition leads to primary and secondary stakeholders (Yläranta 2006). The first group assembles those who have "formal, official or contractual relationships with the firm" (Yläranta, 2006, p. 39). The second group can be influenced by the actions of the firm or, in reverse, influence the firm due to their existence, but do not have any operating power. Thus, these stakeholders are not essential for the survival of the organisation. Slack, Chambers, and Johnson (2007) argued that it is important to take the customer's request into account, thereby acknowledging what people would want most from the university. They added that in terms of stakeholders it is important to identify, prioritise, and understand the key stakeholders.

The origins of stakeholder management can be found within organisational theories and organisational theory research, such as the characteristics of stakeholder perspectives given by Papadimitriou (2007). The usage of this particular type of management theory relies on its context in and relationship with strategic management theories. It is used as an instrument to be able to self-detect and reflect on the situation within an organisation. Such an organisation may be a company, a regional governmental administration, or a university. To be successful in business, all these organisations must have strong relationships with their stakeholders, as these relationships can heavily influence the outcome of projects or the strategic direction in general. The corporate strategy employed determines which economic and non-economic input is going to be made to the shareholders, customers, and also the associated communities. In the case of universities, this can be labelled as the aforementioned KIO (Yläranta, 2006). The idea and concept of KIO within stakeholder theories has been used in other studies, such as Kantanen (2007) and Auvinen, Waddington, Moretti, Dondi, Fischer, Kretschmer, Jonsson, Larsson, and Wiik (2010).

4.3.2 The use of KIO and KIBS in this dissertation

This idea of organisations relying on knowledge used by Yläranta can also be found in the research of Mukkala (2006, 2010, 2011). Her studies were subsequently used by, for example, Kontinen (2011) or Pieskä (2012), both of which dealt with innovation capabilities, business opportunities, and internationalisation. Mukkala argued that KIBS is believed to be one of the main drivers of technological change and economic progress. The special features KIBS are highly skilled employees with a special expertise (e.g. lecturers or professors), a function of consulting (problem-solving), and an interactive client-related character of the services provided. This would directly fit into the scheme of the products a university can provide, such as research into sport facilities. The universities can possibly function within a two-fold role: to serve as an external knowledge source and to contribute to innovations in their clients' organisations. In addition, universities can introduce internal innovations through scientific research, provide mostly highly-qualified working places, and through this contribute to the economic performance and growth of the region.

An earlier definition of a knowledge-based economy and, thus, the incubation of Mukkala's theory of KIBS, was provided by the OECD in 1996 and cited in a scientific study conducted by Nieminen and Kaukonen (2001, p. 7):

> "A country's science system takes on increased importance in a knowledge-based economy. Public research laboratories and institutions of higher education are at the core of the science system, which more broadly includes government science ministries and research councils, certain enterprises and other private bodies, and supporting infrastructure. In the knowledge-based economy, the science system contributes to the key functions of: i) knowledge production—developing and providing new knowledge; ii) knowledge transmission—educating and developing human resources; and iii) knowledge transfer—disseminating knowledge and providing inputs to problem solving." (OECD, 1996, p. 21.)

This assumption of the universities functioning like an engine of the region implies that the universities are treated as higher education institutions (HEI). In terms of KIBS, it is important to acknowledge the assumption that region-specific economic and institutional structures are successful. This is of interest as some regions can serve better as 'seedbeds' and 'incubators' for a new KIBS-related organisation than others. The example below of JYU as well as the University of Polytechnic of Jyväskylä (JAMK) shows the connection between the universities and the economic impact of education. It is debateable whether such a connection between education and economy could also cause a new culture of business for institutions like universities.

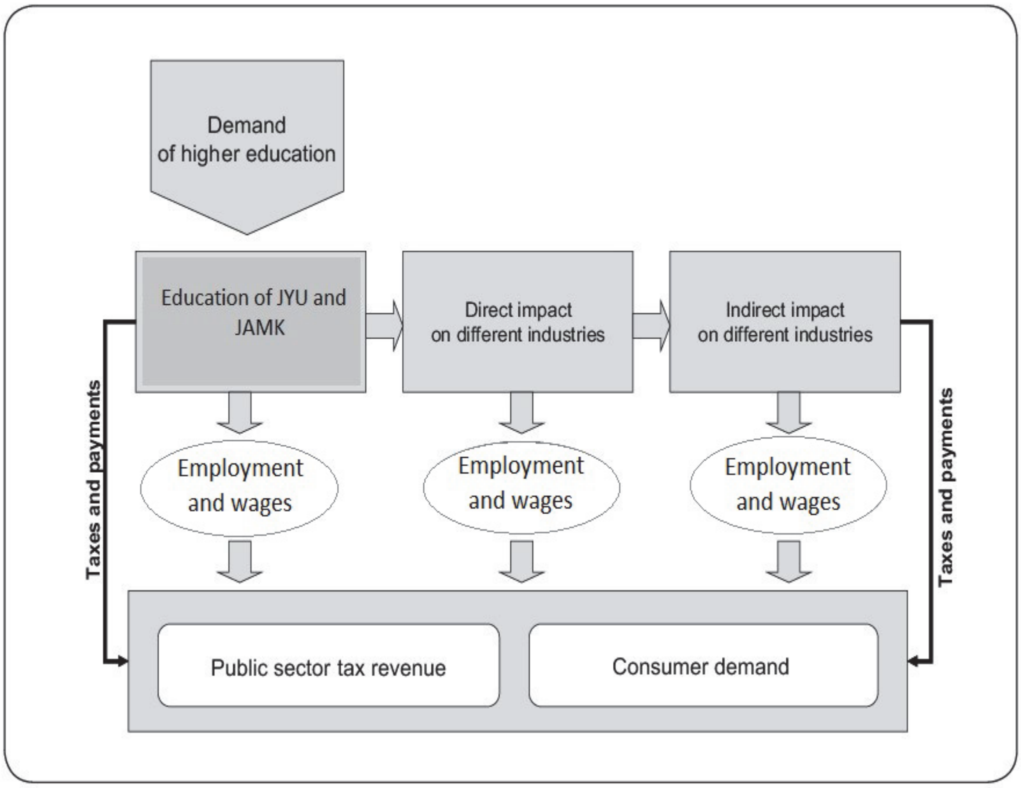


FIGURE 6 Simplified scheme of economic impact of education. Adapted and modified and from Mukkala, Ritsilä, & Suosara (2006)

Hereby, the demand for education comes from the public, to serve whom is one of the major tasks of both organisations (the JYU & JAMK). The JYU is more orientated towards international and national policies and strategies (e.g. social and human capital), while JAMK—[2]—is more connected with the regional level, but also the national one in certain areas. The universities must know exactly what products they can offer. Harris (2008) stated that "building intangible assets requires that firms understand how to create new knowledge from the resources they possess" (Harris, 2008, p. 17). He added that for the universities to function as good firms within a knowledge-based economy, it implies that they "possess non-tangible productive assets that they are able to exploit to give them a competitive advantage" (Harris, 2008, p. 17). Another study by Trippl and Tödtling (2008), argued that there is an ongoing re-orientation of the universities, an "emerging knowledge economy" (Trippl & Tödtling, 2008, p. 160). This fits with the results of Yläranta (2006) and Mukkala (2006, 2011) and indicates that the universities appear to have established themselves within a new

[2] 59% of which is currently owned by the City of Jyväskylä, with ongoing negotiations that JYU will own JAMK in the future (from 2018 onwards)

market sector. "Their main mission seems no longer to be confined to education and research, but increasingly also covers technology transfer and commercialisation activities", and "in most developed countries, increasing attention is paid to the economic utilisation of publicly funded research" (Trippl & Tödtling, 2008, p. 159). In the JYU, approximately 4% of the annual budget comes from private companies (Suomi, 2015), while in Sweden 84.9% comes from public funds and the rest from private sources (Swedish Government 2015), and in Germany approximately 90% are financed by public origins and the remainder by private donors (HRK, 2013). Thus, new theories and management strategies are necessary as the world within marketing and business is becoming increasingly competitive (Trout, 2006).

This is backed up by Ford's (2006) research; he argued that within the economic world there is a trinity which defines the market, namely scarcity, rationing, and competition. Kurowski and Sussmann (2011) added that scarcity is a valuable asset in evaluating available resources with the possibility of suggesting changes in the market. In capitalist market schemes, producers interact with consumers and new ideas are necessary to identify new management strategies. Within the market for investment capital in the developing world, it has become a crucial issue for any organisation making its way to being business oriented to compete for the available monies (Hillman & Keim, 2001). This fits with Schellhaaß's (2011) argument that the quality of the product (e.g. knowledge) has to rise in order to keep up with the other competitors on the market.

4.3.3 The relationship between stakeholder management and strategic management

The relationship between stakeholder management and strategic management is important due to the intensive connections between the two aspects in terms of business possibilities. Kuratko and Audretsch (2009) provide the following definition of strategic management: "*Strategic management* is a process that guides how the basic work of the organization is approached, ensures the continuous renewal and growth of the firm, and, more particularly, provides a context for developing and implementing the strategy that drives the firm's operations" (Kuratko & Audretsch, 2009, p. 2). They continued that "the formulation of plans for the effective management of external opportunities and threats in light of a company's internal strengths and weaknesses is a major component of strategic management" (Kuratko & Audretsch, 2009, p. 2). Therefore, planning theory is also involved. It also includes the definition of the firm's (university) aims, putting attainable targets up on the agenda, to develop successful strategies as well as to outline the scope of the business policy: "Planning is the specific process of setting goals and developing ways to reach them. Stated another way, planning represents the firm's efforts to predict events and be prepared to deal with them" (Hampton, 2011, p. 87). Therefore, the universities must figure out their business options in the future as they need to identify more revenue streams, as becomes evident in the subsequent analysis of this case study. Another important factor of stakeholder theories is moral management within stakeholder management, which was developed by Carroll (1998, p. 154 – 157) and cited by Yläranta (2006, p. 44); this factor will be tested in the research:

Stakeholder	Orientation of management
Owner/shareholder	Shareholders' interest (short- and long-term) is a central factor. The best way to be ethical to shareholders is to treat all stakeholder claimants in a fair and ethical manner. To protect shareholders, an ethics committee of the board is created. A code of ethics is established, promulgated, and a living document is made to protect the interests of shareholders.
Customer/consumer	The customer is viewed as an equal partner in a transaction. The customer brings needs/expectations to the exchange transaction and is treated fairly. Managerial focus is on giving the customer fair value, full information, fair guarantee, and satisfaction. Consumer rights are liberally interpreted and honoured.
Employee	Employees are a human resource that must be treated with dignity and respect. The goal is to use a leadership style such as one that employs consultative/participative factors, which result in building mutual confidence and trust. Commitment is a recurring theme. Employees' rights due to process, privacy, freedom of speech, and safety are maximally considered in all decisions. Management seeks out fair dealings with employees.
Community	Considers vital community as a goal that must be actively pursued. Seeks to be a leading citizen and to motivate others to do likewise. Gets actively involved and helps institutions that need help – schools, recreational groups, and philanthropic groups. Leadership position in environment, education, culture/arts, volunteerism, and general community affairs. Firm engages in strategic philanthropy. Management views community goals and company goals as mutually independent.

FIGURE 7 Orientation of moral management towards different stakeholders. Adapted from Yläranta (2006) and Carroll (1998, p. 154–157)

As Yläranta (2006) put it, "as management is not seen as a stakeholder, but an actor interacting with stakeholders, it is the challenge of the management to balance different, even conflicting, stakeholder demands and expectations" (Yläranta, 2006, p. 44). All universities have their stakeholders and those influence the universities. This is also backed up by Lawler, Worley, and Creelman (2011). Given the importance of stakeholder management and its linkage to strategic management, they argued that an "organisation's identity will support sustainable effectiveness as it depends on (1) the existence and influence of sustainable effectiveness values in the culture, (2) a brand promise of sustainable effectiveness, and (3) the consistency of the organisation's responses to external stakeholder feedback about its behaviour" (Lawler, Worley, & Creelman, 2011, p. 56).

Numerous studies have outlined the meaningfulness of a business project and the inclusion of stakeholder management in the process. Slack, Chambers, and Johnson (2007) argued that "one way of operationalising the importance of understanding a project's environment is to consider the various stakeholders who have some kind of interest in the project." They went on to add that "the stakeholders in any project are the individuals and groups who have an interest in the project process or outcome" (Slack, Chambers, & Johnson, 2007, p. 501). According to Yläranta (2006), business orientation in KIO is no exception to this. In order to be successful in their respective areas of businesses, which rely on knowledge intensive foundations, it is important to pay attention to how to bring the needs of the almost exclusive external customers together with the produced internal knowledge. Occasionally, the help of third parties within planning, consulting, or IT could be useful.

The different categories of stakeholder importance are highlighted in the figure given by Friedman and Mason (2004), which itself is based on a forerunner in classic stakeholder organisation theory, namely a study by Mitchell, Aigle, and Wood (1997). The close connection between power, legitimacy, and urgency is essential to be acknowledged in order to distinguish the most important stakeholders of your business. However, neither Friedman and Mason's (2004) study nor the adapted original of Mitchell et al. (1997) mentioned the necessary factor of ethics, which requires a critical viewpoint for adaptation:

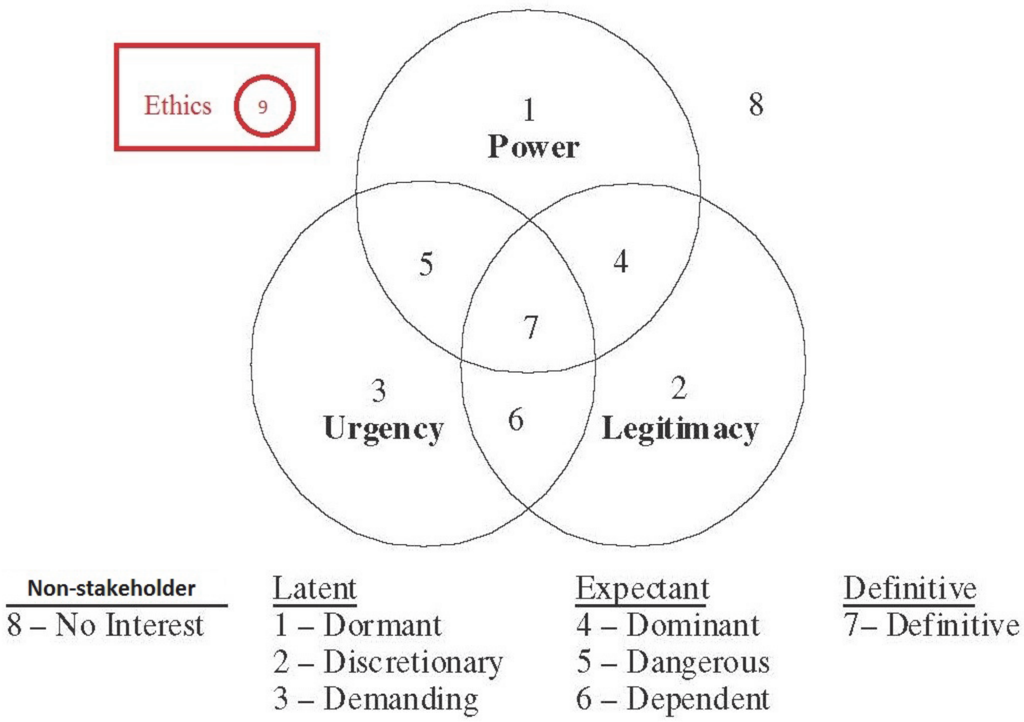


FIGURE 8 Categories of stakeholder importance. Modified and adapted from Friedman & Mason (2004), based on Mitchell, Agle, & Wood (1997)

The interest in stakeholder management is a factor in planning the future business steps within an organisation. With regard to stakeholders within sport organisations, Parker (2004) found that they can be divided into internal and external ones. In order for managers (e.g. the university senate as the executing instance) to be successful, any new strategy must identify all potential stakeholders and the assumptions held by them to ascertain if these are either resistant or supportive, to judge the level of assumption by using a scale, as well as setting a degree of certainty to this particular assumption. Due to the relationship of many sport organisations with their respective customers and the importance of sports for business nowadays, such stakeholders are able to put an enormous pressure on executives if the decisions do not go their way (Parker 2004).

4.3.4 The transformation into a knowledge-based economy

Here, the transformation into a knowledge-based economy using the KIO and KIBS models is explained by using Finland as an example. This change into an economic model has taken approximately 200 years. Yläranta (2006) and Mukkala (2006, 2010, 2011) argued that this transformation has become vital for the Finnish economy. As the share of highly educated people within the working-age population has been rising steadily in previous years, as shown in the KIBS model, it is necessary for the JYU to preserve young university graduates in the region. Since the 1990s, the abovementioned graph has not changed its direction, and the figures regarding the unemployment rates as well as the domestic migration show that there is a need for improvements in the Finnish economy. The level of education in Finland shows a steady rise of higher educated young people in Finnish schools and a rise of university entrants, that is, people with a general qualification for university entrance (Statistics Finland, 2013). The prerequisite for the universities to grow and to be able to 'sell' themselves and do any business with their sport facilities and marketing in general is to have an environment that enables economic growth and a rather low unemployment rate.

In 2013, *Keski-Suomen Liitto* (Regional Council of Central Finland), which is owned by the municipalities, developed a plan to establish entrepreneurship and expertise in the region (see Figure 2 in the appendix). This might contradict the orientation of JYU, whose aims have more of an international approach. Other organisations dealing with business development in the Jyväskylä region are K-SELY (state developer) and the regional development company JYKES. The rising share of highly educated people in Finland is evident from the rise in the number of employees working in the KIBS sector (Mukkala, 2010). A knowledge-based economy becomes more important and, thus, the universities need a solid foundation and a growing market if they decide to become more business-oriented. The implementation of a more direct approach towards entrepreneurship within the universities might help, as Tokila (2010) argued. The public subsidies in Finland are amongst the highest in Europe, thereby offering a good possibility of concentrating more on stakeholder management and entrepreneurialism. This might be adoptable for the sport sector, as the latest available statistics showed a steady rise in the number of people working in the sports sector in Finland since 2007 (Gholamzadeh, 2016). With regard to the economic effects on sport, Vehmas and Ilmanen (2013) used a study by Suomi et al. (2012) to show that participation in physical activities are dependent on the income of the households. In 2012, the total amount of money spent and invested in the sector of sport and physical culture was as high as € 5.5 billion, which equates to a share of 2.1% of the total GDP of Finland in that year. With regard to the possibilities for Jyväskylä as a whole, Koponen and Laine (2013) analysed the economic possibilities by including the rural surroundings. Jyväskylä is located in the region of Central Finland, which accounts for approximately 5% of the Finnish population, which in return generates approximately 4% of the national GDP. Approximately 64% of the population of Central Finland (275.000 in total) is concentrated in Jyväskylä, thereby making it the seventh-largest urban area in Finland. Further, JYKES is on the verge of establishing a new policy in Jyväskylä, for example, through the 'business factory', which provides start-up help for new innovation services.

The aging population and depopulation outside of the major urban area is the greatest challenge in continuing to provide good efficiency. Between 2008 and 2011, the productivity of the area reduced by over 10%. The JYU is the third-largest university in the country and, according to Koponen and Laine (2013), 60% of graduates find a job in the region. Nevertheless, these numbers related to the students should be higher in order to give JYU an even better chance to prosper. In terms of the aging society, the increase in life expectancy as well as a low fertility rate will take its toll on the age structure of the population. There will be a higher number of older people and a lower proportion of working-age population in Finland. However, the forecast for Central Finland looks promising. Based on studies of Mukkala, Ritsilä, and Suosara (2006), the number of people in the working age will be higher than that in other parts of the country. In 2018, there will be a new independent regional country administration ('*maakuntaitsehallinto*'), decided by the Finnish government under Prime Minister Juha Sipilä, in an attempt to organise the different regions in Finland like a company.

4.4 The inclusion of effectuation and the real options logic

4.4.1 Conceptual idea of effectuation within this dissertation

Effectuation is one of the most discussed topics in recent entrepreneurship research. Strategic entrepreneurship has also been emphasised as a set of guidelines for entrepreneurial action and as a subject for research only until relatively recent times. Despite the relative newness of these guidelines in the field of entrepreneurship, they have already gained much attention and interest. Therefore, the concepts of effectuation and strategic entrepreneurship will serve as one of the backbones for this research, apart from KIO and KIBS. The connection between these two will be analysed by conceptualising different parts and topics which are related to their definitions, namely by comparing and contrasting them. In addition, the link of effectuation to strategic entrepreneurship through the effectual process will be tested as one of the key connectors within the JYU, UU, and GSU as well the model of the real options logic as a support. The definitions of effectuation and strategic entrepreneurship are derived from the essential academic writings on the topics and are used in order to explore the connections between the constructs.

4.4.2 Definitions of effectuation

Scientific studies related to entrepreneurship and strategic entrepreneurship in particular are relatively new. Studies began in the late 1990s, when Sarasvathy (2008) empirically studied expert entrepreneurs in order to identify common factors in their problem-solving methods. She constructed a new logic that explains how successful entrepreneurs act, think, and make decisions in a changing environment. This logic is called effectuation. The logic of effectuation takes a set of means and focuses on selecting from among possible effects that can be created. In addition, effectuation is not only about creation but also about innovation. It implies improving the current product—for example, research opportunities for the universities—or finding a better system of 'producing' the particular product, as revealed in a subsequent study of hers two years later (Sarasvathy, 2003). Since then, these studies have been frequently used by other researchers within the field of entrepreneurial education and innovation, for example, through universities such as Chesbrough (2010) or Neck and Greene (2010).

One definition of the contents of effectuation was given by Dew and Sarasvathy (2010) with regard to effectuation becoming a rational choice from just being an alternative:

> "There are at least three major implications of the distinctiveness of effectuation as a model for building theories of entrepreneurship. First, effectuation helps frame a substantial part of entrepreneurship as a distinct domain of scholarship; second, effectuation largely unseats luck and intuition as explanations for entrepreneurship; and third, effectuation helps explicate the role of entrepreneurship not only in the creation of for-profit firms but in the systematic creation of new institutions in general." (Dew & Sarasvathy, 2010, p. 24–25)

The concept was refined in the previous decade and includes aspects related to entrepreneurial expertise, which is something the universities might lack. With regard to entrepreneurial expertise, the required elements are allowed to be stapled within a system of case-specific heuristic rules and those can subsequently be incorporated in high quality systems (expert) or, as a second choice, be taken as methods to teach and check for decision-making and problem-solving. This relates to the sport entrepreneurship theory, as it can inform the design of sport services and related ecosystems. "This is due to sport entrepreneurship research having abundant opportunities for further study due to its practical relevance in informing the development of sport. Research in sport entrepreneurship is considered in its infancy due to the lack of theoretical development" (Ratten & Ferreira, 2017, p. 243).

4.4.3 Principles of effectuation

Effectuation as used in the analysis of this study is based on five principles. Sarasvathy (2008, p. 21–22) describes these principles as something that expert entrepreneurs base their actions on during the process of functioning in their environment. All the principles emphasize non-predictive control over predictive planning.

> The *bird-in-hand* principle requires answering to the following questions: 'Who am I? What do I know? Whom do I know?' Based on the given answers business strategy is made and planned.

> The *patchwork quilt* principle is based on means-driven action. The emphasis of the principle is on creating 'something new' with existing business strategies like cooperating with close stakeholders.

> The *affordable loss* principle focuses on risk-taking and uncertainty. The principle implies that those involved in the process limit their level of commitment according to what they are willing to lose rather than basing their level of commitment on expected returns.
>
> The *lemonade* principle is based on leveraging contingency. Effectuation is action-oriented and this principle involves the idea of benefiting from surprises and contingency rather than attempting to avoid them or minimizing their effect.
>
> The *pilot-in-plane* principle emphasises knowledge and human capital as the basis of opportunity recognition. These factors can be seen as endogenous to the entrepreneurial environment and the principle is a shift away from exploiting exogenous environmental factors.

Effectuation requires not only action and knowledge but also, on contingency, risk-taking opportunities and uncertainty. According to Perry et al. (2011), effectuation "is a composite of several different cognitive processes and behaviours: (1) beginning with a set of given means; (2) decision-making based on affordable loss; (3) emphasizing strategic alliances and pre-commitments; (4) exploiting environmental contingencies through flexibility and experimentation; and (5) seeking to control an unpredictable future" (Perry et al., 2011, p. 852). However, it is debateable whether it is possible to control the market and to what extent. In addition, it remains open how far the entire university system can be considered to be and actually function as entrepreneurs, including legal assets. Thus, the degree of the validity of entrepreneurship, stakeholder management, and effectuation, in combination with the theories of KIO and KIBS, are tested here.

4.4.4 The dynamic model of effectuation

Further, the dynamic model of effectuation elaborates the effectual entrepreneurial action. The model is the basis of the effectual logic and employs Sarasvathy's five principles described above. The model is based on a study by Wiltbank, Dew, Read, and Sarasvathy (2006). It includes the cycle of available resources and, thus, includes the aspects of resource management.

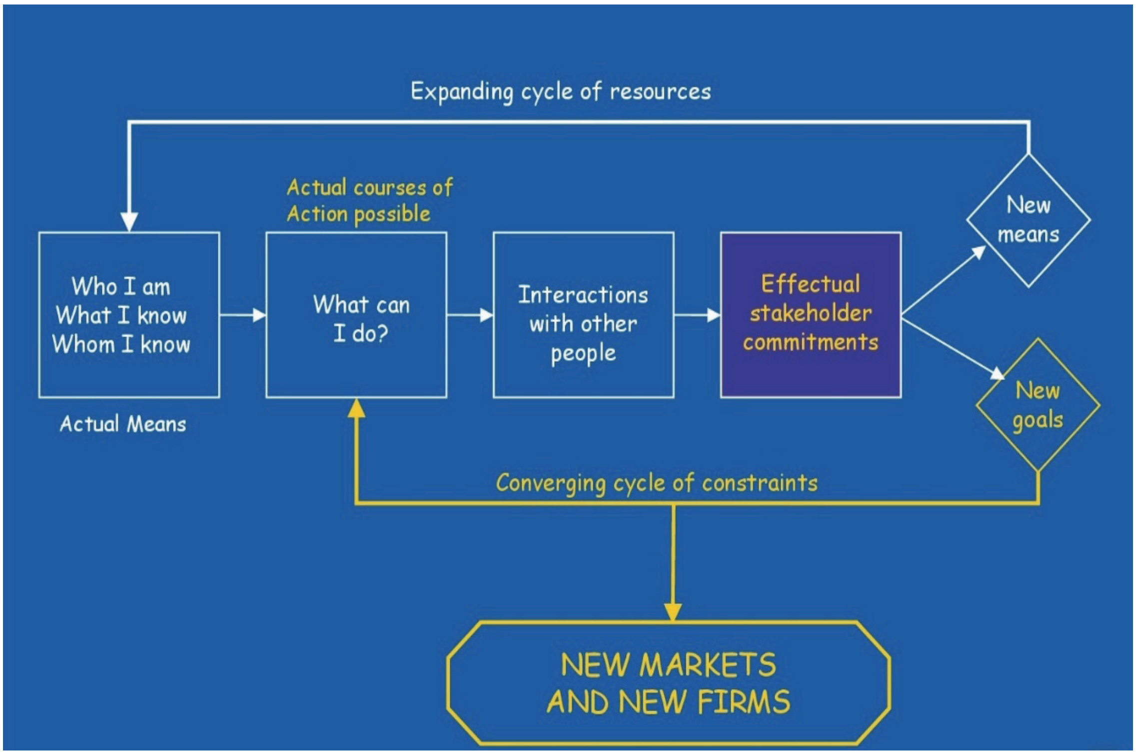


FIGURE 9 The effectual process. Adapted from Sarasvathy (2008) and Wiltbank et al. (2006)

There are two cycles within the effectual process. The course of action and the converging cycle of constraints. Effectuation is a constant cyclical process in which the entrepreneur reassesses and expands the available means by being alert to opportunities and contingencies. New markets and new firms will subsequently lead to new products (Sarasvathy 2001). The first part consists of collecting all the means that the entrepreneurs have and identifying the opportunities; thereafter, the actions are determined. The last step is convincing trustworthy stakeholders who agree to share the risks and belief in the project, for example, research through sport facilities. For the JYU, UU, and GSU, these stakeholders can be local firms, the government, and the customers and environmentalists. The new market or product is the result of the process. After this first cycle, when a project generates wealth, new means (e.g. new stakeholders) are also created. Hence, a new cycle begins from the beginning by focusing on these new means and new goals. A university might generate new revenue streams or launch new research opportunities. Furthermore, the cycle includes environmental changes or new constraints. These changes and constraints shape the process by providing new goals and resources.

4.4.5 Strategic entrepreneurship

Strategic entrepreneurship deals with the problems of how to provide successful strategies for the future and being prepared for eventual changes which can affect business opportunities. Mintzberg (1978) summarised that the common theme for the definitions is “a deliberate conscious set of guidelines that determines decisions into the future" (Mintzberg, 1978, p. 935). Further, Mintzberg suggests that strategy in general and realised strategy in particular could be defined "as a pattern in a stream of decisions", and furthermore, "where a decision is defined as a commitment to action, usually a commitment of resources." (Mintzberg, 1978, p. 935).

Hitt, Ireland, Camp, and Sexton (2002) defined strategic entrepreneurship in the following manner:

> "Strategic entrepreneurship is the integration of entrepreneurial (i.e., opportunity-seeking actions) and strategic (i.e., advantage-seeking actions) perspectives to design and implement entrepreneurial strategies that create wealth (Hitt et al., 2001c). Thus, strategic entrepreneurship is entrepreneurial action that is taken with a strategic perspective." (Hitt, Ireland, Camp, & Sexton, 2002, p. 2)

The following figure illustrates strategy, entrepreneurship, and a combination of both:

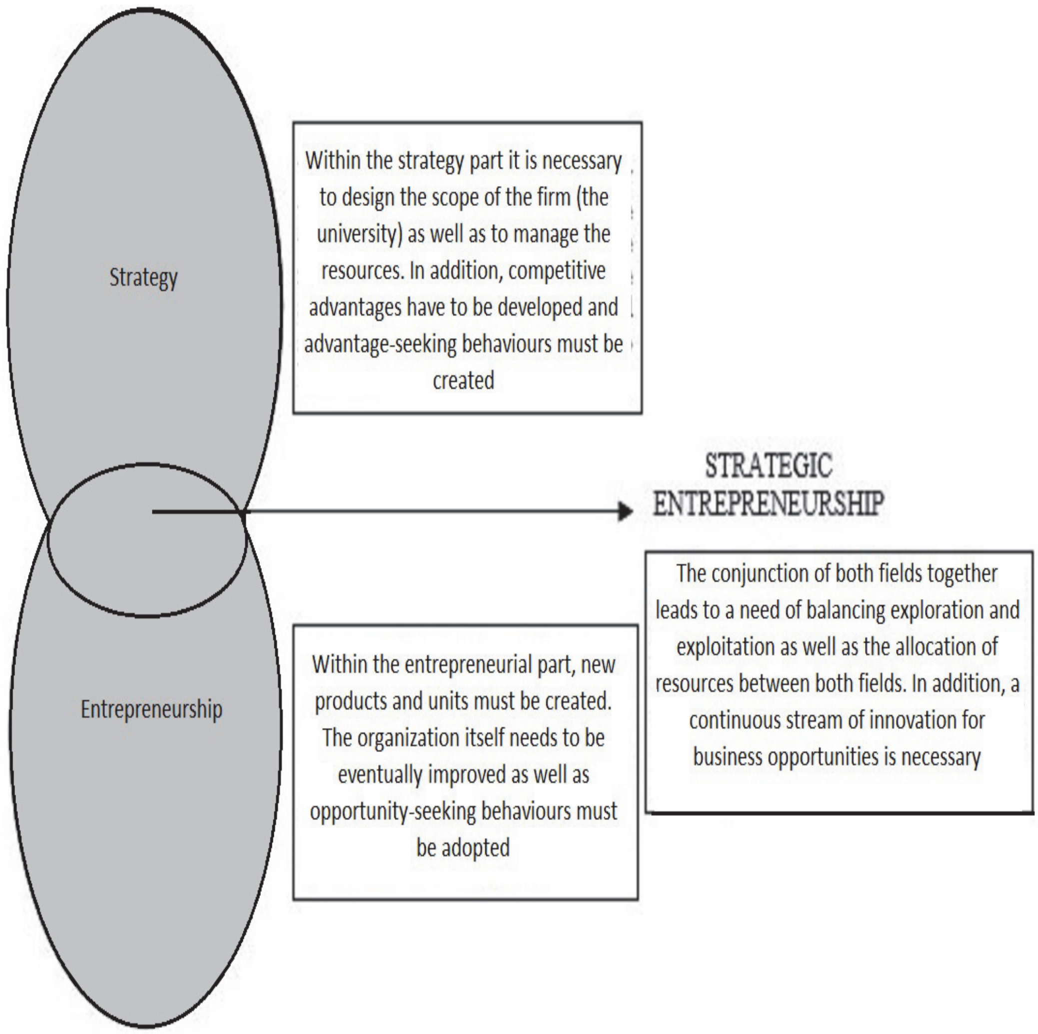


FIGURE 10 Strategic inner entrepreneurship: Creating competitive advantage through streams of innovation. Adapted and modified from Ireland & Webb (2007) and Koiranen & Peltonen (1995)

According to Ireland, Hitt, and Sirmon (2003), entrepreneurship can be divided into these major sections: 1) entrepreneurial mindset, 2) entrepreneurial culture and leadership, 3) managing organisational resources strategically, and 4) applying creativity and developing innovation. Strategic entrepreneurship begins with the idea that there is an *entrepreneurial mindset* as a basis for a successful strategic entrepreneurial action. Such an orientation is a growth-oriented perspective to promote flexibility, creativity, continuous innovation, and renewal (Ireland et al. 2003). An entrepreneurial mindset can recognise opportunities and exploit them, because entrepreneurs have abilities that allow them to impart meaning to ambiguous and fragmented situations (Alvarez & Barney, 2002). The subsequent element is *recognising entrepreneurial opportunities*, which is the key of wealth creation activity (Ireland et al., 2003). Opportunities can be found everywhere but are dependent on information asymmetries in the marketplace. Therefore, entrepreneurial opportunities are to be observed in terms of how an entrepreneur transforms resources from inputs to outputs by using information asymmetries (Alvarez & Barney, 2002; Shane & Venkataraman, 2000). Another key component of strategic entrepreneurship is *entrepreneurial alertness* (Kirzner, 1997). People who have the ability to identify whenever goods or services are becoming unexpectedly valuable to consumers possess entrepreneurial alertness. Such an ability is extremely valuable for universities, as universities not only fight for the best students but also for the few available resources and companies they need to be connected with in order to be successful.

The penultimate part is *real options logic,* which enhances strategic flexibility (Mosakowski, 2002) and enables entrepreneurs to deal with uncertainties associated with identifying and pursuing entrepreneurial opportunities (Hoskisson & Busenitz, 2002). A successful use of options minimises the waste of resources while increasing the likelihood that the firm concentrates on its most valuable entrepreneurial opportunities (Ireland et al., 2003). The idea of the entrepreneurial mindset is then concluded by the so-called *entrepreneurial framework.* It includes actions such as setting goals, establishing an opportunity register, and determining the timing associated with launching strategy. An entrepreneurial framework includes an orientation to the appropriate timing for exploiting entrepreneurial opportunities (Miller & Folta, 2002). Shilbury (1998) used Mintzberg's classic study (1994) that making strategies has become lost by attempting to invent rational planning systems. He argued by citing Mintzberg (1994, p. 24–25) that "intentions that are fully realised can be called deliberate strategies. Those that are not realised at all can be called unrealised strategies… the literature on planning recognises both cases, with an obvious preference for the former. What it does not recognise is the third case, which we call emergent strategy" (Shilbury, 1998, p. 24).

4.4.6 Convergences and differences of effectuation

Definitions of effectuation are closely related to exploration, control, and innovation; these can also be connected to the entrepreneurial aspects of strategic entrepreneurship. Strategic management is generally associated with exploitation, prediction, and risk. In turn, risk has three important aspects, namely uncertainty, upside volatility, and deviation from the expected outcome (Segal, 2011). Effectuation can be regarded as a balancing force in strategic entrepreneurship in terms of the aforementioned notions (exploration and exploitation, control and prediction, innovation and risk). It is important to understand this in the context of this dissertation and with regard to the reciprocation between the universities and potential entrepreneurs and stakeholders who could serve as business partners.

4.4.7 Effectual reasoning linked to the logic of control

Effectual reasoning and the logic of (non-predictive) control can be considered as cornerstones for effectual entrepreneurial action (Sarasvathy, 2001). These notions will be conceptualised and compared to their counterparts, which are causal reasoning and the logic of prediction. The definition of 'logic' is derived from Dew, Read, Sarasvathy, and Wiltbank (2008): "An internally consistent set of ideas that forms a clear basis for action upon the world" (Dew et al., 2008, p. 43). The research on strategic management and thinking has usually been linked to the principle that the future can be predicted to a certain extent, and thus has an emphasis on prediction. This approach to strategic thinking can be labelled either planning, which is related to improving the predictions of the future events, or adaptive, which is related to the speed and quality of adaptation to (or learning of) the circumstances. The defining characteristic of both planning and adaptation is positioning: how a company predicts the future environment and plans its position in it or how it plans to adapt to this environment. Both planning and adaptation include the suggestion of an exogenous given environment which cannot be conclusively shaped by the company itself (Wiltbank et al., 2006).

The logic of prediction is closely related to the planning and adaptive aspects of strategic thinking. The underlying idea of the logic is the perception that what can be predicted can also be controlled, although a full control of the market is not possible (Sarasvathy, 2001). This implies that a company with more knowledge and better abilities to predict the future could be superior to one with less. If a company has set certain goals and crafted different scenarios of future events, it can seek to steer the future aspects of the external environment which it has (supposedly) been able to predict and, therefore, succeed. For example, universities attempt to identify which sections within a scientific field are more prosperous than others, thereby leading to a potential process of specialisation within the faculties and major subjects and affecting how the infrastructure, for example, sport facilities are used. This is the essence of causal reasoning, which suggests that better level of prediction results in better level of control (Dew et al., 2008).

Whereas predictive—that is, causal—strategic thinking regards goals as the basis of planning, the idea of controlling or effectual thinking begins with given means. This contrast was comprehensively defined by Sarasvathy (2001):

> "Causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means "(Sarasvathy, 2001, p. 245).

Causal processes focus on the predictable elements in a future which is uncertain; effectual processes are based on the premise that the future is unpredictable and that there are controllable elements in it. Thus, the need for prediction is eliminated through control (Sarasvathy, 2001). This idea is based on the three types of environmental uncertainty which were presented by an initial study by Knight (1921). Wiltbank et al. (2006) define these types of uncertainty in the following manner:

> "Knight identified three types of uncertainty: the first consisting of known distributions and unknown draws, the second consisting of unknown distributions and unknown draws, and the third consisting of non-existent distributions where the very instances are unclassifiable (subsequently known as Knightian uncertainty)". (p. 988)

In environments which are best defined through that *Knightian uncertainty*, things cannot be classified as 'knowns' and 'unknowns' and, thus, cannot be predicted (ibid.). In these environments, control is used in order to shape the future. Effectual logic regards control as a force which can result in shaping the environment in which a company is functioning. According to the logic, the future environment is highly unpredictable and, more importantly, currently non-existent; thus, it can be shaped (and therefore controlled) by those who are capable of doing so with current means (Wiltbank et al., 2006). The logic accepts uncertainty and contingency and aims at benefiting from them rather than attempting to minimize their impact (Sarasvathy, 2001). The difference between the logic of prediction and effectual logic is the position on risk-taking and managing uncertainty. In addition, as the effectual logic is also related to the responses of the environment (Dew et al., 2008), their view on contingencies will be assessed. As strategic management and strategic thinking usually estimates the expected returns of investments on different opportunities and then chooses the most viable one, effectual logic disregards the expected returns. Based on a study by Gnan, Hinna, Monteduro, and Scarozza (2013), classic state-owned organisations, such as universities, often do not reach their maximum business potential due to a lack of stakeholder's perspective. This leads to a potential loss of business opportunities. Therefore, it is necessary for state-owned institutions such as universities like in this study to increase and acknowledge the interests of valuable stakeholders.

4.4.8 Linking effectuation and strategic entrepreneurship

Linking effectuation and strategic entrepreneurship leads to a more entrepreneurial and business-orientated approach of the universities, as well as their ability and willingness to do so, as explained in research questions 3 and 4. This combination helps to cope with eventual failures and uncertainty regarding a specific business (here within KIO and KIBS; research questions 1 and 2). It assists in how to deal with the '*suicide quadrant*' of new markets and new products that entrepreneurs are interested to act within. The main focus for entrepreneurs is how to minimise eventual risks by using conceptualisation. Sarasvathy and Dew (2008) argued that the effectual logic is non-predictive. This means that the 'effectuator' is only interested in investing as much as possible without a loss. Therefore, the effectuation model causes non-predictive strategies for all parties involved in the transaction. In addition, entrepreneurs using effectuation as their main instrument are willing to create a future that enables them to work towards their own goals. Influence-seeking is another aim worthy of achieving as other stakeholders might be more willing to work with the 'effectuator'. Such effects can be taken to the implementation of new ventures, whether successful or not. Therefore, the effectuation within strategic entrepreneurship is not merely a theory, rather it is meant to be the guiding expertise of entrepreneurialism. Read, Dew, Sarasvathy, Song, and Wiltbank (2009) contrasted a figure (Figure 9: The effectual process) from an earlier study in which they concluded a scheme of how effectual logic works by now using the sole predictive process:

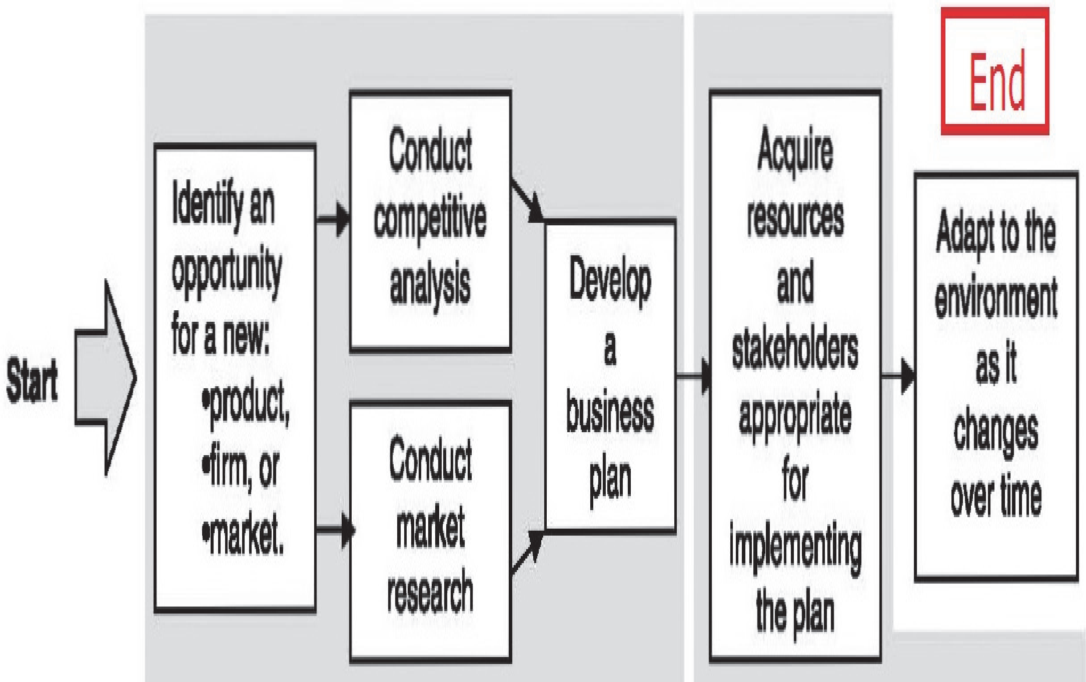


FIGURE 11 The predictive process. Adapted and modified from Read, Dew, Sarasvathy, Song, & Wiltbank (2009)

This implies that the JYU, UU, and GSU would have to analyse the extent to which they can integrate and position themselves into these resource cycles as a knowledge-intensive governmental organisation. Another dimension here was given in 2001 to prove that both causation and effectuation are closely linked together:

> "Causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means." (Sarasvathy, 2001, p. 245)

The categories of 'means' regarding entrepreneurs are divided into three different sections. This implies that "they know who they are, what they know, and whom they know—their own traits, tastes, and abilities; the knowledge corridors they are in; and the social networks they are a part of" (Sarasvathy, 2001, p. 249). With regard to companies, the correct means are the existing and used resources. On the level of the economy though, such means are directed towards demographics, various technologies, and institutions dealing with social policy. Going deeper towards the process of causation, this implies that such processes rely on the effect itself, while effectuation processes need a certain actor. The meaning of exploitation also differs between these two variances. In this particular case, it is knowledge (causation) vs. contingencies (effectuation). Effectuation basically interrogates the usual conjectures on how individuals think and react when they start doing businesses, and it provides a possibility for explaining the idea of causation from which it is believed to derive face validity. Based on Svensrud and Åsvoll (2012), entrepreneurial actions and strategic actions are able to contribute, each for their own, to value creation; this is even more possible once they are integrated into the complete action of the firm. The underlying logic is that entrepreneurial actions and strategic actions can independently contribute to value creation, and they can contribute even more when they are integrated. Taking and analysing effectuation theory from a more distant viewpoint, it can be treated as some kind of philosophy. This implies that something in the future is considered unpredictable. However, by enacting on this changeable future, it enables an entrepreneur to obtain control and steer own actions.

4.4.9 The real options logic

The approach of the real options logic related to effectuation and strategic entrepreneurship aims to cope with difficult and uncertain environments within business. The selected universities do not have much experience in marketing themselves and functioning as firms; thus, they are facing many diversities of uncertain environments. Based on the study of Cuipers and Martin (2006), "the value of a real option is a function of the same five factors that determine the value of financial options, i.e., the value of the underlying asset, the strike price, the time to maturity, the risk-free rate and the uncertainty surrounding the underlying asset" (Cuipers & Martin, 2006, p. 2). Used for strategic entrepreneurship, it is inevitable to transfer the gained insight from financial options to real options. Therefore, arguably the most important challenge for the universities is the linkage of current strategic decisions with a certain uncertainty with regard to future outcomes depending on the various surroundings. Thus, the uncertainty within the real options logic is divided into exogenous and endogenous uncertainty.

Disparities within the concepts of uncertainty could give reasons for some inconsistencies for Joint Ventures (JV) strategies. This aspect can be linked to this study as it is questionable how the universities would act if they decide to transform into JV's (presupposed law changes) to solve potential business and money problems. Cuipers and Martin (2006) argued that "the gaps between theoretical and empirical literatures suggest that a critical distinction is whether or not uncertainty is exogenous to the firm's influence" (Cuipers & Martin, 2006, p. 3). According to Coff and Laverty (2001), the options logic is sort of 'poised' to be placed within the mainstream of strategic management. This is the opposite of the usual fundamental problem of investment approaches: companies are forced to commit to expenditures while lacking key information regarding the future, namely the use of new technologies, the behaviour of competitors, or an upcoming economic crisis. As Williams and Hannes (2007) put it, the real options logic must focus on innovation and ideas. From the real option perspective, capital budgeting decisions could be seen as a mirror for financial options—either a call option or a put option; thus, this implies that you have the right but not the obligation to either buy or sell. In order to address future issues concerning the model of effectuation and the inclusion towards strategic entrepreneurship in practise, additional studies are necessary. Sarasvathy (2001) used Lindblom's (1959) study to show that people were aware of the importance and meaning of policy-making even back then. As she put it, "the policy maker does not separate ends from means; the choice of means embodies within it the policy maker's selection of ends" (Sarasvathy, 2001, p. 256).

4.5 Implementation of the framework

The presented theories and concepts within this chapter were tested throughout the analysis of the interviews as well as during the discussion and the presentation of other related results (see chapter 9). If applicable, suitable practical examples of adjacent recent studies were included and compared to the findings as well as various practical models of other studies of how to gain revenue streams for the universities by using entrepreneurial and stakeholder-friendly models. By this strategy it was attempted to include cross-sectoral approaches and theories to this particular research and to include these into suitable problem-solving solutions.

5 THE SPORTIVE AND ECONOMIC STRUCTURE OF THE CITIES

In this chapter, the role of sport in Jyväskylä, Umeå, and Cologne are defined as well as the major areas which are connected to sport and their influences on this particular research. In addition, the economic backgrounds of each country and city are discussed. The view focuses on the local and regional circumstances in relation to their abilities to draw economic interest into the respective regions, which is important for the universities and sport faculties if they want to strive toward a more entrepreneurial-orientated business approach. The national viewpoint touches upon the differences between the national, regional, and local sport structures and their origins. Sport itself is widely considered a huge business factor (Szymanski, 2010; Pawlowski & Breuer, 2014). Further, the economic circumstances around the universities (local and regional) can also have an impact on the business possibilities. In addition, the structure of sport facilities and organisation within the countries and universities are portrayed and analysed.

5.1 JYU and Finland: National, regional, and local surroundings

5.1.1 National, regional, and local sport structures

Sport itself has always played a prominent role within the Finnish society. The State Council of Sport, the country's first governmental board, was founded in 1920 and the first municipal sport board was also founded in the same decade (Heinilä, 1989). Municipal sport boards are responsible for their district and have a large autonomy in Finland. These boards can decide and direct the sportive orientation, including the economics related to sport (Suomi, 2016). According to Vuolle (1993) and Kokko (2006), sport has a positive influence on life and the society and is still a very important part in the Finnish curriculum of physical education (Rämä, 2013). The importance of the grassroots sport has always been very high and can still be considered as the backbone of Finnish society (Suomi, 1998). With regard to the public direction of sport in the last few decades, the structure of the Finnish society has favoured the objective of sport clubs orientating themselves towards top-level sport (Suomi, 1998; Ilmanen, 2015; Suomi, 2015). In terms of the building of sport facilities, the interest has shifted to become more multifunctional and to combine business interests with the needs of the society; overall, a more resource-interested viewpoint is now being adopted, thereby leading to intense analyses of ‘doing more with less’ (Laine, 2015; Salmikangas, 2015; Suomi, 2015). This viewpoint combines de Mel’s (2005) RBV with the possibilities of business-related models of sport facility management. Due to the economic recession in the last few years, the rise of the private sector can be expected to enhance the existing offer of sport for the community in addition to the already existing services of the public and third sectors. The most popular areas for the community are pedestrian areas and walking in nature (Suomi, 2015). Gymnastics are highly regarded within the Finnish society at the national, regional, and local levels; other popular sport includes floorball, pesäpallo (Finnish baseball), motor sports, football, Nordic-walking, skiing, basketball, and athletics (Parkkari, 2006; Karimäki, 2006)

According to of the former Finnish Sport Association (SLU), which was subsequently transformed to VALO (Finnish Sport Confederation)—only to hand over its duties to the National Olympic Committee (NOC) in 2017 after its abrogation—approximately 3.4 million Finns are regularly participating in sport and over 20% of the adult population is a member of a sports club, which equals approximately 1.2 million people. Further, approximately 9,000 sport clubs take care of the needs and interests of the society, which is the equivalent of one club for every 650 Finns. Amongst these sport clubs, approximately 3% have professional athletes as their members (Eurostrategies, 2011). The SLU was founded in 1993 and was the first umbrella organisation for Finnish sport federations. The national sport federations are part of the SLU, along with the National Olympic Committee (OK; Suomen Olympiakomitea), the regional sport federations, and the sport clubs (Tokarski & Steinbach, 2001) as also illustrated in the new Finnish sport structure (see Appendix Figure 3). VALO and SLU have been deleted, and the major sport organ concentrates on Olympic sport.

The Finnish sport structure has experienced several changes since 2010. On the regional level of the governmental structures, the power is now in the hands of the regional administration agency called AVI (*Aluehallintovirasto*), while at the local level, the municipal sport boards have taken over the power from the municipal sport councils. With regard to the government, the first political act to give sport a legal basis was in 1980, as the ‘Sports Act’ came into force from the beginning of that year and divided the public and third sectors. It was an attempt to harmonise the Finnish sport system with the various municipalities and sport organisations in combination with the Finnish state (Remans & Delforge, 1997, F.1, 1). The successor was put into force in

1998 and updated again in 2015. Currently, the duties of the government, regional, and local administration are legalised in the Sports Act (390/2015). Further, 25% of the proceeds of the Finnish National Lottery Veikkaus OY are allocated to sports, and 98% of the state's sports budget comes from lottery proceeds (Eurostrategies, 2011). However, recently, the state aid per capita and year for sports has fallen significantly in certain regions. According to Suomi (2015), in within eight years, the sum spent for sport in 2009 was only 10% of what it was in 2001. Based on LIPAS (Finnish sport facilities databank), the investments have dropped again by 10%, which can be explained by the official economic recession Finland has been experiencing for the past two years (LIPAS, 2016).

5.1.2 The students' sport culture

The students are one of the major users of sport facilities in the universities and, therefore, the students' sport culture is analysed here. A study by Kunttu and Pesonen (2012) regarding the health of Finnish university students reveals that they do care about health and sport. According to their study, approximately one-quarter of the students who participated in the survey play a sport at least four times a week and slightly over one-third (36%) did so between 2–3 times per week. Only 9% of all students never or only very rarely participate in sport for fitness purposes. From among the various disciplines of sports, health and physical activity, the greatest favourite were fitness sport, team ball games, strength sport, and also physical activities of daily life. The main motivation for the students to participate in sport was found to be health (89%), feeling good (88%), improving physical fitness (85%) and, finally, joy (85%). The sense of sport in daily life was also asked as a question in the aforementioned survey of students, as Kuntto and Pesonen showed: "Physical activity was considered as being a significant means of life management: an escape from the everyday life, recreation, relaxation and achieving balance were important matters for 72–73% of the respondents. Pressure or stress relief was rated as important by 67% of the respondents" (Kunttu & Pesonen, 2012, p. 68).

According to Mörä-Leino (2013), sport is important to university students, as it was revealed that 20 student groups have reserved additional time for their own sport every week, apart from participating in the sport programme offered by their university sport office. In comparison to other Finnish universities, the rates for sport participation at JYU are higher as it hosts the only sport faculty of the country. The total annual budget (2014) for the sport office of the university, generated from selling sport stickers and course fee, is approximately €213,000; this is used partially to pay course instructors and partially to buy equipment. The payment for the facilities is done through the state, that is, SYK. The most important students' sport club at JYU is Liikunnan Riemu, which also plays officially in Finnish leagues of different sport disciplines such as football or table tennis (Mörä-Leino, 2013). Liikunnan

Riemu is an own-sport club by the students, including membership fee and the main idea of collaboration with actual sport clubs.

5.1.3 The socio-economic background

Since 2010, the number of inhabitants in Jyväskylä per km² has gone up from 109 to 114 (Statistics Finland, 2014). According to Gløersen, Dubois, Copus, & Schürmann (2006), in many regions in Finland and Sweden, there is a negative net migration outside the major cities. In addition, there is a clear disadvantage in terms of economic competition against the possibilities available in Helsinki. As Böckermann and Maliranta (2007) found, there is a huge diversification between Helsinki region and Eastern Finland in particular in terms of productivity. This also applies to the surroundings of Jyväskylä or Oulu. This makes it difficult to keep young people in the region due to the lack of jobs. Power and Lundmark (2004) stated that the "availability of a young and growing population is a prerequisite for economic development" (Power & Lundmark, 2004, p. 1026). JYU competes against the universities and polytechnics from Tampere, Oulu, Turku, Seinäjoki, or Kuopio. Based on the studies of Haapanen (2010), the unemployment rates and the number of younger and highly educated people are correlated. This is related to business possibilities for universities (including research through sport facilities), as these are linked with the growth possibilities of the regional and local areas, which in turn are also dependent on young highly educated people. In Jyväskylä, since 2007, the number of university graduates and the unemployment rate have been on a steady decline. In 2009, the unemployment rate dropped to 5.8% (from 7.2 in 2007), and in 2011, it reached a five-year low at 3.8%. However, the economic crisis hit Finland and in 2012 this rate rose again to 5%, followed by 8.1% in 2013 (Vipunen, 2016). The generally high unemployment rate (19% as of June 2017) is continuing to cause problems in the Finnish economy.

The metropolitan regions in Southern and Western Finland have fewer problems with the unemployment of university graduates than the other bigger cities with Kuopio being the sole exception (Vipunen 2016). According to Ammermueller, Kuckulenz and Zwick (2009) regional unemployment is an indicator of regional labour demand. Wages of different skill groups can react differently on changes in labour demand, leading to a connection between unemployment and returns to the education (RTE). Black, Kolesnikova and Taylor (2009) found out that in the USA the RTE "is relatively low in expensive high-amenity cities" (Black, Kolesnikova, & Taylor, 2009, p. 41). The studies of Kangasharju and Pekkala (2004) showed that after the recession in the 90's Finland faced a "more fierce economic competition. In this new situation, firms started to locate more than before in regional growth centres, seeking agglomeration economies" (Kangasharju & Pekkala, 2004, p.266). This might help Jyväskylä to keep more graduates in the region. With economic problems like the high unemployment rate and, thus, a lack of possible business partners, the universities experience huge challenges. Mäkinen (2016) argued that a business possibility through sport could help JYU as it is the only sports faculty of the country and the overall rising popularity of sport.

5.2 Umeå, the university, and Sweden

5.2.1 Sport and the connections in Umeå and overall Sweden

Sweden has always been a very sportive nation. Based on studies by Blom and Lindroth (1995), it can be said that this history of sport in Sweden dates back to the time of King Gustav Vasa (1496–1560). The organisation of sport grew quickly in the twentieth century and in 1970 over 2.2 million Swedes were a member in a local sport club. The sport movement in the earlier years of century was very important for the development of Sweden, particularly in the 1920s and 1930s, as Norberg (2002) added. Physical education was made obligatory in schools and the sport structure improved notably (Blohm & Lindroth, 1995). Umeå itself is also a very sportive town. According to Forsman, Söderlind, Lindgren, and Rönnlund (2001), sport was always highly regarded in Umeå and it is possible that tournaments and challenges date back into the nineteenth century. This claim is backed up by Blom and Lindroth (1995), who analysed the history of Swedish sports dating back to the Middle Ages. Jarvie (2003) uses a quote by Cronin to show how success in sports is important for the Swedish people: "Nothing awakens Swedish national feeling so easily and strongly (at least among men) as sporting success. Glorious history, royalty, a splendid army, democracy and the welfare system, ancient ideals and traditions, Volvo and other great companies—none of these things can measure up to sport in providing bonds of national solidarity or in creating collective consciousness of one's country" (Cronin 1999, p. 59 in: Jarvie 2003, p. 541).

According to Eurostrategies (2011), over 90% of the youth (50% in Finland) have been members of a sport club during their youth. This sport movement is the driving force for the interest in new sport and hobbies. However, the increased use of private gyms for fitness training has its roots outside the sport movement. The most famous sports nowadays are football, floorball, and athletics (Eurostrategies, 2011). Mattson and Karlsson (2001) argued that the "sport in Sweden mainly belongs to the social economy", thereby implying that it is owned by the entire society (Mattson & Karlsson, 2001, p. 28). The organisation of sport in Sweden does not have intermediate sport organisations, which is similar to Germany and Finland (after the structural changes in the last decade). There is a clear distinction between governmental and non-governmental sport organisations (see Appendix Figure 4).

The Swedish Sports Confederation (*Riksidrottsförbundet*, RF) has a central role as the constitution does not specifically mention sports. The principles of the sport policy have been approved by the Swedish Parliament (Govt. Bill 1998/99:107, Culture Committee report 1999/2000:KrU3, Riksdag Communication. 1999/2000:52). However, "despite being a strictly non-governmental organisation, it has been assigned some tasks by the government. The confederation and at least the administrative work in federations are financed by the government" (Remans & Delforge, 1997, pp. 1, 4). With regard to non-governmental sport organisations, the RF provides a high priority to the governance of sports. It is also responsible for policymaking and the distribution of state subsidies. Sport clubs are organised into approximately 1,000 regional sport federations (similar to Finland) which, in turn, constitute the 70 currently existing national sport federations. In 2004, the first nationwide sport for all programs was launched with the ambition to reach more children and youth. It was an additional funding to the regular 1 billion SEK (approximately €98 million) for a period of four years. The first program was called 'The Handshake' (*Handslaget*) and the new program is called 'The Sportlift' (*Idrottslyftet*). Like in Finland, a set percentage of the income from lottery and betting is reserved for child and youth sport. In addition, a set amount by the state is handed over to the sport movement as a general aid. The amount in 2008 was 1.4 billion SEK (€137 million), which equates to an increase of 40% since 2005 (Eurostrategies, 2011).

The current government's policy regarding education and universities aims to promote sport and get more people to study in the universities, thereby helping Sweden to be more prepared within the international competition (Swedish Government, 2013). At the same time, the ongoing UU policy (University of Umeå, 2012), which runs until 2020, wants to foster knowledge-based actions. Increased research and education should provide the society with skilled employees and long-term knowledge acquisition to contribute to the aforementioned issues, as the universities are a part of the innovation system of the society. Currently, Umeå not only has their own university and the Department of Education which includes its own sport section, but Umeå is also the home of the Umeå School of Sport Sciences (USSS). USSS is also one of the major stakeholders of UU, according to Karp (2014), together with companies such as Baltic Group and Akademiska Hus. Karp argued that it is very difficult for UU to find other bigger companies as stakeholders for UU due to the low population density in Northern Sweden.

5.2.2 The combination of IKSU and UU

The students' sport culture in Sweden is very active. The students of UU use the sport facilities of *Idrotts Klubben Studenterna Umeå* (Students' Sport Club Umeå), referred to as IKSU. It acts as a regular sports club with members from all parts of the society. However, the biggest user group is the students from UU. IKSU has an ownership of a trinity based on the university, the student union, and IKSU itself (Viklund, 2014). These three owners build a foundation and own the old part of the main sport building. The new part of the sport facility ground, which contains several sport possibilities, is owned by AH. Since the university owns one-third of the aforementioned foundation, the connections between IKSU and the university are very strong. For the student union, this is also important as it ensures the influence of the students' sports culture on the business model of IKSU, thereby leading to the creation of a student-influenced interior of the sport facilities (Viklund, 2014). In 2015, half of the current students at the UU—30,957 in that particular year—were members of IKSU (Viklund, 2015; IKSU, 2015) and used its sport facilities. From the end of 2010 until the end of 2013, the number of people possessing an IKSU sport card has been steadily on the rise. In 2010, 18,172 people had such a card, in 2013 this number stood at 21,689, and in 2015 it was 21,918 (IKSU, 2012; IKSU, 2013; IKSU, 2014; IKSU, 2015). Based on these figures, the percentage of students of UU who are also members at IKSU was 70.6%. As UU itself only possesses open football fields and no indoor halls, swimming pools, or track and field-related facilities, IKSU is frequented by students a lot (Viklund, 2014). The capacity of IKSU itself is 21,000 m². In addition to the own training of UU fields, this gives the students the possibility of using approximately 22,000 m². Further, the most preferred sport amongst the students has been beach swimming (180 active members), followed by beach volleyball (170), and martial arts (170). IKSU counts these by the number of active members involved in teaching, building teams, and competing.

5.2.3 Economics in Sweden, Northern Lapland, and Umeå

Like in Finland, Sweden faced an economic recession in the beginning of the 1990s. Back then, it was very difficult to find work, particularly with the upcoming migration due to the war in Yugoslavia and the collapse of the former Soviet Union. It drove many people out of the countryside towards the metropolitan regions of Stockholm, Gothenburg, and Malmö, thereby leading to an economic downfall in regional centres which were not as big (inhabitant-wise) as the mentioned cities. Palme, Bergmark, Näsman, Fritzell, Sommestad, Lundberg, and Szebehely (2000) compared the social and economic background in Finland and Sweden during the time of their respective recessions. Based on their study, there are historic, social, and economic similarities between these two countries. A strong involvement of the state in all political areas in the year 2000 was noted. The economic crisis of the 90s was rather severe in Finland, but less so in Sweden. The reasons for this vary among the available studies, but a big factor was the crash of the Soviet Union as Finland's economy was connected to that of the Soviet Union like no other in Europe.

Another root for the crisis other than the collapse of the Soviet Union was the Swedish crown being rated as too strong for the national economy to survive. In Finland, the export industry also had issues with the strength of the national currency. The problems of the export industry occurred simultaneously as a decreased domestic demand generated several lay-offs in the working fields dependent on it. In Finland, the unemployment rates were also constantly higher. These rates began declining in 1993, while they were still rising in Finland until 1997, only to rise again during the European recession in 2008 (see Appendix Table 2) (Palme et al., 2000; Ekonomifakta, 2017). These economic factors are directly linked to the problem of domestic migration, which turned out to be an important issue as revealed during the interview sessions. According to Nilsson (2004), this can be somewhat seen "in the context of the economic crisis, globalisation and Sweden's entry to the EU" (Nilsson, 2004, p. 117). Further, the process of domestic migration was also examined by Hjort (2005), who found that during the last 15 years (1990–2005), there has been a general shrinking of the population number in large parts of the country. This was also verified by Gløersen et al. (2006) as well as by the Swedish Bureau of Statistics in 2005. However, they added that a steady number of people moving out of large metropolitan areas such as Malmö, Stockholm, and Gothenburg has led to a growing number of young people (e.g. graduated people coming out of universities) in large cities (Statistics Sweden, 2005).

In Umeå, rapid expansion already began in the 1990s and is ongoing (Wieslander & Dahllöf 1996). Currently (in 2017), the municipality of Umeå has close to 130,000 inhabitants. Nevertheless, the process of domestic migration is remains, with a constant flow of people moving to Middle and Southern Sweden, including highly skilled graduates from the universities. Like in Finland, this may cause problems for the university to maintain their standard in teaching and research as the salary diversification between Umeå and other regions in Southern Sweden can be seen as relatively high. In the interviews, participants stated that a scientific job in Malmö would be paid approximately €1,000 more for the same tasks than in Umeå. That makes it difficult for universities like UU to maintain or even improve their position in teaching and research.

Borjas (2001) argued that there is a close link between migration and economic efficiency, which of course is important to be productive. Based on this study, the workers available in the country react to "regional differences in economic outcomes by voting with their feet" (Borjas, 2001, p. 9803). If there are two different regional labour markets in a country with different wage structures, it is possible that workers living in a lower payment sector may eventually move to another area of the country in the hope of a better salary. This not only leaves the region with lower payment without the skilled workers they need, but also facing a more difficult competition to obtain highly paid jobs. It is arguable whether a flow of workers going from Northern to Southern Sweden would lead to an increase in the wages in the North (leading to the loss of skilled workers and luring qualified ones instead) and depress the wages in the South due to the huge competition among available skilled experts. This flow of domestic migration might level out, and currently suffering regions like Umeå with a lower wage payouts would rise again in the future. If such equilibrium of national wages occurs, it would result in labour market pooling, knowledge spillover, and specialised suppliers (Krugman, 2008). Wagnsson, Augustsson, and Patriksson (2011) stated a diversity in socioeconomic geography, and this has influenced sport, for example, the participation levels of the youth in sport. This could affect the students' sports culture, as poorer students might not be able to participate in every available sport, for example, due to expensive equipment and, thus, slightly skewing the overall impression of a united students' sports culture. Dahllöf (1996b) argued that when there is a comparison between Sweden and Norway, the national resources in Sweden that are of great economic importance are located in remote rural and coastal areas. Such conditions can cause a great vulnerability in terms of regional imbalances, which is still very important for Swedish politics. Such imbalances as those regarding salary diversification mentioned above make it difficult for the universities to maintain their quality in research and teaching and, thus, also affect potential business opportunities through sport facilities.

Jaeger, Bonin, Dohmen, Falk, Huffmann, and Sunde (2010) argued that people searching for better jobs with the will to take risks is a positive, statistically significant, and quantitatively important determinant of migration (Jaeger et. al 2010). Cummings and Worley (2008) recognised that career planning is an important issue in working life. If the career of the university staff is rather secured, the performance output is also likely to improve. Bryson (1988) stated that the human problem within strategic planning is the management of attention and commitment. Key issues, conflicts, decisions and policy preferences have to be focused upon. Strategic planning should not be too 'special' for letting employees be focused and take tasks seriously. Bryson added that "people will not view strategic planning as 'real', as worth taking seriously, unless real consequences—such as performance reviews, important decisions, and budgetary allocations—flow from it" (Bryson, 1988, p. 202). A stronger input is expected as humans tend to focus in public, important, explicit, and irrevocable deeds (Bryson, 1988).

5.3 GSU, Cologne, and Germany

5.3.1 Europe's biggest sport university, Cologne, and Germany

Like in Sweden and Finland, sport has always been regarded as very popular in Germany. According to v. Bottenburg, Rijnen, and v. Sterkenburg, in terms of sport, Germany appears to be much more active than many other member states of the European Union (EU) (v. Bottenburg, Rijnen, & v. Sterkenburg, 2005). In the nineteenth century, callisthenics became very popular in Germany, mainly among the working class, which excelled under the leadership of the German gymnastics educator Friedrich Ludwig Jahn (1778–1852). While the nobility represented a small percentage of the entire population, the people were more interested in sports such as fencing or horse riding. In the First World War, physical activity was mainly used for propaganda purposes in order to impress the public and also to increase the motivation of the soldiers. This happened not only in Germany but also in Great Britain and Finland, as Redmond (1986) claimed. Thus, some of the sports involved throwing hand grenades or participating in steeplechase while being armed. These games were known as *Deutsche Kampfspiele* (German Fighting Games) and were highly rated. Other sports that were popular at this time in Germany were shooting or weightlifting. The labour sport movement in the Weimar Republic also helped to make sport more famous amongst the working class (Suomi, 2006). Subsequently, in the 1920s, sport became more and more political in its major institutions. This led to the Olympic Games 1936 in Berlin, which were held under the Nazi regime (Bohlen, 1979).

After the Second World War, the interest in sports has been steadily growing and, currently, according to the German Olympic Sports Federation (DOSB), sport is extremely popular in Germany. In 2007, over 27 million people were organised in over 90,000 sport clubs in 96 sport organisations, thereby representing one-third of the German population (Breuer & Feiler, 2013a), with a constant number of sport clubs, organisations and participants in 2017. The DOSB is the main non-governmental organisation and handles the sport structure under the Olympic sport movement. The most popular sports in Germany are football, gymnastics, tennis, shooting, and athletics (DOSB, 2017). The sport clubs and their respective federations are organised under the umbrella of the DOSB (see Appendix Figure 5). Funding for sport mainly comes from the state's income of lottery and taxes. In 2010, the lottery contributed €430 million towards the sport, which constitutes 33% of the entire budget of the German Olympic Sport Federation and up to 80% of the budgets of regional sport federations (*Bundesinstitut für Sportwissenschaft*, 2014). The figure below presents the actual organisation figure of the governmental and non-governmental sport organisations in Germany. It is pretty obvious there is not much interference among these organisations, thereby retaining very few intermediate structures except financing.

The aforementioned 90,000 sport clubs in Germany in comparison to 9,000 in Finland and Sweden differ in terms of clubs per capita, assuming that there is a similar number of inhabitants (approximately 134,000 in Finland and 75,000 in Sweden). However, the financial situation of German sport clubs has become worse since the economic crisis in 2008 (Pawlowski & Breuer, 2014). Approximately 35% of all sport clubs in NRW are currently facing between low and severe financial problems (Breuer & Feiler, 2013b). This fact affects this research as many sport clubs use the sport facilities of the GSU. In case of monetary problems and a lack of local coffers of the communes, this could lead to changes within the German sport culture. Cologne itself is a very large city in Germany, with over one million inhabitants. It is the centre of multiple first league clubs in various sports such as football, ice and field hockey, and basketball. Moreover, Cologne is the host of Germany's only institution for higher education where one can study nothing but sport—the GSU. Breuer (2014) argued that the most important stakeholders for the GSU are institutions such as the Ministry of Finance, the Ministry for School and Sport, the *Deutsche Forschungsgemeinschaft* (DFG) (German Research Communnity), and the German Olympic Sport Confederation, among others. He claimed that the GSU networks on country and federal levels rather than at the communal level, thereby potentially limiting the number of suitable stakeholders.

5.3.2 Students at the GSU

At the GSU, the students' sport culture has always been important. All students are obliged to visit the sport facilities regularly to obtain their degrees. Therefore, the numbers of hours the students spend visiting the sport facilities are more difficult to compare to the numbers from the JYU and UU. The numbers differ between the various study programmes; in the bachelor programmes at the GSU it is obligatory to fulfil at least 32 ECTS in sport courses, equalling 25 hours per week of practical sport courses (obligatory courses such as swimming, athletics, gymnastics, and multiple optional ones) divided over the entire programme (GSU 2016). According to Jörissen and Widmann (2015), all sport halls are completely reserved during the entire semester; it is only during holidays that students may be able to book halls for training purposes. The sport facilities and options of different disciplines are dependent on the interests of the students. After the triumphs of Steffi Graf and Boris Becker in the 1980s in tennis, 10 new tennis courts were built on the campus. Back in the 1990s, there were up to five tennis courses offered, but since 2010 only one per term has been offered (Jörissen & Widmann, 2015). Courses for students to provide them additional recreation according to their needs and wishes are possible. Currently, 500 hours per week of courses are offered in over 120 different disciplines (GSU, 2016). Thus, the students' sport culture definitely affects the manner in which the sport facilities are managed, as the wishes of the students are taken into account if it comes to the booking of halls for various sport disciplines.

5.3.3 Business structures in Cologne, NRW, and Germany

Germany and Cologne are in a different situation than Jyväskylä and Umeå. Germany is still the most powerful economy in Europe. Cologne, due to its size of over one million inhabitants, has many more possibilities for economic collaborations. The number of inhabitants per km² in Cologne is also much higher than that in both Jyväskylä and Umeå, peaking at 2,553 people, which is approximately six times as much as that in the other cities within this study. While domestic migration hampers Jyväskylä and Umeå to a certain degree, Cologne is much less affected as it is a metropolitan area, as per the definition of the OECD. According to a recent study (OECD, 2013), a metropolitan area has functional regions, one or more large urban cores, the human capital and the companies are highly concentrated, and there is a so-called 'integrated hinterland' with an urban core as the economic engine. The entire regional space is organised according to that core: "commuting patterns and economic also occur within and across the *peri*-urban areas, independent of the urban core" (OECD, 2013, p. 24–25). There are good chances for spillover effects produced by the strong core, thereby providing economic and other benefits for the entire region, but also creating the possibility of tensions within smaller areas surrounding the region. In a well-working model of such a region, the rural and semi-urban areas are fitting in their work, fulfill many functions, and also can help larger companies (potential business partners) in retail and manufacturing issues (OECD, 2013).

In comparison to this, both Jyväskylä and Umeå fit into the OECD description of a network of small- and medium-sized cities, while also being regional and country centres. Such regions can comprise several cities, often linked in non-hierarchically relationships, functional complementarities, attractiveness due to often “specialised industrial clusters and cultural dynamism” (OECD, 2013, p. 25), and their urban and rural areas are less separated and borders are often blurred. Such areas can gain economic advantages through various network relationships of complementarities, while increased synergies are necessary to provide steady growth. Currently, the unemployment rate of Cologne is 10.9% (Bundesagentur für Arbeit, 2017). While this can be considered a high number, the problems of unemployment of Jyväskylä (19% in 2017) are worse. However, Umeå had an unemployment rate of 5.5% in 2016 (Ekonomifakta, 2017). Therefore, it can be assumed that the location and status as a metropolitan region does not necessarily guarantee a growing labour market as well as business possibilities, which in return can affect the opportunities of the universities to strive more towards this direction. The economic situation in Cologne and, thus, the business opportunities for potential stakeholders of the GSU have changed within the last decade as research by the *Industrie- und Handelskammer Köln* (Cologne Chamber of Industry and Commerce) has shown (see Appendix Tables 3 and 4). With the beginning of the recession in Europe, the GDP in Cologne district took a huge hit but has improved steadily ever since.

5.4 Sport facility management

5.4.1 History of sport facility resource management

In the current society, the way sport facilities were and are used has changed throughout the years. Sport facilities can have an exclusiveness of limited access. This is comparable to the situation of the universities, whose facilities cannot be used by the entire public. Facilities owned by sport clubs (very rarely in Finland as well as in Sweden) are often only allowed to be used by members (Farmer, Mulrooney & Ammor jr., 1996). Arthur (2004) found that the Olympic Games 1984 in Los Angeles brought about a change, particularly in terms of the size of facilities and hosting events. The events, facilities, and their surroundings became a huge opportunity for customers and stakeholders to create new relationships, and as a conclusion, “management principles embodied in planning, human resource management, financial management, marketing, risk management and evaluation have all been applied to the event industry that has involved” (Arthur, 2004, p. 323). The scale of Olympic arenas and the sport facilities of universities is different, but these principles mentioned by Arthur and also by Chadwick (2004) are the same. There are three major aspects regarding property management, which build the foundation of a successful business in this area. These aspects are use, services, and ownership. The latter one additionally deals with capital investments and usage costs. It covers areas such as property disposals and acquisitions, property development and retention of the value, quality keeping or space usage by effectively meeting users' need cost. Overall, the three aspects are in a circular flow with each other, namely the usage of the facilities, the ownership, and the services the facilities have to offer. All of these are also in a steady interaction with the needed space available. This circular flow has to be acknowledged in the subsequent part of this dissertation regarding business possibilities within facility management.

5.4.2 The differences in Northern Europe

In Finland, there are currently three university property management companies, which are jointly owned by the universities (2/3) and the state (1/3). The first is a limited company which is called the University Property of Finland, but can be seen technically as a subsidiary company to the university (e.g. JYU); the second one is Aalto University Properties Ltd, and the third is called Helsinki University Properties Ltd. In the other Nordic countries, separate property management organisations are owned by the state, which operate in the university and higher education property fields. In the case of Denmark, it is an administrative body within a state agency—the Danish University and Property Management Agency (UBST). In Norway, it is an administrative body within a government company called Statsbygg, while in Sweden it is a limited company called Akademiska Hus (AH). In Denmark and Norway, these organisations are within the state budget, while in Sweden and Finland they are not. In Finland, SYK was established in 2010 following the original model of Senaatti. The situation of the ownership in Sweden is older, as it has not seen a rollover like that in Finland with the establishment of SYK (University properties). In Sweden, AH was founded in 1980 and has been a monopolist since then (KTI, 2010; see Appendix Figures 6 and 7)

5.4.3 The situation in Finland and for JYU

In Finland, there have been several changes in the country and towards the needs and desire of the public. According to Bisi (2001), the facilities are built in fast-growing population centres. The facilities itself must meet the new needs of the public. This could be useful as sport halls and for other possible occasions. If possible or required, the halls should be integrated into other facilities as a complex. In addition, the aesthetic theme and environmental issues must be acknowledged while building them (Suomi & Vuolle, 2001). Prior to these two studies, a need to improve the facilities and their management was already known. Thus, it is important to compare the possibility of progress and improvement concerning facility management, the usage rate of the sport facilities including a cost-benefit equation, and finally, the differences between the universities and the investments of the state, the town, or private persons as facility owners. In 2017, there were approximately 33,000 sport facilities in Finland. According to Suomi et al. (2012), 70% of the ownership of sport facilities is under the rule of public municipalities, 25% owned by private institutions or persons, and 5% are organised and owned by public societies and corporations. Some of these corporations are also under public rule of the municipalities (Vehmas & Ilmanen, 2013). Based on the study of Suomi et al. (2012), the annual amount of money spent on sport facilities in Finland is approximately €1.4 billion.

The organisation taking care of the premises of JYU on the campus is University Properties of Finland Ltd (part of SYK). It owns 105 properties and these include 378 buildings. The total rentable is 1.1 million square metres. The amount of money spent for facility rents and leases as well as maintenance costs has varied over the last six years. This is partially due to the new property system under SYK, and partially because several main premises, including the faculty building of the Faculty of Sport and Health Sciences, were under renovation and re-construction from 2010–2012. The inflation-adjusted rent and maintenance costs of the sport facilities from 2010-2015 are depicted in the appendixes (Tables 5 and 6). Including additional costs for the sport facilities outside of the sport faculty, the general share of costs equals approximately 3% of the total costs. Based on the current number of students, the amount spent per capita for the facilities in 2015 was €6.8 per year. This is still a higher sum spent at JYU than for sports in public, taking Jyväskylä as an example, as it dropped significantly over the last decade. In 2009, in Jyväskylä, the per capita amount was only €1.5, which is only 10% of the sum which was available in 2001 (Suomi, 2016). However, due to the organisational system of SYK that implies paying dividends to the universities based on their share (8.6% for JYU) of the annual profits (26 million in 2010), this money flows to the general budget of the university and is again used for the needs of the students. Due to the many renovations, not only in the sport facilities but the campus in general, a deeper cost reduction in the future might be likely due to energy saving costs.

The number of facilities available and used for sport activities for the students at JYU covers 2656.7 m^2 and is divided among four buildings: The Faculty of Sport and Health Sciences, U1, U2, and Ryhtilä (SYK, 2013; JYU, 2016). Additional spaces are rented at the Hippos Sports Hall, ice hall, swimming hall, and the skiing slopes at Laajavuori. The Hippos area will also change drastically in the future. The so-called 'Hippos Master Plan' aims to be implemented until 2020, which includes a complete reconstruction of the venue with new sport halls and business opportunities. Mäkinen (2016) criticized the structure and size of the Hippos Master Plan due to its enormous scale, which is rather too ambitious and should be changed into different phases, with the next phase coming into force after the previous one has been implemented successfully. Within the municipality of Jyväskylä, the density of sport facilities has been on a very high level since many decades. According to Suomi (1998), the Jyväskylä municipality possessed a world record of 170 inhabitants for each sport facility, which has changed to 166 as of 2016 (Suomi, 2016).

5.4.4 The situation in Sweden and for UU

There are similarities between the type of university property management system employed in Finland and Sweden. Both countries use limited companies as the major institutions in order to handle the businesses of the university properties; all the companies (3 in Finland, 1 in Sweden) are completely outside of the state budget in terms of their financial situation. However, all of them are still at least partially owned by the respective state. There are also differences in property management. In Sweden, the most distinctive difference to the model used in Finland is the one regarding the model of ownership. Like in Denmark, the Swedish system is arranged to guarantee a more separated situation of the university property management organisations.

In Sweden, AH has a property ownership of approximately 3.2 million m^2 of university and research premises. It is a total rent model (market rents applied) and the rental cash flow in 2009 was approximately €464 million (inflation adjusted to €427.74 million in 2016). The universities cover approximately 82% of the earnings. Both AH and the three Finnish university property companies have some challenges to master in the future. According to KTI (2010), AH will face more competition for large projects from the markets. However, the situation with the sport facilities used by the university is a different one as most of these special facilities and sport areas (except for three football pitches owned by AH) are under the management of IKSU, for which the university has to pay (see Appendix Tables 7 and 8). A centralisation of the organisation in Stockholm, Gothenburg or Malmö would increase the distance to the university and might cause additional problems. Further, it must be mentioned that all three Finnish companies are currently facing their own challenges. There is cooperation, particularly among the financial divisions, but that does not affect basic day-to-day operations. The challenges are various and they are dependent on the local—that is, regional area—of the specific university and the company.

While the amount of money spent on renovation and maintenance has risen between 2010 and 2014, the local costs for facility management for the universities have dropped since 2008 (University of Umeå Rector's Office, 2014; University of Umeå, 2010, 2011, 2012, 2013, 2014, 2015; IKSU, 2010, 2011, 2012, 2013, 2014, 2015). The rise in 2015 indicates a higher percentage rise compared to the last few years. From 1999–2008, the facility management costs accounted for approximately 14% of the local budget, and approximately 12.3% in 2013. At the UU, the numbers dropped from 10.6% in 1999 to 9.7% in 2013. Based on per capita figures, the money spent on sport facilities in 2016 with 34,200 students equates to only €14.15 per capita/year. In comparison to JYU and GSU, such a number appears very low, but in terms of sport facilities, UU benefits greatly from the partnership with IKSU and their existence as a club, allowing the university to spend only 1.2% of their total expenditures for rent of sport facilities. However, more money for rented space has been spent on sport in comparison to other fields such as social sciences. This could actually help the universities in terms of future business plans if they decide to use the sport facilities as an expanded tool. The data of the UU rector's office (2014) showed that from 1994–2013, the share of AH as the owner of the facilities has risen from 60% to 67%. In Umea, the share of AH of the annual rent was 78.4% of all the buildings in 1994; in the following years, there was frequent fluctuation by a few percentage points. In 2013, the mark of AH as the major landlord for UU stood at 73.4%. The total amount of rented area covered 270.689 m² in 2014 and the complete rent paid in 2014 was 365.014.515 SEK, which equals inflation-adjusted €41.264 million in 2016 (University of Umeå Rector's Office, 2014); compared to the amount of rent paid to IKSU for the use of sport facilities, this required between 1.5–2% of the entire spending.

5.4.5 The situation in Germany and for GSU

In Germany, the sport facilities of universities are financed by using public money of the state. However, private funding and hybrid models have become more important and could become popular financing models in the future (Hallmann & Petry, 2013; Breuer, 2014). The GSU is located within the state of North Rhine-Westphalia (NRW) and the specific property rights are handled by the regional government, which itself is located in Düsseldorf. This government has handed the property rights of the facility management towards the *Bau-und Liegenschaftsbetrieb* NRW (BLB; Building and Real Estate Management of NRW). It was founded in January 2001 and has since been the keeper of not only all the NRW's universities premises but also other official governmental buildings within NRW, thereby functioning as a monopolist. There are eight regional centres and one general headquarters located in Düsseldorf. This is subordinated to the Ministry of Finance of the state and has an annual budget of €1 billion. The duties contain not only the planning of new facilities, but also the renovation of older premises. The money spent for rent and leasing costs, maintenance and renovation issues rises annually (see Appendixes 9 and 10). According to Jörissen and Widmann (2015), the money given by the government annually is not sufficient to cover the rising energy and maintenance costs as well as the rent and leasing costs while maintaining the same level of quality. The numbers related to rents, leasing, maintenance, and renovation costs are based on the official numbers given by the government (Ministry of Finance NRW, 2010, 2011, 2012, 2013, 2014, 2015, 2016).

However, if the money given by the government is not sufficient because of factors such as a long winter (annual heating costs on average are estimated with €1,200,000) or rising fees for oil and gas heating during the year, the money has to be saved in the overall budget by cutting down other segments—for example, in maintaining the quality of the used sport facilities or by outsourcing parts of the maintenance services. The latter though can heavily affect the quality maintenance within the resource management of the GSU, as the assigned companies are not very integrated within the organisation. Moreover, with the university seen as a customer, the quality of their service can drop by decent amounts over the years (Jörissen & Widmann, 2015). The usage rates of the sport facilities vary throughout the year, as not only the current 5,997 students (GSU, 2016) can access the buildings but also sport clubs which have rented evening hours for training purposes. While the total volume of the university area is 187.000 m², the actual usage area covers 61.640 m² with an addition of the outside sport fields of 40,300 m². Given the amount of money spent for the facilities per year (rent, leases, renovation, and maintenance costs), this equates to an amount of €3.703, for the year 2016, to give each student decent sport facilities. As evident thus far, the numbers among these three countries vary a lot. Due to the different rental systems (SYK, AH, IKSU, & BLB), and the various sizes of the university sport facilities, a comparison needs to be executed very carefully and critically. This applies even more after the leading political coalition has lost the elections in NRW in spring 2017. The effects this will have in the long term for the universities and the GSU remains to be seen, particularly in terms of monies from the government.

According to Pawlowski and Breuer (2014), the annual sport facility usage fee in Germany in 2010 was approximately €800 million. This number does not include other money spent on facilities, such as maintenance, rebuilding costs, planning and constructing new premises, and purchasing equipment. The total number though shows a much higher amount, as one example by Hallmann and Petry (2013) showed: The overall sum of money spent on sport facilities, including maintenance costs, grew to €22.6 billion in 2008. These higher costs make it more difficult to sustain the level of high quality and sustainability of these facilities. While these numbers reveal huge interest in sport in Germany, overall because of the high spending, it also leads to questioning the means of effective economics and resource management regarding sport facilities, an issue which could also affect the universities in the future. Almost 30 years ago, in 1988, Papier already argued that in Germany, the building of sport facilities is often hindered by many laws, such as building safety, energy saving, and landlord rights (Papier, 1988). According to Jörissen and Widmann (2015), this has not changed yet. With regard to the sport-related finances on community levels, based on the closest ring of the "Vilnius definition" (Pawlowski & Breuer, 2014, p. 3), it must be added that the spending of the communes in terms of taxes in 2010 is higher (€3.3 billion; €3.051 billion inflation-adjusted to 2016) than the actual earnings from it (€738 million; €682.37 million). On the federal and state levels, like in NRW, the income is closer to equal with incomes of €626 million (€578.81 million) and expenses of €754 million (€697.17 million), while at the national level, the earnings are higher than the expenses with €624 million (€576.96 million) vs. €240 million (€221.91 million) (Pawlowski & Breuer, 2014). The closest ring of the Vilnius definition itself covers aspects such as sport facilities, sport clubs, sport associations, and professional sport teams.

5.4.6 Business and marketing within sport facility management

Rafossa and Troelsen (2010) analysed the financing, distribution, and use of sports facilities in Scandinavian countries. While they argued that there are better possibilities to run facilities in rural areas than in bigger cities like Copenhagen (due to their size, Helsinki and Stockholm may be considered as being at the same level) as those were too crowded, there is still the problem of how to finance such sport facilities in rural areas. Both Jyväskylä and Umeå are facing difficulties in attracting big players at national and regional levels due to the various factors which favour the capital regions, for example, salary diversification. Hartikainen, Anttila, Oinas, and Nätti (2010) argued that this can also be a sign of varied quality of work. Another critic is the lack of multidisciplinary sport facilities which are necessary to attract any interest of investors or can be used as a business vehicle: "Although from an international perspective the Nordic countries' coverage of sports facilities is among the largest in the world, the concentration of installations in certain areas is out of step with the individualised, pluralistic, mobile culture of today. Facilities are either outdated, mono-functionalistic or adjusted to spectator sports. Despite the high degree of coverage, 'sports facilities for all' in Nordic countries remains a contrasted, controversial term" (Rafossa & Troelsen, 2010, p. 654). However, Suomi et al. (2012b), Kalaja (2016), Karimäki (2016), and Karjalainen (2016) argued that this is going to change in Jyväskylä; for example, the aforementioned planning process of the Hippos Hall Sport Area will deal with these issues, namely improving the previous lack of the mono-functionalistic sport facility culture.

The idea of sport facilities also has a cultural or philosophical component. The concept of sport facilities has developed over many decades, including cultural and national habits, patterns, and mores. Such concepts may include the connection to several scientific disciplines such as economics, history, and sociology as well as migration tendencies, which are also important due to their eventual impacts on the labour market and the potential need of sport facilities. This involves business options, which refer to the potential economic importance of a sport facility as well as the social implications. The latter one is connected to the concept of *topophilia*, which is the idea of belonging to a certain place. This includes the perennial impact of sport events, sport halls, or stadiums in defined areas, adding cultural value for local residents and supporting the feeling of having identities (Bale & Dejonghe, 2008). Such habits among the local and regional society may also lead to certain extended visits to those venues, thereby leading to some nostalgia sport tourism (Gordon, 2013).

In their studies of analysing the German situation of public finance with regard to elite sports, Emrich, Pierzioch, and Flatau (2011) argued that if the sport facilities of universities are also used for elite sport athletes—for example, for their training to get to the Olympics—the expenses on the improvement of the equipment and infrastructure in those buildings borne by the government can also have positive side effects for the students, that is, the universities in terms of better usage and research possibilities. In the UU, a new programme has been launched which has been enforced to lure more Swedish elite athletes to join the campus:

> Interviewee 4: "But I guess we will see more and more of those kinds of cooperation [with sport federations]. We have already one with the ski federation, the floorball federation, the orienteering as I mentioned and a few more. So, with those contracts that are drawn up between the university, the municipality and the sport federation.

> There will be more money put into special facilities to provide those coming athletes with possibilities to train and compete at elite levels."
>
> (Third interview with Interviewee 4 on 24 August 2011)

This indicates an important aspect of how striving for enhanced business activities and possibilities may be intensified by using sport facilities. While this idea has also been discussed at JYU and GSU, it must be criticised that those elite athletes are only a small part of the overall student count. Thus, the expectable effects appear to be rather low. Overall, there is still a lack of research regarding sport facilities in Northern Europe, as Nielsen (2005) argued. He stated that at that time, only very few books and articles attempted to analyse the overall situation regarding the development of sport facilities in Northern Europe. The sport facilities have a decisive role in the development of sport and leisure and also reveal the relationship between sport and the local society: "Clothes make people, it is said, and likewise participation in sport, it can be asserted, has shown itself to be greatly determined both by the peculiarities of landscape and the presence of good facilities" (Nielsen, 2005, p. 147). An example is hiking in nature or the development of pedestrians in the cities. Nielsen also can be considered a frontrunner for Rafossa and Troelsen's research, as he mentioned five years earlier that there has been a trend to build "timeless, universal and general boundaries for sport and to locate it in a mono-functional, permanent space, characterized by separation between sportsman and spectator" (Nielsen, 2005, p. 137). An actual example in Jyväskylä is the Hippos Master Plan mentioned earlier.

Moeck (2011) argued that the current state of the sport facilities in Germany, namely in Cologne, is also not very good. He found that restructuring of the ownership of various sport facilities is definitely necessary in Cologne in order to save money and attain better efficiency. Interestingly, this also appears to be necessary at the GSU, according to Jörissen and Widmann (2015), and their view on the BLB's working inefficiency. With regard to financial issues, real estate managers have been facing enormous problems. In case of an inflation rate of 2%, which is the aimed standard of the European Central Bank, real estate managers would receive the same amount of money from the respective Ministry of Education; however, the energy costs are 20% higher than estimated. This applies to Germany and Finland as well as Sweden, as the inflation rates per CPI are very similar (Jörissen & Widmann, 2015; Viklund, 2014; Fahlén, 2014; Jokio, 2014).

Furthermore, if the state's funding is much too trivialised, any special needs are not taken into account anymore, thereby causing problems for sport facility managers. Schellhaaß (2011) backed up this assumption. He claimed that application-oriented third-party funds of potential donors, for example, the DFG (German Research Community), have become the main targets of financing the university pools, leading to a rising diversification in the university's business options. That includes JV's, scientific expertise, and further education amongst others. The *Bundesinstitut für Sportwissenschaft* (Federal Institute for

Sport Sciences; 2000) of Germany argued that the need for sport facilities is equal to the need of sport within a specific area. The need for sport is defined in terms of type and size of the discipline and the need for sport facilities is based on the query of the public to have a proper sport complex for their favourite sport. To adopt and implement this theory, the current and future number of inhabitants participating in sports within the area will be taken into consideration. Based on this, the usual horizon for such projects may vary from 15–20 years with the aim of attaining a balance sheet of stock and demand. This fits in with the statement of Karimäki (2016), who argued that the Hippos Master Plan needs to be re-evaluated after 2035 in order to analyse any potential success. Farmer, Mulrooney, and Ammon (1996) analysed the demand for new facilities in a local community. In their opinion, the reasons are primarily forced "by increases in the number, type, average size, and attendance at sports and entertainment events" (Farmer, Mulrooney, & Ammon, 1996, p. 11).

According to Farmer, Mulrooney, and Ammon (1996), facilities that serve sport usually have four specialties based on the unique surroundings sport can provide—namely, intangibility, perishability, unpredictability, and emotional attachment and identification. However, as the sport facilities within this study are only marketable in case of teaching and research, the indexing process is dependent on the university's individual circumstances. Based on Kurowski and Sussmann (2011), national economies can vary in terms of their degree of economic planning. These can be more centralised in contrast to a widely decentralised one in terms of decision-making. One example of a mainly centralised policy would be France; whilst Germany, Finland, and Sweden are much more decentralised, as the authorities of the respective regions often decide the criteria for investment resources (Kurowski & Sussmann, 2011).

6 METHODOLOGY AND RESEARCH MATERIAL

6.1 General prerequisites for this research

According to Pürer (1998), there are three important scientific criteria for research. Firstly, the criterion of objectivity, which implies the variables and categories within this particular scientific work are named precisely and unambiguously. The second one is the criterion of taxonomy, which is used to precisely describe the procedure of data acquisition. Thirdly, the criteria of quantitative description of the content which explains the superficial content separated into precise and defined categories (Pürer 1998). This is backed up by Mayer (2006), who stated that "a good description is the foundation for every research" (Mayer 2006, 35). König and Bentler (1997) claimed that scientific results are always dependent on the subjective differences of each observer. This implies that it is only possible to make an empirical study if the prior research questions have been defined. This idea was subsequently verified by Patry and Dick (2002), who added that the method must be adapted to the research questions.

6.2 The body and design of the selected research method

The description of the methodological approach of this study begins 1) with the comparison between qualitative and quantitative methods, followed by 2) the interview as the major research source and includes data collection. Thereafter, the criteria of 3) reliability, 4) validity, and 5) representativeness are handled as well. Then, 6) the employed method of analysis (discourse analysis) and 7) the interpretation method are discussed. Thereafter, the 8) employed method is critically evaluated and, finally, 9) the selected interviewees of each university are portrayed anonymously.

6.2.1 Qualitative and quantitative methods

Initially, the decision between selecting a quantitative or qualitative approach as the most suitable research method had to be made. As Bos and Koller (2002) stated, methodical decisions should not be based on the foundation of personal interests, but rather on their dependency on the research question and research area. Qualitative research methods were rather uncommon in the past; the extensive use of quantitative approaches was the rule. This has changed since the 1970s, as there has been a steady rise in qualitative approaches (Engler, 1997). Lamnek (2002) added that the rising importance of qualitative interviews in previous decades as a research technique also occurred due to the possibilities of having electronic transcribing tools and transcription material permanently available. The increasing number of text interpretation techniques has helped to make the qualitative analysis of interviews more suitable to various scientific research studies. Schwarz (2000) argued that quantitative methods cannot replace qualitative ones and vice versa. Qualitative analysis does not deliver numbers, but rather the conclusions and models for further discussion, which are necessary to create a solid fundament for potential upcoming analyses to be eventually conducted quantitatively. However, quantitative data remains necessary and is employed by comparing the number of facility management with renovation and maintenance costs. In qualitative analysis, often the approach is multidisciplinary as the results extracted through interviews can have a wide frame. In this particular case of research, it implies an inclusion of various fields such as management, economy, sports, politics, migration, or labour markets. This is backed up by Kelle (1997), who stated that within qualitative studies, this is possible through concentration on several special cases to describe a multitude of complex backgrounds in a certain research field.

6.2.2 The interview and the collection of data

> "Interviewing is rather like a marriage: everybody knows what it is, an awful lot of people do it, and yet behind each closed door there is a world of secrets"(Oakley 1981, p. 41 in: Patton, 2002, p. 340).

Sampled semi-structured interviews were selected to collect the findings. By doing so the interviewees had a broader scope to reflect the questions and to connect these with own experiences, and at the same time it enabled the author to follow the contextual framework of each interview session. Experience for utilising this method was at hand. The interviews were done with various persons out of the selected data sources four times in a biannual rhythm. This strategy provided the possibility of checking the progress and improvement during the entire research process in reference to the research questions and to analyse minor changes and mistakes within long-term projects. Moreover, it allowed separating the findings into micro- and macro-cycles. The allocation of the '*interview rounds*' is partly predicated on Culkin and Kirsch (1986), but adjusted, modified, and optimised to this particular research. It begins with 1) 'determining the needs', followed by 2) 'inventorying the resources', 3) 'Matching the needs with the inventory', and finally, 4) 'planning for changes'. According to King (1994), the interview is a very flexible method, and can be employed in many cases, while providing great depth of data.

The interviews in Jyväskylä, Umeå, and Cologne were conducted using English language. By using other languages, a comparison of the results may have been skewed due to different meanings in the respective languages. The only exception had to be made for the facility managers of the GSU using German language as they were not fluent in the English language and no suitable interview replacements at the GSU were at hand. In this case, the interviews were transcribed in German and subsequently translated into English. Both the German and English version were analysed in order to compare and avoid different results. After the interview the recorded sessions (via a voice recorder) were transcribed. To avoid any mistakes during the analysis process of the transcription material, each interview was checked twice after the original transcribing action to correct any spelling mistakes. According to Heinzel (1997), transcribing is more like a notation: breaks, duration, emphasis, hesitation, other utterances such as laughing or stammering etc. All transcripts were sent to the interviewees after completion to give them an opportunity to check or correct results. Based on the general principles of researchers' ethic (Atteslander, 2006; Keats, 2000), the interviewee must have the option to ensure that nothing will be published without permission. This procedure guarantees the interviewee that nothing is added to the interview which was not said—that is, any disliked phrases can be either changed or deleted. The transcripts were performed in Times New Roman typeface, font size 12, and lining space 1.5. The interviews lasted between 33 and 131 minutes. The difference in length was mainly due to difference in the knowledge of the interviewees in terms of the selected questions within each round, as well as due to the amount of time the interviewee could spare (see Appendix Table 11).

König (2002) argued that for explorative studies, it is helpful to allow the interviewee to freely describe his or her perception of the situation. This can show the constructs underlying the public viewpoint, creating an option to receive more useful information. Collection of additional information before and after the interview and subsequently confronting the interviewees with the results can also be helpful as the variations of the methodical setting (triangulation) allow to diminish the chance of misinterpretation of the results (Schründer-Lenzen, 1997), which supports the outcome of the research. In addition, the analysis of the same interview topic at different times, at different locations, and with different interviewees aids the approach of data triangulation, thereby leading to added data security and reliability of the research. The employed system of triangulation in this dissertation (literature review, qualitative, and quantitative data) provides a possibility to support the main research method with additional techniques (Atteslander, 2006; Gratton & Jones, 2004). Within constructed and semi-constructed interviews, the interviewee has the possibility to make *free associations*, offering the chance to say anything he or she thinks is worthy to tell about a certain topic (Friebertshäuser, 1997; Schmidt, 1997). Based on Gratton and Jones (2004), this approach is an interpretative one as well as qualitative and inductive, possesses a flexible design that can be adapted during the process, and, finally, explains causality and develops a theory. A neutral interview style is necessary to avoid desired answers. However, questions may be formulated differently during various points of the interview and this is a useful tool for testing any reversing by the interviewee (Lamnek, 2002). Meuser and Nagel (1997) claimed that to receive substantial information, there is a need for an open and flexible means to structure the interview and avoid asking only strict questions. As Silverman (2001) stated, since interviewing reflects qualitative research, authenticity rather than reliability is often a problem. The goal is to gain an authentic understanding of practical knowledge; moreover, open-ended questions appear to be the most actual ones for this research approach. In addition, no double entendre within the selected method (interview or questionnaire) is allowed to avoid any possibility of an alternative indexing.

6.2.3 Reliability of this research

The reliability of the employed sources, particularly the interviews, is the first major criterion for making this a useful scientific study. This implies providing a tenacity to the conducted interviews and presenting the employed research methods in their entirety for allowing a replication of the results. Gratton and Jones (2004) argued that the entire process of the study has to be explained as precisely as possible; this includes not only the methodological part, but also the theoretical framework as well as the background studies. To make this dissertation applicable and to ensure reliability, the research process in each of the target countries, cities, and universities is described step by step. An attempt was made to elucidate all decisions made as precisely as possible in order to guarantee maximum transparency. The reliability of an interview "can be enhanced through a standardised interview schedule, maintaining a consistent interviewing environment, and recording with the interviewees' permission, which should then be transcribed within as short a time as possible by the researcher" (Gratton & Jones, 2004, p. 150).

Pre-tests of the interviews were performed and while the possibility of a re-test of the entire process is an absolute necessity to guarantee the reliability of a scientific study, the reliability here is related to the scientific process of inter-subjectivity. This means that a second or third coder should receive similar results as the inventor of the experiment (Merten & Teipen, 1991). Nevertheless, based on Lenk and Maring (1997), the author's own perspective and eventual personal prior experiences of the researcher must be acknowledged. Each interpretation is, at least to a certain extent, naturally based on the subjectivity of the interviewer and the approach of how to analyse and judge received information. Because of this, it is not always possible to repeat a study with a different researcher and obtain exactly the same results. Interpretative freedom is the rule, not the exception (Lenk & Maring, 1997). This claim is backed up by Uhle (2002) who highlighted the huge importance of interpretation of texts and the potential and often unavoidable bias of the author. However, if this is visible in the outcome, it may also add to the credibility of the study as it can show a high degree of involvement as well as a non-negligible interest with regard to the results of the research (Uhle, 2002). During the entire research process, it was attempted that a high degree of conscientiousness as well as sincerity be maintained.

6.2.4 Validity of this research

According to the researcher's ethics and guidelines, the second important criterion that is necessary to follow is the validity (availability) of a study (Atteslander, 2006). This implies that the researcher as well as the reader of a study can reflect and learn by understanding the employed research design. To provide the requisite validity, it was attempted that the goals, interests, and possible benefits of the research are expressed and explained clearly in preceding chapters. In addition, the research process was followed and evaluated from the beginning until the end in order to deal with any unforeseeable changes within the research plan, which could have affected the methodology. Schwarz (2000) argued that the validity is not based on a permanent change and adaptation of the research methods, but on an accurate analysis. Sources can be considered valid if these are free of systematic mistakes, which implies that they contain what they claim to.

Interview transcripts can serve as a source to guarantee the validity of a study. König (2002) used a study originally conducted by Fromm (1987) to describe the term 'communicative validation'. The transcript of the interview is used to support the subjective theories of the researcher but may be corrected or changed by the interviewee prior to the analysis. This facet was also discussed by Keats (2000), who claimed that validation is secured by "extensive use of actual textual material and comparing other interpretations of the same material. In the case of interviews, detailed transcriptions of the texts are used" (Keats, 2000, p. 80). According to Gratton and Jones (2004), the validity of the interview transcripts was guaranteed by defining the exact transcription technique. An interview can be tested in a blind-test with other people to ensure that all the questions are clear. For this study, such blind-tests were conducted with members of the author's family prior to each interview round. During the research, the interview points were also sent beforehand to the interviewees in order to avoid any misunderstandings. In addition, another pre-test of the interviews through practise took place during the first meeting with interviewee no.1 one week before the interview on 24 May 2010, and the answers were deemed suitable and good enough to work with.

6.2.5 Representativeness of this research

The final criterion to guarantee a solid research is representativeness. This means that the selected sources are not the exception, but rather the rule. The representativeness for a research study is given if the results can be considered a part of the population mean. In qualitative research, this is not necessarily the case; however, in terms of explorative studies, this issue can occasionally remain unfulfilled (Atteslander, 2006). For this particular research, the representativeness is given for those universities that possess sport facilities and have a general facility or real estate manager. All the three selected universities (the JYU, UU, & GSU) do fulfil this criterion. Due to the structure of the available faculties of the selected universities, each had available knowledge and experts on sport economics, management, and entrepreneurship. Thus, interviewees were successfully found and selected accordingly. Information regarding the student's sports culture was derived from the available sport offices at each university. Thus, the selected sources can be considered representative and this study could be implemented in other countries and for universities if they possess sport facilities.

6.3 The use of discourse analysis

Firstly, the origins of discourse analysis and the idea of the narrative approach is briefly described. Thereafter, a step-by-step analysis of the transcribed interviews will be provided, followed by the interpretation method. To clearly illustrate the ideas of the employed approach, examples from the interviews of this study are given.

6.3.1 The origins of discourse analysis

It was decided that all the interview transcripts of this research be analysed by using discourse analysis majorly based on Viehöver (2001), thereby making it an inductive research that employs a narrative approach. Additional ideas such as the cultural ways of speaking and writing were adopted from Paltridge (2012). Inductive research can be considered as being more conjunctive with interpretative and qualitative studies. Schwarz (2000) provides proof for making this an inductive theory construction, as the researcher is inspired by the data material and uses this to create own adaptive theories. It was the goal to gain data and to use it to develop an explanation for this explorative research. The term discourse analysis has become more known for usage within scientific texts due the works of Focault and Lacan in the twentieth century (Knoblauch, 2001). According to Paltridge (2012), early attempts to provide a definition were made by Harris (1952): "Connected discourse occurs within a particular situation—whether of a person speaking, or a conversation or of someone sitting down occasionally over the period of months to write a particular kind of book in a particular literary or scientific tradition" (Paltridge, 2012, p. 2). Lamnek (2002) explained that triangulation can also mean the combination of different qualitative interviewing and discourse techniques. A discourse can also be considered as societal production, as discourses such as interview transcripts mediate social realities (Jäger, 2001; Paltridge, 2012). According to Bublitz (2001), social reality mirrors the self-actualisation of a constructive process in the sight of discourse theory. The specific analyst must ensure that the critic does not leave the particular field of discourse, as, otherwise, he or she questions his/her own concept of argumentation. Paltridge (2012) employed the perception of interpretation—in his understanding, the discourse analysis is about how to interpret what someone says, leading to the notion of the context.

> Nr.1: […] "But otherwise, it is quite good. I mean, we are in a good **building,** we have modern **premises […double expression, higher value?]**. The only thing…. which basically is a downside as you said, we do not have any teaching facilities here. **[…tone a bit unhappy?].**"
>
> Interview with interviewee No.1 on 8 September 2011

He underpinned that by using a quote of Johnstone (2002) to explain that the aim of discourse analysis is to ascertain "what happens to people draw the knowledge they have about language... to do things in the world" (Paltridge, 2012, p. 3). Further, it is important to acknowledge the cultural ways of speaking. This is even more significant in cross-cultural studies. The differences among the Finnish, Swedish, and German mentality and their cultural habits of expressing an opinion are definitely not completely diverse, but rather they are comparable. These cultural patterns above are normal as "[…] different pragmatic norms reflect different cultural values which are, in turn, reflected in what people say and what they intend by what they say in different cultural settings" (Paltridge, 2012, pp. 48–49). Keller et al. (2001) stated that discourse is important for understanding the process within communication and argumentation as well as the mediated conception through speech, that is, the construction of reality. The types of discourse are different: it can be sounds (e.g. intonation of the voice, talking speed of the interviewees), moves and gestures during the interview, laughs or other emotional signs during the interview. It was the aim of this study to examine the relations between the text (discourse) and context of the interview transcripts. According to Keats (2000), "discourse analysis is directed towards the interpretation of themes rather than the frequency of words, phrases or themes as in content analysis" (Keats, 2000, p. 80). Therefore, this analysis deals with the meaning both in the socio-cultural and political contexts. As Gratton and Jones (2004) put it, "If you are more interested in the thoughts or feelings of people, then these are difficult to quantify, and qualitative data will be more appropriate" (Gratton & Jones, 2004, p. 25).

6.3.2 The narrative approach of this research

Viehöver's (2001) approach was selected in this research as it was believed to provide the best opportunity for participants to articulate their own viewpoints in narrative form. In attempting to see the world from the interviewees' viewpoints, it is necessary to try to understand how individuals construct social reality in relation to their own interests (Sparkes, 2002). Therefore, the interviewee's personal opinion can influence the transcribed statements. The "exhaustion of grand narrative" (Kivisto, 1998, p. 139) characterised by the move from macro-sociology to micro-sociology (Macionis & Plummer, 1997) purports that it is not appropriate to make sweeping generalisations with regard to the modern world. Transferring the approach of 'interpretivism' and narrations into this particular research topic implies that within some interviews, the line of discourse could suddenly change into a sub-topic and make it more of a narrative discourse, as Viehöver (2001) described such a process based on Smith (1981, p. 228): "It is […] important to recognise that narrative discourse is not necessarily—or even usually—marked off or segregated from other discourse. Almost any verbal utterance will be laced with more or less minimal narratives, ranging from fragmentary reports and abortive anecdotes to those more distinctly framed and conventionally marked utterings that we are inclined to call 'tales' or 'stories'" (Viehöver 2001, pp. 178–179).

> DK: Well, Aalto is something different.
>
> No.1: Yes, they are the Aalto. […stronger emphasis higher, distinction]
>
> DK: Yes.
>
> Interview with interviewee No.1 on 8 September 2011

Interviews have become increasingly important in general communicative processes in the field of sociology (Knoblauch, 2001). Viehöver (2001) added that usually it is not only a single part of the text that can be considered as a source of narratives, but rather discourses as a collective, intertextual and appropriate means of communicational expressions. Switching between various information-collection techniques—for example, with narrative and expert-interview methods (Lamnek 2002) and description of triangulation methods—using extended narrative passages can help a lot in collecting information as the interviewee is allowed to add valuable side-notes. By doing so, areas which are usually barely accessible can be reached (Kraimer, 1997; Viehöver, 2001).

6.3.3 Extracting information

Based on Viehöver's (2001) approach, 1) the first step of how all used transcripts were treated was conducting a raw analysis that comprised three different parts: paraphrase (short roundup), intention (what the interviewee wants to say), and structural aspects, meaning the characterisation of the interview (e.g. relation of the interviewer to the interviewee, external influences, atmosphere, date of the interview).

Interview date	Name of the interviewee	Relation to the interviewee	Atmosphere	Content of the interview	Special remarks
8.6.2010	Anonymised for the transcript	Known since autumn 2008; first meeting during the Nordlys-exchange programme 2008–2009.	Calm and relaxed. A bit of tress noticeable because it was the first interview of the entire PhD session.	Importance of students related to sport facilities, overhead costs, and business awareness for universities	Interviewee interested in the role of UU within Umeå, academic freedom, and sponsorship possibilities.

FIGURE 12 Roundup of the first interview with interviewee No. 4 on 8 June 2010

Thereafter, a more in-depth analysis of the interviews was conducted. Each interview (2) was divided into several parts, depending on their own topics (discourse lines).

> DK: Yes.
>
> [Fifth discourse lines ends]
>
> [Sixth discourse line opens]
>
> […] So, right now do you think there is, not only here, but in the university in general, if you go towards marketing and business, there is a lack of awareness? You have to go to **specialisation**?
>
> No. 1: Yes, I think so. Maybe people are aware, but that collides with the **traditional academic freedom**.
>
> First interview with interviewee No. 1 on 8 June 2010

The 'lines of discourse' given by Viehöver (2001), as discussed above, are a very important part of the analysis structure. Jäger (2001) stated the importance of the different structures within an interview. Various topics are often handled during the entire discourse; these parts were handled as 'lines of discourse'. The level of discourse can vary, for example, between politics, media, everyday life etc., but also among different aspects of sport. Each designed sector (discourse line) has to be analysed independently. The next (3) step of this method of analysis was the complete breakdown of the entire discourse, meaning the entire interview. It is also possible to compare the various discourse lines and analyse whether, for example, the interviewee was more involved or less involved—that is, interested in one section and less in another. This breakdown was based on the definition of the research questions as given in the statement of the problems. It was directly combined with the fourth step (4) which referred to the four designed specific topics of each interview session based on the modified setting of Culkin and Kirsch (1986). Therefore, in the next step (5), each interview session had its own set of markers, which implies the distribution of keywords based on the research questions as well as the interview theme, which were then counted in their frequency. The variations among the keywords were not only dependent on the title of the interview, but also based on the results of the earlier sessions as those also influenced the questions in subsequent meetings. Keywords such as 'money' could also be inflicted by multiple categories, for example, in 'major constraints' and 'entrepreneurship'. In addition, the selected keywords were compared to those with similar meanings and to potential fittings of the context within the discourse line (see Appendix Figure 8), thereby creating a breakdown of entire interview segments.

Based on these markings, the coding process was developed—for example, which categories are mentioned within the transcription over and over again? To which theme are these mostly referring and what appears to be the major problem of the various discourse lines? After (6) such a single-case analysis of one interview, it was necessary to compare the results with the ones of the same interview wave. Which problem-solving ideas (7) were similar and which were different? Which consequences (8) were named and of those which were intended and which were not? In the last step (9), meaningful quotes were collected and sorted by their intention, namely explicit positive, neutral, explicit negative, and thick description, which in its meaning is a human behavior that explains not just the behavior, but its context as well, such that the behavior becomes meaningful to an outsider. The data collection itself was diachronic as it re-occurred among the interview participants.

6.3.4 Interpretation method

Based on studies by Keller (2001) a discourse analysis does not necessarily define a specific method but rather a research perspective on a carefully selected topic, offering a certain amount of knowledge. Arguably, discourse analysis might only be used if the topic is worthy enough and contains various levels. Here, it is important to acknowledge that every discourse analysis has its own significant value within the context of the society, thereby implying that the 'worthiness' of the study has to be discussed under the evaluation of the topic and the circumstances (Keller, Hirseland, Schneider, & Viehöver, 2001). Discourse analysis means to analyse various sequences of speech, sentences (written and/or spoken), or simple conversations by attempting to use an in-depth analysis. Schmidt (1997) argued that speech pauses, intonations, interruptions, feelings, or other similar issues for interpretation do matter (with regard to emotional aspects), and for example, word order and slips of the tongue can be important.

> DK: And we were talking shortly about, concerning the current economic situation, do you see any effects, also theoretically, in the way of possibilities for the universities to get more **collaborations** or expanding stuff? Do you think this recession took a deep hit in the possibilities of the universities to **market themselves**?

No.7: No, I do not see that this **recession** plays a major role here. **[...secure tone, not thinking much?]** More it is the case that things play a bigger role like you mentioned before. Rising **energy costs** for example and also rising construction costs in general.

Second interview with interviewee No. 7 on 20 December 2010

The extracted discourse lines were then sorted by their themes and meta-themes as well as by their grouping segments.

TABLE 1 Interpreting the themes and meta-themes of each discourse line

	A	B	C	D	E	F
1			Grouping segment			
2	Interviewee's position		Explicit positive	Neutral	Explicit negative	Thick description
3						
4	Themes	Topic				
5		Context				
6		Subjectivity				
7		Objectivity				
8						
9	Meta-Themes	Type of speech				
10		Tone				
11		Pausing				
12						

Within every segment, an attempt was made to see the context beyond the actual quote. For example, if the interviewee repeated himself/herself on various occasions, any linkage to the former question was checked. Other examples included faster speech, laughing, and different intonations (a potential hint for stress), which might allow analysis of the context. Pauses within statements were counted, including their length due to a potential relationship and interest of the interviewee to the actual discourse line. It was decided that any pause under three seconds in between an ongoing speech was going to be evaluated as a short interruption by looking for the right words, while a pause lasting over three seconds would be considered not only a serious interest but also as a potential conflict or nervousness with the topic. In case of a longer pause, this specific part of the interview—that is, the paragraph and sentences around it—were handled with greater caution.

Various repetitions of phrases and synonyms were marked on paper and compared to other discourse lines. These keynotes also covered short descriptions of any newsworthy issues which happened during the interview, for example, visible feelings of the interviewee. Taking additional handwritten side notes during an interview is also a helpful technique to pick up any newsworthy information being given out throughout the interview (Schmidt, 1997). Every transcript was analysed several times and the results were compared afterwards to guarantee that they did not change. Keller et al. (2001) argued that in order to extract the information from the selected sources, the researcher must aim for the instantaneous analysis of communication processes. One use of discourse analysis is the extraction of implicit expert knowledge of communication sequences. The base unit of a discourse are parts of a conversation; the information is derived from the process of communication and analysed as an own-layer of reality (Keller et al., 2001).

During the analysis one line of the discourse handled, for example, the possibility of business orientation within sport facilities, while another line dealt with the issues of strategic planning. Due to the possibility that the interviewee was speaking freely about his or her opinions and experiences, it is rather difficult to make pre-fixed categories for the lines of discourse as well as for the results (Schmidt, 1997). Schmidt went on to cite a study by Glaser (1978) regarding the 'open coding' of interviews: "The goal of the analyst is to generate an emergent set of categories and their properties, which fit and are relevant for integrating into a theory" (Schmidt, 1997, p. 553). As the various lines of discourse in the interviews had different sizes which were based on the topics and the available input of the interviewees, the pre-categorisation of the expected discourse lines had to be flexible during the analysis. During the categorisation of the interviews, the research material reduces step-by-step by eliminating parts of the transcripts which did not deal with valuable information regarding the research process, but also by placing and defining the extracted material within each of the discourse lines. After completing this, the interview was reconstructed and written down, and included any expressions collected throughout the entire duration, any valuable thoughts which were not explicitly stated, and also any emotional feelings that could have affected the flow of the interview. However, these impressions cannot be used as interpretative arguments as they are subjective. Thus, these were used for checking the plausibility of the interpretation (Friebertshäuser 1997; Schmidt 1997).

6.4 Methodological critics

Literature research is obligatory to build up a solid scientific fundament. According to Mayer (2006), Nieminen (2006), Atteslander (2006), Gratton and Jones (2004), Kirchhoff, Kuhnt, Lipp, and Schlawin (2003), Noelle-Neumann, Schulz, and Wilke (2003), and Keats (2000), the selected analysis method has its benefits as well as its drawbacks. Firstly, interviews include the benefits of a private atmosphere, a possibility of personal communication, the reflexion of own actions, and the possibility of repeating questions in case of misunderstandings. Secondly, a deep insight within the subject is possible, thereby leading to more and tenacious questions, which in return allow receiving meaningful and relevant answers. Finally, information can be elicited which the interviewees might not have unveiled in a non-personal communication. Heinzel (1997) stated that a rising number of interviews can cause a higher degree of trust, thereby leading to more information that the interviewee is willing to reveal. While that can be a positive affect for the researcher, Lamnek (2005) warned that there is the danger of asymmetries within the qualitative interview: the interviewer emphasises, develops, and eventually reconstructs the questions based on the answers of the interviewee. Therefore, a very close relation with the interviewee needs to be avoided and it was tried by the author to acknowledge such a trait during the interview sessions. Interviews may also require much time and money, including travel costs. This issue was not possible to be eliminated during the interview process as phone interviews with the interviewees may create different results than interviews conducted through personal meetings. Therefore, it was a difficult task to select the most relevant interviewee who has to fit with the criteria of representativeness. Another aspect is the needed 'ability' of the interviewee to provide useful information. Merkens (1997) argued that good interviewees have the needed knowledge, can reflect on their opinions, and are able to articulate well, have the time to be interviewed, and, finally, they have the will to participate in the research. After the selection process, it became evident that the selected interviewees suit these criteria very well. In addition, the selected interviewee can be a big constraint for the researcher's data and the proximate analysis. Other problems include the fear of data misuse of the interviewees or the lack of previous research, making it more difficult to collect reliable literature and to draw the correct conclusions. Thus, it was attempted to gain a level of trust from each other prior to the first interview sessions to avoid any harm done with the data.

6.5 The interviewees

The interviewees were selected to represent various institutions, which provides the possibility of collecting diverse opinions. The selection for this particular research was the need of experts to reconstruct very complex research cases (Meuser & Nagel, 1997). It is necessary to seek experts wisely and from the most suitable division available (Mayer, 2006). Friebertshäuser (1997) claimed that an interest for data, facts, and internal courses of action within a certain institution often require experts as interview partners. Thus, based on their individual backgrounds, the questions were able to cover theoretical and practical aspects. The interviewees were also confronted with the results, that is, the opinion and ideas of the other interviewees, not only from the same university but also from other countries, in order to obtain greater insight regarding possible adoptions regarding the sport facility as well as resource management and business strategies. In this chapter, all interviewees are anonymised to avoid public detection as much as possible. The numbers given in the following subchapters defer to their coding within the analysis and discussion of the interviews.

6.5.1 Jyväskylä

With regard to business theories, stakeholder management, and entrepreneurship as well as the opinion regarding sport facility management, interviews were conducted with No. 1), an expert from the School of Business and Economics from JYU, whose research areas for the most part deals with strategy and strategic management of business organisations. In addition, the interviewee is involved in network management and strategy-making, particularly the role of trust as the building block for cooperative arrangements. The interviewee is also personally interested in sports and, thus, was able to deliver valuable information. With regard to the sport facilities managers from the real estate services of JYU, namely No. 2) and No. 3). The task of the real estate manager is to offer the departments reasonable and effectively used facilities. After the first two interview sessions, No. 2 had to be replaced with the successor due to a change of work place. The change did not produce problems as No. 3 was already working as No. 2's deputy.

6.5.2 Umeå

At UU, the interviews were conducted with No. 4), a senior lecturer from the department of sport education. No. 4 is also a teacher in the sport management programme, specialising in organisational theory, leadership, and event management. Interests are placed in Swedish sports, particularly in organisational changes and structures and its impact on individual experiences, and correspond well with the research topic. At UU, sport facility management was covered by two, respectively one person (see below). UU uses the sport halls of IKSU. Moreover, the municipality of Umeå frequently uses these sport facilities. To draw a connection with the university, IKSU, and the municipal level, it was decided to select a key account manager from IKSU, No. 5 and a board member, No. 6, both dealing with management, facilities, sales, and leadership issues. No. 5 is familiar with the structure of IKSU and its connection to the university. Due to working issues, No. 6, working in the department of law, could only join the first interview.

6.5.3 Cologne

At the GSU, the selected interviewee, No. 7 excels in aspects of economic theories, marketing, stakeholder management as well as sport management. No. 7's research areas include sport facility planning and economics of sport clubs and sponsoring. Moreover, No.7 is a founding member of the European Sports Economics Association. The practical issues regarding facility management were discussed with the head of the department in terms of facility, policy, and construction issues, No. 8, and the senior assistant No. 9. Their working fields covered many areas that are important for this research such as facility management, rebuilding, furnishing, hiring issues, property management, and telecommunication.

6.5.4 Other interviews and sources

Apart from the regular interviews, it was also decided to have additional meetings with other experts from the JYU, UU, and GSU. The information received from there is listed in the references.

7 THE RESEARCH DATA: INTERVIEW QUOTATIONS AND ANALYSIS

In this chapter, selected quotations from the interview transcripts based on the methodological template provided in the previous chapter are analysed. The analysis of the research questions is derived from the most suitable quotations from the extracted information. The quotations can have an explicit positive, a neutral, and an explicit negative viewpoint, or (if available) present a detailed thick description of the subject based on the results of the discourse analysis described in the methodology. The interviewees are anonymised. The selection and number of quotations for each research question below can vary a lot, depending on the results of the interviews and if, for example, the interviewee changed their opinion over the course of the interview sessions, provided useful additions in subsequent interviews or changes within the university which made former statements invalid. The quotations are sorted by country and date, providing the possibility of showing changes and reversed statements. Based on the essence of the quotation, either the entire discourse line is shown or an excerpt presenting the most important part is presented. Each research question can be divided into several sections due to the depth of the given answers that is the available knowledge presented. The aspect of sport facilities will not only be shown through the questions specifically dealing with those, but also, if applicable, as a supporting or contrasting aspect to other aspects. Additionally, the presented models and figures were partly taken from cross-sectoral studies e.g. in business administration in addition to the ones presented in the theoretical framework such as KIO and KIBS as explained in chapter 4.5 to allow an analysis based on various segments and backgrounds. The main findings are depicted partly in the analysis, the discussion of the results and finally, in the summary of this dissertation.

7.1 The potential adaption of KIO and KIBS

- 1) "Can the adaptation of KIO and KIBS be a useful need for universities in order to be successful in businesses?"

The potential implementations of the theories of KIO and KIBS for this research case are depicted below. As mentioned in the theoretical framework, KIO deals with the most important product the universities have to offer, namely, the scientific knowledge that they are able to produce, while in the latter, the universities serve as a source for knowledge and simultaneously as a consultant for the knowledge they produce. This is strongly related to the described conjunctions towards stakeholder management and entrepreneurship. Through the use of the quotations, an attempt was made to show if the potential as well as the obstacles (critics) of the universities meshing with the essence of both theories and how it could be adapted into this specific case study. During the interviews the theories were not described, that is, the interviewees were not confronted with these theories with the distinctive names KIO and KIBS. There were mainly two reasons for this. Firstly, if the interviewee had never heard that name, the sole description of the theory and its conjunctions towards the university might have caused uncertainty, thereby leading to answers of diminished value. Secondly, if the interviewee knows the theory, there could have been a strong agreement or disagreement towards it beforehand, leading to a bias, which again would have lowered the value of the answers. Therefore, it was attempted to ask questions on the essence of the theories, combined with future outlooks regarding possibilities of implementations. In addition, an attempt was made to analyse potential business effects and implications for sport facilities through KIO and KIBS.

7.1.1 Adaptive approach of KIO and KIBS

Within this subchapter, it is displayed how these two business approaches could be included in the universities' strategies. The focus here is on the adaptive capabilities of the universities and how it can be possible connect business potentials with applicable ideas.

> DK: Well, that the… they want to be more independent, [people] of the university. That this might a fear and an obstacle to go more into marketing, business and stuff?
>
> No.1: Yes, that might be one issue. At least for some people. [mumbling]
>
> DK: Yes.
>
> No.1: You know, the idea of independent science of, you know, being free from all kinds of influences.

DK: Well, that is...

No.1: Which is... [searching for words]

DK: A nirvana.

No.1: Yes. Utopian thinking in many ways, because, you know, we are so connected with all kinds of groups that, you know... yes, it is a moral dream, the autonomous science.

First interview with interviewee No.1 on 2 June 2010

The first interview with interviewee No.1 already showed a distinctive problem of the entire intention of going towards KIO and KIBS and their adaptation for the universities, namely, the fact that if you offer business services (including knowledge intensive ones) you always have to go into partnerships with other people and organisations, eventually causing a feeling of being distracted in the own autonomy and free decision-making, potentially depicted below. This graphic shows the connection of the university to its various stakeholders and how business services based on the theoretical model of KIO and KIBS are sorted:

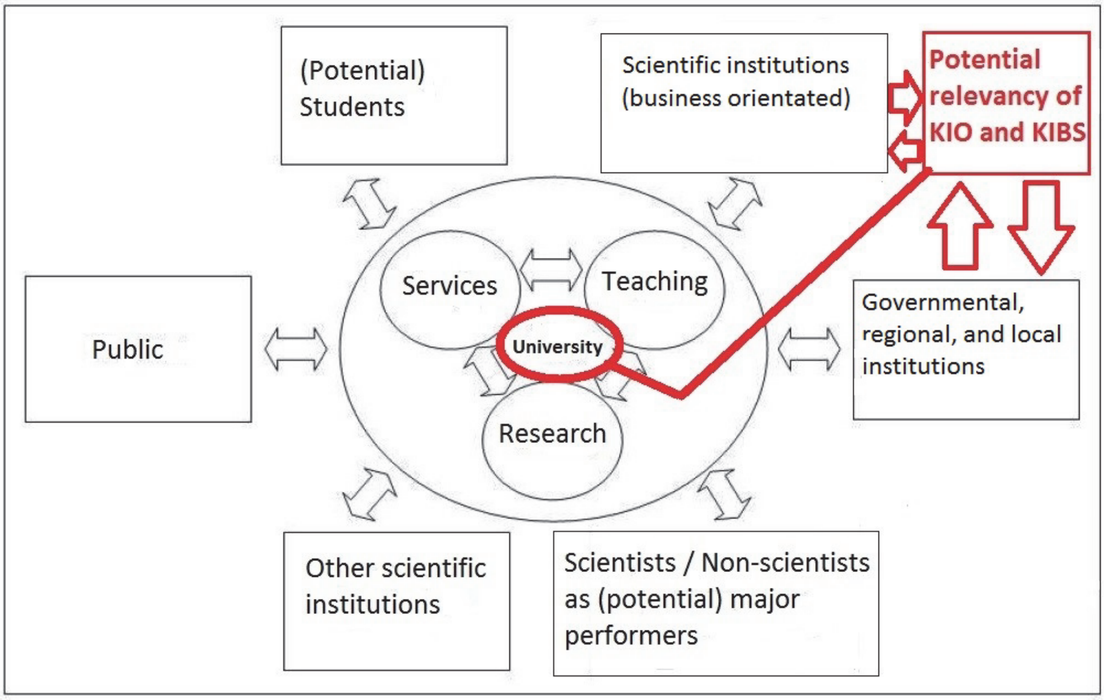


FIGURE 13 Potential business partners and the relevancy of KIO and KIBS . Adapted and modified from Jesse (2007)

DK: Hm. Concerning the current economic situation, we talked about it before... [waiting]

No.1: Yes.

DK: ...half a year ago, were there any, well, still effects concerning business, marketing management and stuff? Did you see anything happen?

No.1: I really do not know actually, but I think the situation has not altered that much. I think it is more or less the same than it was six months ago.

DK: I mean, you read everywhere that the real wise people expect the economy to go up again... [suggesting]

No.1: Right.

DK: ...that the deepest point of the recession is gone and over...

No.1: Yes. [secure tone]

DK: ...but the effects are mainly on the long run, like even if the economy is going up again, very often the deepest effects come even after it is going up again.

No.1: Yes, yes. There is always this lag. And, you know, in terms of the general economy it seems like we are picking up again, but, you know, thinking from the Central Finland perspective, Jyväskylä perspective, we do have a major problem with unemployment. Still.

DK: Yes. 13 or 14 percent or what you have here.

No.1: Yes. So, it is a big problem. But then again, you know, that might be actually a sort of opportunity in terms of sports. People have time. So, they can be attracted to, you know, do something related to sports.

DK: Yes.

No.1: With that time, you know. I do not know if they have the monetary resources for that, that is the other question. [pausing]

DK: Of course.

No.1: At least there is some possibility in that regard.

Second interview with interviewee No.1 on 9th December 2010

This interview half a year later, highlighted by this critical discourse line of interviewee No. 1, showed that the possibility of establishing KIO and KIBS is only possible if the economic circumstances are suitable, as high unemployment rates can lead to economic recessions (which Finland has been facing from 2015 onwards) and, thus, drastically reduce the number of potential buyers of the knowledge the universities can sell, as shown in Jyväskylä.

No.4: It is more interpersonal relationship. Talk to be people, be visible, show your results, and be out there in the newspapers, in the media. Show your research and prove, prove yourself to investors and partners that...

DK: You are worthy to get the money.

No.4: Yes.

DK: But how would you think can, well, the location of Umeå be overcome?

No.4: Yes, I think so...

DK: In the north, as you said, it is rather difficult.

No.4: Yes. I think, speaking of research, it has the benefit of being not so very local. The awareness in the sports sector has also gone up, so far that actors have been aware that if we want this kind of research you should go to Halmstad. If you want that kind of research you should go to Umeå.

First interview with interviewee No.4 on 8th June 2010

Within the first interview session, interviewee No.4 addressed the necessities to do KIBS as a KIO and to sell your knowledge, most notably visibility of the research and knowledge provided. Sport facilities must be adequately equipped and address the needs of the customers and various stakeholders. Without that any business orientation, this is highly unlikely. The need for the universities is displayed in the search for partners and clusters with other universities working in similar research areas, as Rocha (2004) showed (see Appendix Figure 9). Combining the need for cluster solutions in scientific markets with local and regional resources, it is the consequence that innovation must begin here: "Given knowledge spillovers, a key element of the innovative activity, tend to be spatially restricted (Audretsch & Feldman 1996) especially when they are based on informal or social ties (Audretsch & Stephan 1996), it turns out that globalisation triggers the clustering of economic activity via the concentration of innovation, making local regions a key source of advantage (Audretsch 2000)" (Rocha, 2004, p. 525).

Necessary adjustments to be made by the universities, in the case of this research implying the conversion of KIO and KIBS, requires that the "University management needs to control available financial and human resources and the power of the executive and the central administration of the university needs to be strengthened […] Universities should, however, be better integrated into society, in particular into industry and the business community, and should be governed by bodies that reflect a wide range of stakeholders." (Olsen & Maassen, 2007, p. 4). Such an approach could lead towards advanced knowledge, producing functional improvement, and benefitting the society.

DK: Yes.

No.1: I mean, we are basically in competition with the other faculties for the same amount of money that is basically dividable.

DK: Yes.

No.1: And that creates all kinds of tensions. [distinctive]

DK: Understandable.

No.1: Yes. That is normal. But that is very counterproductive in terms of these research groups.

Third interview with interviewee No.1 on 8th September 2011

Another critic of a successful implementation of KIO and KIBS refers to the possible diversity between faculties and departments competing for available monies. For the different sections in a university, cooperative planning strategies can be more valuable with different focuses, as a higher spending for infrastructure (e.g. for sport facilities) as without higher expenditures, without such a step of pre-establishing the fundament any steps towards KIO and KIBS do have a less likely potential to be adapted successfully.

DK: Okay. Then, changes concerning a need of a stronger orientation towards stakeholder's interests, whilst having no tradition in stakeholder management as you said before.

No.4: Hm.

DK: How do you think that could be planned and solved?

No.4: Yes, I think the direction we are going to right now is we are coming from a place where we chased stakeholders.

DK: Yes.

No.4: But I would not be surprised if we in five years' time being the ones chased by the stakeholders. Given that we have in a successful way transformed our education and our research in a way that makes us even more attractive.

DK: Hm.

No.4: I see signs of that already that federations, municipalities and other organisations looking up to us.

DK: Ah. [surprised]

No.4: Instead of us looking up to them. So, hopefully that trend will continue and in a few years' time we can sit here and just wait for proposals coming in to us.

Fourth interview with interviewee No.4 on 19 January 2012

Within this discourse line, the intention of business might have changed slightly. Instead of adopting an active role, interviewee No.4 hinted that the university could wait for the offers to come, which contradicted earlier statements. This aspects does not have to be seen as a negative turnaround, but rather critically. The potential role of the university as a business-orientated service enterprise, leading towards the notion suggested by KIO and KIBS, may cause a combination of conflicts created by various actors (e.g. senate) and immense external pressures such as money and funding (Salerno, 2007). "In particular, if there has been a trend towards the service enterprise embedded in a competitive markets-model (the University as a rule governed community of scholars, an instrument for national political agendas, and an internal representative democracy) what are the main conditions favouring such a development?" (Olsen & Maassen, 2007, p. 20)

> DK: Okay, we drop over one, because I do not know if we have time for that. So, leaning to a stronger orientation towards stakeholder interest versus no tradition in stakeholder management here. How to solve?
>
> No.7: Yes, it is a question of the people who are in charge of leading the university and I am not sure if they have to be educated a little bit or to be advised, but I guess the implementation of the advisories of the 'Hochschulrat' should make sure that we have stronger stakeholder orientation.
>
> DK: Hm. That would also lead to the next question. Stakeholder and entrepreneurial orientation, US, marketing theories, brand building, acuity, implementation of a culture of understanding how the customers/stakeholders think about the university versus possible in the current system?
>
> No.7: Partly, only partly. Because there are incentives and I mean, the strongest support would be to have not a non-profit university anymore, but a profit-orientated university.
>
> Third interview with interviewee No.7 on 19 July 2011)

This is one of the problems of KIBS if a direction towards this theory is aimed for—the dilemma between the need of monies and the original aim of a state-owned university, a servant for the needs of the public. In the long run, this may require changes in the law (like in Finland in 2010) for heading more towards a business-orientated direction, which might cause problems within the public society: "Nevertheless, when a Commissioner sees it as necessary to claim that 'I do not want to give the impression today that I see universities as a purely economic instrument' (Figel, 2006, p. 10), the statement suggests that many observers perceive a dominance of the 'knowledge economy' over the 'knowledge society'" (Olsen & Maassen, 2007, pp. 8–9).

7.1.2 Problems of scientific markets

The next part affects the eventual existence of scientific markets for the universities and how they could use the potential of those to be more business orientated, relying on people and organisations who are willing to buy their knowledge.

> DK: And do you think concerning marketing within the university, like market itself, not only in the sector of sports, but in general, what could you do to improve yourself, respectively in the past, have there been any improvements or setbacks?
>
> No.4: I guess that depends on what type of marketing you are talking about. Is it towards students or is it towards perspective partners in research?
>
> DK: Both, but majorly like to get networks, block buildings with any other organisations, well in order to improve the status of the university, to attract more investors.
>
> No.4: Yes.
>
> DK: Not only national, but if possible also international.
>
> No.4: Yes. I think the main venue we have used to market ourselves in that respect is by our own research. I think it is hard to think in other terms. We can advertise our research on billboards or... we could do that, but I think it is pointless.
>
> DK: Yes.
>
> First interview with interviewee No.4 on 8 June 2010

Networks and block building are essential aspects for universities and faculties for improving their business perspectives, as seen in this discourse line. Olsen and Maassen argued that "for example, when Walter Hallstein proposed a European University and a 'common market of intelligence' and argued that such a 'market' would accord with the concept and tradition of a university, 'the most magnificent form of cultural institution created by the European mind', he did so in a section of 'Industrial policy' (Hallstein, 1972, p. 200)" (Olsen & Maassen 2007, 19). Thus, such connections also need to be searched internationally, for example, through joint projects such as the IMPALA project which analysed neighbourhood sport facilities in a European perspective (Suomi & Kotthaus, 2017).

> DK: Okay. Then, the second last thing: autonomous science versus the dependency on money and funding. And you said it, I think in the first interview: it's a moral dream, the autonomous science.
>
> No.1: Yes. That is what it is. It is a... yes, you know, as long as the... I mean, in terms of that we do not want to, obviously, risk the autonomy of science in a way that the one that funds the project or the university gets to dictate what is researched.

DK: And that is the biggest fear. [asking tone]

No.1: Or gets to dictate what is said as a conclusion.

DK: Yes.

No.1: Obviously, that is something that we will not... [waiting]

DK: Tolerate.

No.1: ...tolerate or even risk.

DK: Yes.

No.1: But in terms of autonomous science we still do have all kinds of, you know, various stakeholders if you will.

DK: Hm.

No.1: And even if we are not sort of knowingly trying to please them there is still the question of if I cross these folks who have been giving me money for research, how likely is it they will give me some money in the future? And so, in that sense, there is always this dilemma.

(Third interview with interviewee No.1 on 8 September 2011

The results of the second interview at JYU are confirmed in the third round, including the fear of being too dependent on the donor, likely leading to a reluctance of establishing any business service, which in return would make the adoption of KIO and KIBS more problematic. An improvement could be made by including the universities in planning processes with an addition of own responsibilities and market orientation, such as the HIPPOS 2020 sport project and the *Sportpark Müngersdorf* close to the GSU, combining research, facilities, recreation, and community services.

DK: My interviewee No.7 in Cologne [Anonymised for the transcript)] told me that many Japanese universities are very much enterprise driven.

No.1: Yes.

DK: So to speak.

No.1: Yes, yes. [Waiting for more information?]

DK: And well, it might also be a problem here in the Nordic countries, Finland, Sweden that the people might be not used to this way of thinking.

No.1: Hm. [Unsure]

DK: And that is why they might be even hesitant to even think of implementing such a thing.

No.1: That might be the case. You know, getting back to the issue of silos, I mean, if the situation within our school is that, you can imagine what it is at the whole university level.

Third interview with interviewee No.1 from 8 September 2011

The idea of establishing business services needs serious thoughts by the executing university. "The main assumption, in simplified form, is that more complex and competitive economic and technological global environments require rapid adaptation to shifting opportunities and constraints. This, in turn, requires more determined university strategies and a strong, unitary and professional leadership and management capacity that matches those of modern enterprises" (Olsen & Maassen, 2007, p. 4).

DK: Yes, because you do not have any. I mean, you do not have many investors here.

No.5: No, you do not have. But the ones we have are strong. So, we are well renowned in reputation. So, if we wanted to make a project, I do not think we would have the problems. But Umeå in general has a problem with investors, maybe. [sounding negative]

DK: Yes, because like, I think as we discussed also in summer, 90 percent is in Stockholm and below, I mean of the population in Sweden, and half of the country has only 10 percent.

No.5 Hm.

DK: And do you think the... the, well, it might also have to be some... not only location, but also some structural issues maybe? Now with the finish of Botniabanan and the announcement of Umeå being this cultural capital in 2014...

No.5: Yes.

DK: ...that this might help to attract more people and get more marketing visibility?

No.5: Maybe. I do not think it will have that enormous effect.

Second interview with interviewee No.5 on 26 November 2010

Interviewee No.5's outlook toward business orientation is rather negative at this point of the research due to the missing diversity of investors around. Except for AH and the Baltic Group only public institutions like Umeå Kommun (Commune of Umeå) or the hospital could be used as a potential buyer, narrowing down the options for partnerships. This viewpoint will be supported by the next interview session with interviewee No.4, as any kind of business services often require partners:

DK: Yes. And concerning new projects and potential investors, that can also be the state; I mean, the investor does not have to private...

No.4: Hm.

DK: ...do you think there might be a huge problem of overhead costs?

No.4: Yes, that is terrible. We hear... we have a big research project financed by Riksidrottsverbundet, when we look at the 'Idrottsliftet', it is a big project.

DK: Yes, I know.

No.4: You know? [Surprised]

DK: Before it was called 'Handshake', I think.

No.4: Yes, right. And now we have the... the contract has been expanded, because they obviously see we do something good, I guess. And... but they talk a lot about the overhead costs and how it would be better for them to hire Ernest & Young...

DK: Yes.

No.4: ...or Price Waterhouse Group or some private audit firm. And of course that is terrible for us.

DK: Yes.

No.4: But we can just hope that these types of funders still see [the] university and scientific research as a better partner than the average audit firm out on the street.

Second interview with interviewee No.4 from 26 November 2010

The interviewee supported this claim in the next interview by adding the idea of striving for autonomy, insisting that the idea of reforms should be weighted carefully before being put into force. Thus, it is questionable how commercialisation should be weighted. In their study, Audretsch and Lehmann (2004) argued that "entrepreneurship is an endogenous response to the commercialising response that has not been adequately commercialised by the incumbent firms" (Audretsch & Lehmann, 2004, p. 434). Based on this viewpoint, entrepreneurship can be seen critically, as it would lead towards commercialisation while having the potential danger of leaving autonomy behind.

DK: Okay, okay. Then you have overhead costs in practical and scientific ways concerning research projects, how do you think it might be possible in the future to keep the interest of potential investors?

No.7: Well, I think you have to develop the ideas together with them and there are so many different opportunities. For example, yesterday I had a meeting with the 'Stiftung Deutsche Sporthilfe' how to collaborate closer and the different guys from the sports medicine field they can work together with pharmaceutical industry, with cancer research institutes.

No.7: Hm.

No.7: So, there are a lot of opportunities for this university I think.

DK: Okay. So, in general the networking has become closer?

No.7: Yes, and more important.

DK: Okay.

No.7: I mean, it was always important, because as a sports university you are not only focused on basic research.

DK: Of course not.

No.7: You always do a lot of applied research and then you do always the connection.

DK: Yes.

No.7: But I think it is even more important that these connections will grow.

Fourth interview with interviewee No.7 on 11 May 2012

In general, this discourse line shows that one of the major goals for a business orientated approach is seeking selling opportunities for research. Without such opportunities, such as the pharmaceutical industry, it will be difficult to find buyers of your knowledge. This, of course, can also lead to ethical conflicts as it cannot be the aim of the GSU, for example, to have very close connections in doing research with pharmacies and their industry. While such an approach is seen rather critically in Europe, in other parts of the world, this is rather the norm as Wright, Clarysse, Mustar, and Lockett (2007) claimed: "Renault (2006) showed in a study of 98 professors in 12 universities in the US that the entrepreneurial attitude of the academics had most explanatory power in predicting their commercialisation activities, including their involvement in licensing out new technology, spinning off companies and being involved in contract research." (Wright, Clarysse, Mustar, & Lockett, 2007, pp. 18–19).

No.4: We have had a debate where the common opinion has been that the university is not serving the public or the society as good as they should.

DK: Hm.

No.4: And a lot of reforms have been put in place to make the university, to force the universities to be closer to industry, closer to the student needs, closer to what research is demanded of the society.

DK: Hm.

No.4: But now I can sense a shift that the government is starting to realise that the universities must be free. [urgent] They must be free to decide for themselves what they want to give. What courses they want to give, what research they want to do and what cooperation they want to build. So, the government has launched a declaration of independency if you want to [say], to give the universities more mandate to decide strategies and directions on their own.

DK: So, it was much worse in the past?

No.4: Yes.

DK: Especially money-wise, I guess?

No.4: Yes.

Third interview with interviewee No.4 on 24 August 2011

This part is critical as it shows how such an orientation by the universities might be accepted by the general public, the party which is usually the major aim of the university in terms of their goals. The question is if such a transformation of the University into a University of interests is not itself a dissolvent of collective solidarity" (Neave & Maassen, 2007, p. 151).

7.1.3 Sport facility management and its constraints

This section of the first research question handles the connection of the sport facilities with business potential, eventual problems under the specific use of organisational theories, as well as KIO and KIBS.

No.7: And... okay, then within the possibilities you have despite of these constraints, the question arises how you can change such an organisation and so, we come to another big issue of managing theory, organisation and change and I would assume that nearly everything of the body of knowledge of organisational change would also count for this situation. So, on the one hand it is very important to show each employee why it is important to make some efforts in this area...

DK: Yes.

No.7: ...and as well as to think about how each employee is responsible at a certain point of this value chain, how he or she can benefit the change.

DK: Yes.

No.7: So, thinking of incentives.

DK: Of course.

No.7: And I doubt there have been any thoughts about that.

First interview with interviewee No.7 on 29 June 2010

In the first interview, one of the criticisms that came up was whether the university has thought enough up to the day about their own situation and the importance of knowledge and the issues associated with it. This is also evident in the following discourse line recorded in the second interview with the real estate experts of the GSU.

> DK: Okay. Then… in both Finland and Sweden that was the case, and also interviewee No.7 (anonymised for the transcript) agreed that if the GSU gets larger, including the floor space where here about 7.000m² are missing, do you think that in a competition with universities, if you can say so, is there regarding scientific offers coming from externals…. Do you think such an enlargement of the GSU is only possible in regards of research and development, but not that much for sport halls? Regarding clubs for instance? So, the university can only get bigger based on the scientific sector? Like with this new facility including all the laboratories for doping research you are just building over there? Even if the old one is in a bad condition energetically, would you still do such a thing only in regards of research?
>
> No.9: That is a good question. I think only someone... [pausing]. Well, it has to be research, because the alternative is teaching.
>
> DK: Yes.
>
> No.9: And what should from the facility management say about it?[unsure]

As a midsection analysis of this discourse line, universities in general are tending to get bigger within the European Research Area (ERA). Indicators are showing that reforms are mainly of an economic nature. However, the knowledge industry must reform. Research and higher education are identified as key instruments for economic performance and growth and for mastering global competition (Olsen & Maassen, 2007, p. 7). Critically, it must be seen whether this applies to different national circumstances and patterns of how to govern.

> DK: I know. As I said, the issue is interesting for me as I would like to know how it looks like from your perspective in terms of costs and benefits if something new is built. Do you even think, for you as 'building managers', if I may say so, it has a positive connotation?
>
> No.8: That is tough to say. We are servants for the scientific sector. And if this sector expands towards research we will serve the research. And if they expand towards teaching, we would of course serve teaching. That is certain, because we follow the aims of the GSU. However, and this is my personal opinion, it is not only here, but in Germany in general, that research is in the first position, because the required monies, as we already discussed, also from third party funds, are there and the teaching is, if it all, only financed by the public authorities in the country [NRW]. And the country is bankrupt, that is why research is rather more promoted than teaching. That is my personal opinion.

DK: Hm, hm.

No.8: Or?

DK: Personally, that is my own opinion, I can agree here. Once I spoke with interviewee No.7 about it and it was agreed as well. From my perspective it is interesting to see what you, the facility managers think about it. If you have to provide the facilities. It is not that much your area in which the decisions are made, but how you think about, how your personal opinion looks like. If you….

No.8: I think a good mix is always preferable. You have to see it that way. But without intensive research no university can exist. That is a fact.

Second interview with interviewees No. 8 and No. 9 on 20 December 2010

In general, the real estate experts of the GSU had a similar opinion as that of interviewee No.7, as visible above. They only criticized the amount and direction where the money is heading to, thereby causing an inequity between research and teaching. This may also cause constraints between the amount of money spent on human resources and infrastructure (such as sport facilities), as both depend on each other to achieve scientific excellence.

DK: Okay. Then: Possibility of establishing a more entrepreneurial approach within the university's business orientation. What would be necessary to make it happen? How strong is the desire?

No.1: Again [raising voice], I think there are systems and processes in place for doing that. I mean, we have the innovation folks at the administration. We have the people like [anonymised expert] who is basically running the programme for turning research into sort of businesses. And we have a few examples of that happening already. But I would say the general mindset of university folks is not very much entrepreneurial in a sense that, you know, once we are in a system we have a tendency of thinking about as we are here for good.

DK: Hm.

No.1: And in that sense we do have some lack of interest, if you will... [pausing]

DK: Hm.

No.1: ...into turning the expertise we have created through years of university work into business.

DK: Which might still be necessary or if I may even say so inevitable in the future in order to be still a competitor with the universities, the others in the country.

No.1: Yes, that is true. And, you know, if we take into account the shrinking age groups and stuff, you know, it is likely that the universities do not grow in the future. [Agreement]

Fourth interview with interviewee No.1 on 27 January 2012

The overall status at the JYU, UU, and GSU is not overly pessimistic, but several factors such as economic recession, unemployment rates, diversities within research groups, to name a few, might be the biggest obstacles of making an implementation of KIO and KIBS doable at JYU and also at GSU and UU. The key issue here is that "universities must overcome their fragmentation into faculties, departments, laboratories and administrative units and target their efforts collectively on institutional priorities for research, teaching, and services (Commission 2006b, p. 8-9)" (Olsen & Maassen, 2007, p. 7).

7.2 The model of effectuation

- *2) Could the model of effectuation be implemented into future strategic management models by using the university as a replacement for a company?*

This next research question deals with the next major theory of this dissertation, namely, the model of effectuation by Sarasvathy (2008). Here, it is depicted how entrepreneurial theories for universities might be applicable in the universities' strategic management planning as well as to an eventual connection with their sport facility management.

7.2.1 Entrepreneurship vs. bureaucratic management

This section provides an overview of how entrepreneurial ideas might be contradictory in the organisational structures of a university, thereby causing potential constraints of this approach to be implemented.

No.1: So, in that sense we do have certain stakeholders that are traditional, that we are accustomed to have around and also cause them to listen very carefully.

DK: Yes, yes.

No.1: But then again, the customer side, I mean, whoever is the customer of the university and that is a good question by the way. I mean, who is the customer?

DK: Yes.

No.1: So, that side is more of a haze. I mean, we do not understand it very well. I mean, we do have... you know, lately we have been talking about or there has been talks about the students being the customers which sort of an idea that I do not agree with. But then again, if we talk about the whole society as a customer then the things get very complicated. [Complexity growing, tensed voice]

DK: Hm.

No.1: I mean, the society is, as you know, very partial and consists of all kinds of fractions who might different opinions on what needs to be done and what not. So, you know, in that sense what might be needed in the first place is a theoretical and thought-out stakeholder analysis. In the firs

DK: Ok.

No.1: And that is something that I would think is needed.

DK: So, a stronger orientation towards stakeholder management?

No.1: Yes, yes. And to understand who the stakeholders are, who matter in terms of the university.

Third interview with interviewee No.1 on 8 September 2011

In order to be an entrepreneur, you have also to know who your stakeholders are, a problem which, according to interviewee No.1, has not yet been resolved by the university, that is, different groups within departments and faculties might have various opinions and, thus, a closer connection might be difficult to establish. Moreover, the direction of leadership might differ, thereby causing constraints in potential business directions. Such conflicts need to be taken into account as Olsen and Maassen (2007) indicated: "Furthermore, there may be conflicts over the use of different instruments of steering, the role of territorial state compared to other levels of governance and to different types of societal actors, and over what should be paid by general taxes, families, buyers of research and education, and external stakeholders" (Olsen & Maassen, 2007, p. 13) This relates the theory of Sarasvathy as "studying entrepreneurship as a form of expertise not only allows us to develop such techniques for entrepreneurship, but also introduces an important new perspective to the field that especially impacts current views about entrepreneurial performance" (Sarasvathy, 2003, p. 19). For the universities to become more business orientated, they must use the expertise they have, forcing a better collaboration within different faculties and departments of the university.

DK: Okay. We have already spoken about it briefly, financial funding from the state. We can cut it short as we have said already the most relevant things. In general, has it been cut in recent years, because the state has to safe money if I remember correctly? Now referring to the general budget.

No.8: No, not in that way. [It] gets adjusted, but not enough to equal out the inflation rates or to keep the standard based on the inflation. We have to lower the standards, although we… [thinking] because we do not get the inflation equalled.

DK: Frankly speaking, if you compare now, you would have… if you set the inflation to a specific rate, in five years you would have for instance 95 percent of the sum you received 5 years ago? Something in that level?

No.9: Basically too much is trivialised and special….

No.8: Special issues.

No.9: … special issues are treated as such anymore.

DK: Ah.

No.9: And right now… let's say the energy which takes roughly about 50 percent within our management plan, if there is a change of 10 percent which is not taken care of [by the ministry], this hurts us a lot.

DK: This is exasperating.

No.8: That is how it looks with financial subsidies, period.

First interview with interviewees No.8 and No.9 on 5 July 2010

This statement from the real estate managers of the GSU is important in this particular aspect of entrepreneurial theories, as it shows that the financial situation is not ideal and this may lead to problems with the facilities and, thus, might hinder a more business-minded orientation of the universities, blocking an adaption of Sarasvathy's (2008) theory. The connection here towards business orientation is shown by Wennekers and Thurik (1999), as it depicts the single steps to success through an entrepreneurial orientation, which under test for the universities through this research:

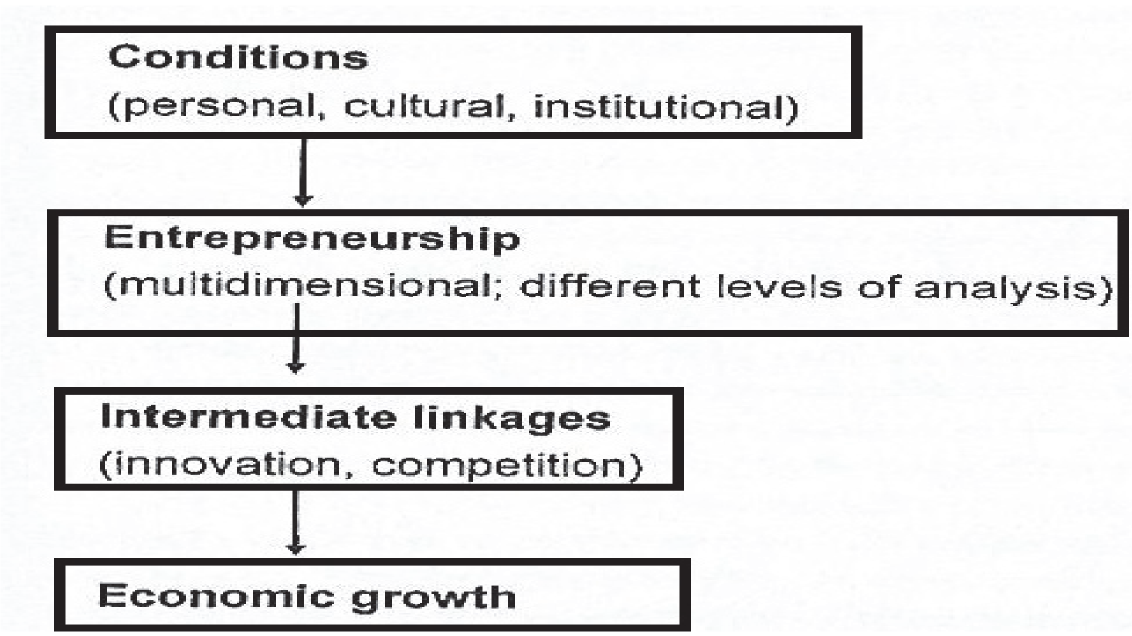


FIGURE 14 Simplified scheme of economic growth. Adapted from Wennekers & Thurik (1999)

While it is important that the preferences of customers and stakeholders be acknowledged through business orientation, the criticism has to focus on a potential loss of freedom and autonomy. Interviewee No.4 addressed this issue in the following discourse line below:

> DK: Yes. So, to conclude that, the meeting in general right now, you said that in terms of determining the needs it is definitely necessary to, well; rethink the ways of strategic management and to set your sights more on segments of specialisation instead of broadening your general approach concerning research and teaching?
>
> No.4: Yes, for sure.
>
> DK: And are there any future issues which might come to your mind right now?
>
> No.4: I am sure the only thing we can be sure of is constant change.
>
> DK: Hm.
>
> No.4: I have been here eleven years and every month there is something new we have to adjust to. New government reports, new students' needs, new research agendas or whatever. So, I think the only thing we can be sure of is that next week, next month, and next year we will have to be ready to change yet again.
>
> DK: Hm.
>
> No.4: We will always have to be ready to change.
>
> First Interview with interviewee No.4 on 8 June 2010

The essence of both the last discourse lines is at least partially based on the second mentioned principle of effectuation from Sarasvathy (2008), namely, the already described *patchwork quilt* principle. If the surroundings change, you need to be able to react and adapt quickly to the new environment. The logic of this principle is to create 'something new' with existing business strategies like cooperating with close stakeholders.

> DK: Hm. That was also my assumption before I even started my PhD in general that the amount of real money that the university gets is basically less.
>
> No.1: Yes, that is true. That is true. [happy to hear someone with the same opinion?]
>
> DK: And how to survive then? How then to generate any other revenue streams?
>
> No.1: Yes, right. That is true. And in general I would say that the question of resource allocation in the whole university system in Finland it will be a big issue. I mean, it is not like next year or in a couple of years from now, but in five to ten years we will be in a very different situation that is for sure.
>
> DK: I guess so.

No.1: Yes.[distinctive]

DK: That is my estimation that there might be a, although not many will like it, but there will probably a bigger infliction of the private sector coming.

No.1: Yes, and that is something that the university, I mean the management of the university, is pushing for. And, you know, getting more money from the private sector in is a major target. I mean, it is a strategic target for the university.

Fourth interview with interviewee No.1 on 27 January 2012

Entrepreneurial thinking within the theory of effectuation also includes striving for business partners, not only being shortened to the public sector or state councils, but also being able to find the right niche for your new market (see figure 12). Audretsch and Keilbach (2004) used a study of Acs et al. (1994) to highlight the importance of knowledge businesses as it was found that the "persuasive evidence that spillover from university research contributes more to the innovative activity of small firms than to the innovative activity of large corporations" (Audretsch & Keilbach, 2004, p. 129). Such a fundament might be essential for universities in smaller towns such as Jyväskylä or Umeå, which also do possess a smaller private sector and less potential business partners for their sport facilities. Ratten and Ferreira (2017) argued that "a future direction for managers to take is to study how some forms of sport innovation may be more accessible in some organizations and easier to commercialize. This is due to some organizations being more adept at formulating and solving problems based on their ability to process knowledge (Vanhaverbeke and Cloodt, 2014)" (Ratten & Ferreria, 2017, p. 7). Therefore, a potential factor in future orientation is to focus on managerial factors which can shape sport innovation in the scientific sport sector and provide suitable facilities.

7.2.2 The patchwork quilt principle among stakeholders

This principle is used by Sarasvathy (2008) to explain an action to create something new by already existing means, for example, the renewal of already existing stakeholders of a university with a private one:.

DK: Yes.

No.4: And that is very good, I think. Of course, we would like all investors to come to us...

DK: Of course.

No.4: ...but the second best is really that they go to Halmstad or Gävle or Malmö, where they have the best competence for...

DK: ...one specific field.

No.4: Yes. And I would rather... [waiting, word search?] I would rather have them go to my competitor and be satisfied than they take their money to me and be dissatisfied.

DK: And take only the second choice.

No.4: Yes, exactly.

DK: So, do you think that Umeå, in order for the university to go towards business, like... well, not only taking the sport halls as the main vehicle, because that is only local...[waiting for an early answer]

No.4: Hm.

DK: ...but in general, also take sports in general like sport research and stuff.

No.4: Hm.

DK: Do you think that the solution for Umeå, if the university can go towards business, the solution would be then to take several segments and make specialisation, because otherwise it is not possible?

No.4: Yes, of course. We need to focus on less topics.

DK: Yes.

No.4: I would prefer, as the head of this research that we focus on only one thing.

First interview with interviewee No.4 on 8 June 2010

A potential trend towards a specialisation of the universities, such as in combination with the idea of finding new market opportunities, which is one essence of this theory, is to focus and act under the consideration of what your customers and stakeholders want and prefer. Prior to this research Török (2009), warned European universities that leading positions are almost exclusively owned by American universities. "This speaks for an increased effort to improve both the teaching and the research performance of European universities" (Török, 2009, p. 238). Therefore, the JYU, UU, and GSU need to analyse at what costs such positions can be reached with regard to the sports sector and the necessary infrastructure for human and facility resources.

DK: So, would you say the university itself due to their, well, history and their building of structure, they are using a more strategic approach of management, but they should think about some way of strategic entrepreneurship?[linkage in the discourse line possible?]

No.1: Yes, and I would even characterise the previous world and still where we basically live more like bureaucracy.

DK: Hm.

No.1: Not even strategic. Bureaucratic management is what it is. Even if it gets to strategic management it is something that we I think currently are doing in the new management scheme of the universities, but, yes, I mean, to more entrepreneurial orientation even that is something that would be beneficial. [angry]

DK: Hm.

No.1: How to do it though that is the question.

DK: Yes.

No.1: But in many ways actually we think of, you know, the external funding that we currently attract. We could actually talk about it in entrepreneurial terms. I mean, those who come up with the ideas for research projects trying to get them funded are actually very entrepreneurial.

DK: Hm.

No.1: You know, in that sense. So, just... I do not know if it needs to be labelled as such, but the sort of idea of... you know, we all are quite entrepreneurial in the university.

DK: Sort of.

No.1: Yes. So, that might be the making-it-happen-part of the trends transferring towards entrepreneurial orientation.

Third interview with interviewee No.1 on 8 September 2011

While within this study such an orientation was seen positively amongst the interviewees, there is a need for a critic regarding the organisational structure as well. Wright et al. (2007) showed that "Most universities are publicly owned and thus embedded in the bureaucratic nature of any national administration" (Wright et al., 2007, p. 6). Therefore, bureaucratic mismanagement can be considered as a potential obstacle for entrepreneurial effectuation. As Ratten and Ferreira (2017) argued, the social nature of sport can influence network relationships and entrepreneurial actors within sport can get closely to business knowledge, fostering the connection towards innovation, marketing and effective resource usage. Such a planning procedure the universities are trying to achieve like e.g. JYU with the Hippos Master Plan. "Industry and markets are contextual factors influencing sport entrepreneurship. The industry a firm operates in provides the context for the type and frequency of innovations (Porter, 1980). Some industries are more competitive than others due to the nature of their products and services (Zahra et al. 2014)" (Ratten & Ferreira, 2017, p. 245).

DK: Do you think with this lack of money [incoming from the state] and stuff [like that], it could be then an idea to go more towards stakeholder groups or if there is somewhere interest necessary within the departments and faculties to go more towards this direction in order to maybe generate interest and money?

No.4: Yes, but the problem for us is that... where would we turn?

DK: Yes.

No.4: The private sector is almost dead. [pessimistic tone?]

DK: Yes.

No.4: In terms of sport you have... the other partners than the state are municipalities and sport associations, which are also public organisations.

DK: Yes.

No.4: So, I have not seen a single assignment or funding coming from some external party being a private.

DK: Hm.

No.4: A private party for all my time here and I have been here for 11 years and I have never seen private money coming in.

DK: Hm. So, do you think a direction more towards stakeholder groups or entrepreneurship…? [Pausing] might be a good idea, but due to the location it is almost impossible?

No.4: Yes, I think the only place we could turn for external funding other than the sources we have now is the EU-level.

As a midsection analysis, the money issue has been there for many years as Goldstein (2009) had found out before this research study began: It should be noted that the share of public university revenues from state governments has been steadily decreasing over time, though at the same time there has been an increase in autonomy" (Goldstein, 2009, p.13). Therefore, a future cooperation requires additional search for valuable stakeholders.

DK: And maybe in terms... and maybe as you said before if you might attract people concerning research...

No.4: Yes.

DK: ...who might be interested in this, also coming from the private sector and saying "alright, you are some force in this area, also on the scientific sector..."

No.4: No. No that would not happen, because the private sector is not investing in research.

DK: Okay.

No.4: So, it is not a competition that the private sector is now turning to Gothenburg and not to Umeå. And then if we get four professors here they would turn to Umeå.

DK: Hm.

No.4: The private sector is not investing in science, in sport science. They are doing that in medicine and all kinds of...

DK: Yes, biology.

No.4: Yes, but not in sports.

Second interview with interviewee No.4 on 26 November 2010)

Here, interviewee No.4 criticised the diversity in sport sciences itself; for example, sports medicine has likely a better chance to get research money and attract new stakeholders by finding niches than sport management or sport economics. A potential business orientation within the own-sector is likely to require different sections of interest, for example, through a re-orientation or specialisation of research areas, which again might require different sport facilities, that is, suitable equipment.

DK: Okay. Then, need of a stronger orientation towards stakeholders' interests and there is not much tradition here in stakeholder management, do you think there might be any changes necessary in planning your future? Of the university, but also your faculty here?

No.7: I think there are some stakeholder which we have in mind or which the university has in mind, but there are no new stakeholders on this list. Let's take again the example of the new research building. So, people living in this area were not on our stakeholder list yet.

DK: Yes.

No.7: But the university sees that they should be on the list.

DK: Yes, because they are, well, kind of demonstrating.

No.7: Yes. So, we had the classical stakeholder list with for example students, alumni and also the classical sport organisations.

DK: Yes.

No.7: So, the classical employees, but there are more stakeholders to take into consideration.

DK: So, due to stronger networking now, like in the past, you have to, well, kind of rewrite your lists and get a different orientation.

No.7: Well, I think there is not a clear concept behind it. I mean, fortunately we have a president who likes connecting to others, who likes networking.

DK: Yes.

No.7: But maybe that is more his personal attitude and not a clear strategy.

DK: Yes, yes.

Fourth interview with interviewee No.7 on 11 May 2012

The need for networking and a stakeholder-friendly approach can be found in this discourse line. However, it is not a new trend among scientific institutions creating knowledge. According to Audretsch and Lehmann (2004), entrepreneurial policies have shifted from national and international aims towards regions and regional clusters. This may include new start-ups of companies, venture-based capital, and spillovers based on R&D. Universities do play a key role in here by giving scientific assistance and as those can provide spillovers through "academic research and human capital in form of well trained and educated students" (Audretsch & Lehmann, 2004, p.433), which again leads to the potential benefits of cluster solutions and sport parks closely related to the universities and their sport facilities.

7.2.3 Potential detriments of entrepreneurship

This subchapter describes various influences that the interviewees detected during the interviews, which can hinder the universities being more business-orientated in both entrepreneurial and stakeholder-related issues. In particular, the factors of globalisation as well as different initial positions within different countries, universities, faculties, and departments can cause constraints of different kinds.

DK: If it is necessary or not. Do you think the collaboration with sport associations, clubs, the community and stuff; are there any possibilities to implement new strategies? Also in order with communication issues. Do you think there is any possibility to try new ways of management, respectively are the current ways of managing too much, well, old-fashioned?

No.7: Yes. As I think, the question could be 'are there any or could there be any synergies?' [going a step further]

DK: Yes, for instance.

No.7: Between... or what could the university, as the facility provider, could do in a different way than another provider of sport facilities. And there are some interesting issues here. I would not speak of solutions, but there are some interesting issues. For example one institute implemented a project for... [thinking] or some institutes implemented projects for specific target groups of the population. For example people with obesity, children with obesity and also... what is it in English? People who had a heart-attack.

First interview with interviewee No.7 on 29 June 2010

This discourse line from the first interview with interviewee No.7 shows one concept of being an active entrepreneur, showing similar connotations within this statement as his colleagues in Finland and in Sweden, being aware that the first step has to come from the universities for acting as an entrepreneur and an 'effectuator'. Such a step is related to the idea of establishing visionary management approaches, as depicted below. Karjalainen (2016) argued that, for example, the net effect of the Hippos Sports Park needs to be evaluated not before the year 2035 as otherwise, a reliable and valid analysis cannot be made.

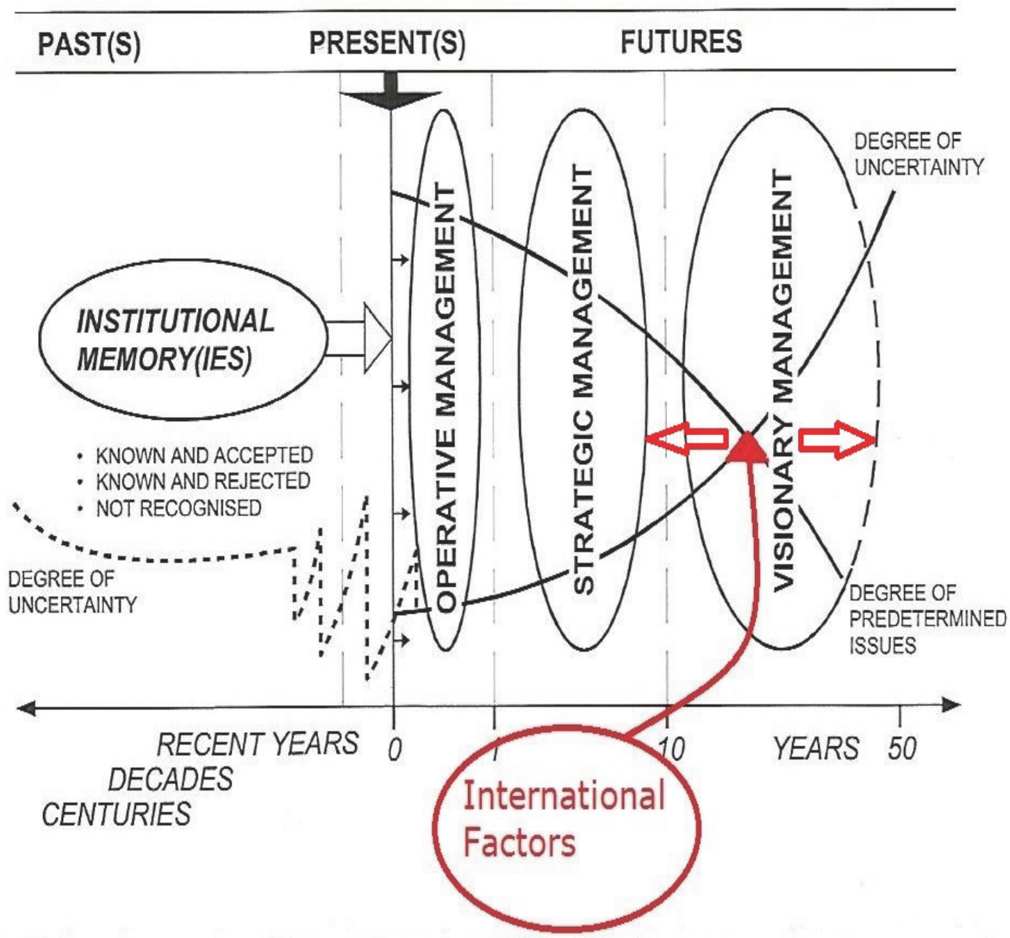


FIGURE 15 An overall framework for strategic management in relation to past(s), present(s), and futures. Modified and adapted from Hukka, Juuti, Katko, Mohamed, Nyanchaga, & Seppälä (2005), taken from Kaivo-Oja et. al (2004)

DK: I mean, the university is basically like you have those one year or even five-year plans which is like strategic management, well, more management based, and in terms of pure [more concentrated?] entrepreneurship that is not possible, because the university does not have the structure for that. But some mixture like the approach of strategic entrepreneurship could help there. What would you say?

No.1: Yes, most likely. Most likely, because, you know, people are most entrepreneurial in creating all kinds of projects and getting funded. But, you know, maybe they should be rewarded about that also. Somehow. [a bit lost]

DK: Hm.

No.1: Not just, you know, pattern on the back and yes, keep up the good work. I am not meaning that necessarily it would be a need of financial reward, but that might be a part of it at least. I mean, if you bring in one million € for the university, why could the university not set up some fraction of that for your not personal use, but for conferences and...

DK: Something like that, yes.

No.1: Sort of setting up a fund or whatever for those purposes.

DK: Hm.

No.1: I do not know if that would be acceptable, would it be attractive, but maybe.

Third interview with interviewee No.1 on 8 September 2011

The process here follows a distinctive pattern; it features the criticism of a not-yet established approach towards entrepreneurship, partially based on malfunctioning strategies in the past, for example, 'bureaucratic management', which hinder the enabling of the 'effectuator', the faculties and departments of the universities dealing with their sport facilities and their path towards business and entrepreneurship. The various fields within sport sciences must follow an integrative and collaborative approach, steering through aspects of innovation and knowledge to reach the specific market, as depicted below:

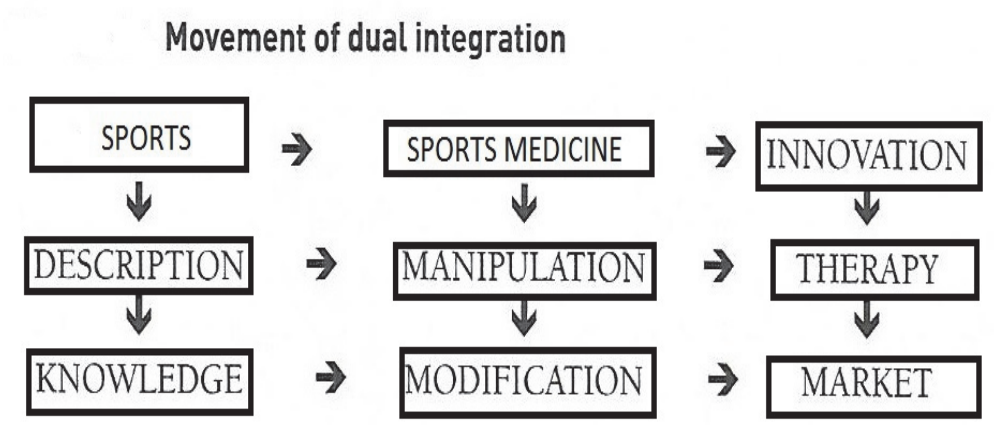


FIGURE 16 Movement of dual integration. Adapted and modified from Pau (2003)

Thus, business and entrepreneurial opportunities are currently heavily dependent on the scientific area where the faculty or department is located.

> DK: Okay. Then lack foresight concerning strategic management in the past versus losing ground nationally and internationally? Because we talked about like there has been some lack of foresight.
>
> No.4: Yes and as I probably said before I think Umeå together with other universities, not only in the north, but the capital region and outside the cities of Stockholm, Gothenburg and Malmö need to find better strategies in terms of attracting students, attracting research funding, attracting partners in business and in industry. Unless we want to be a second-class university.
>
> DK: And what do you think could those strategies look like? In which direction could they go?
>
> No.4: What we see right now is the rural universities are making partnerships with those...
>
> DK: Bigger ones?
>
> No.4: ...yes, in the south. Umeå has signed a deal with Linköping University to cooperate. And I know that Luleå has done the same with some other place. And I am not sure if that is the right way to go. My guess is that the big ones are drawing the most benefits out of that cooperation.
>
> Third interview with interviewee No.4 on 24 August 2011

This segment validates the earlier statements that not only at UU, but also in general, it requires the connection of willingness to 'sell' knowledge and the ability of 'finding the right niche and new market segments' (Figure 12), connecting to the entrepreneurial theories of Sarasvathy (2003, 2008). According to Goldstein (2007), universities are considered to be 'multi-product' organisations. "Their outputs include not only "know-how" embodied in human capital, but also research, technology assistance and transfer, technology development, real estate investment and development, entertainment and leadership" (Goldstein 2009, p. 13). In addition, the potential spillover effects of knowledge created through entrepreneurship by Acs (2009) must be focused upon by the deciding bodies of the universities:

1. An increase in the stock of knowledge has a positive effect on the level of entrepreneurship.
2. The more efficient incumbents are at exploiting knowledge flows, the smaller the effect of new knowledge on entrepreneurship.
3. Entrepreneurial activities are decreasing in the face of higher regulations, administrative barriers, and governmental market intervention.

The last factor is important as it shows a potential positive effect if autonomy is being maintained by the universities. This is based on the theory "of endogenous entrepreneurship, where entrepreneurship is a response to opportunities created by investments in a new knowledge that was not commercialised by incumbent firms" (Acs, 2009, p. 49).

> DK: Okay. And do you think then for instance it might be a problem for the public to understand exactly what you are doing, that for instance someone from the outside needs a gazillion of phone calls in order to get the right people. And because of this, maybe, lack of communication, there is not an understanding by the public what you are doing or you do not know the exact needs of the public, that there is maybe a stronger connection needed.
>
> No.7: Yes. I am not sure if the public has to understand in every case exactly what we are doing. To my understanding that fits very well to the theories. It is often okay if they see we are experts in the sports sector and they trust in what we are doing is on the highest level. But they do not have to understand exactly what we are doing in every case. For example, look at the biochemistry and the anti-doping research. So, they do not have to understand... [waiting for reply]
>
> DK: Of course. That is a bit, well, too high, but on the other hand as you said also before, there is a certain gap of understanding or connection between you from the university and the public that there also might be then a difficulty for potential investors to understand what you are doing or to... or the will to invest in you, because they do not know exactly what you are doing.
>
> No.7: Hm. Yes, I think sometimes that would work, but sometimes it is again not necessarily in every case.
>
> Second interview with interviewee No.7 from 20 December 2010

From this excerpted discourse, it can be derived that for the public to understand what you [the universities] are doing might require additional knowledge. Being 'special' might also lead to market advantages (Barney 1997 & Sarasvathy 2001) if your strategies cannot be copied by people from the outside as Gornitzka (2007) argued: "Institutional theory suggests both inter- and intra-institutional dynamics through which change and innovation occur" (Gornitzka, 2007, p.158).

For the sport facilities, there are three key factors as Schwarz, Hall, and Shibli (2015) argued: "Ultimately, sport facility managers look at three key determinants of success as related to marketing management: (1) did the marketing program influence sport consumers to come to the sport facility; (2) did the advertisements and other collateral materials stimulate sport consumer purchasers to come to the facility; and (3) was the spread of information about the sport facility via ward of mouth in an effective, controlled, and positive manner" (Schwarz, Hall, & Shibli, 2015, p. 254).

> No.7: Maybe if we have the next president and he will have different personal attitudes, so things will change.
>
> DK: Yes.

No.7: But if you have a clear concept for this university, it should be more independent from the personal attitudes.

DK: So, do you think that the personal interests of the deciding people are, well, have a too strong weight?

No.7: In the moment they have a strong weight I would say. So, if these interests and attitudes are positive for the university, so then you cannot say they are too strong. [secure tone]

DK: Yes.

No.7: But... so, I would like to say they have a strong weight, yes.

DK: And that might change in the future if those interests and attitudes might be too overwhelming?

No.7: Maybe, maybe. [weighing arguments?]

Fourth interview with interviewee No.7 on 11 May 2012

In this interview, but also for the overall results of the case study, it became clear that stakeholder management has been not practised to the extent necessary for occupying new market niches and new products. However, there is an interest to change the behaviour and this can also be taken to the conclusion of this research question. Therefore, it is necessary to acquire complementary assets to bring new ideas to the market and to conquer potential niches, as Wright et al. (2007) claimed.

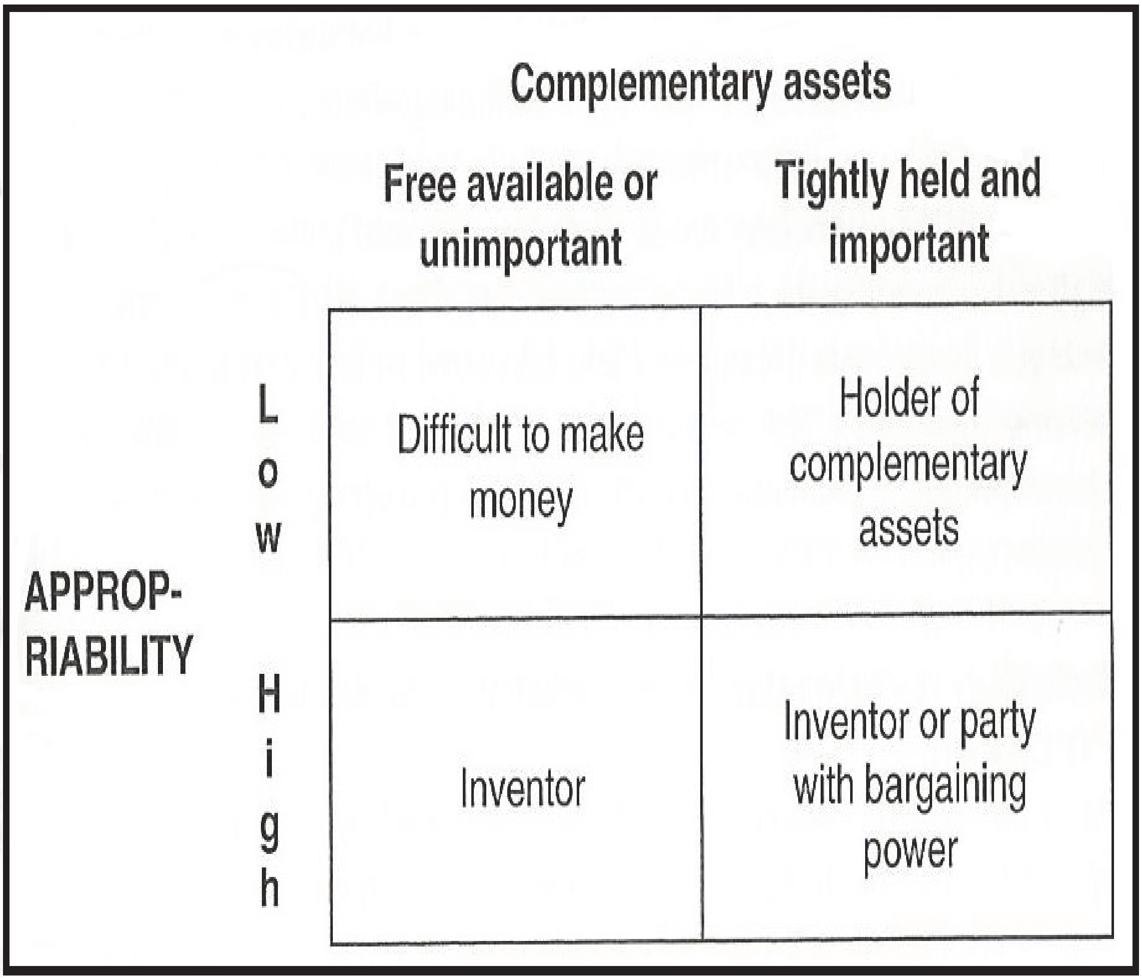


FIGURE 17 The teece framework. Adapted from Wright et al. (2007)

Potential assets do not only include human resources but also, for example, sport facilities, other necessary infrastructure, time, and needed monies. The inventors, for example, researchers must be aware that a connection with holders of complementary assets (e.g. university budget) is necessary in order to succeed.

7.3 The ability to be a seller of knowledge

- *3) Do universities have the ability to become and function as 'sellers' of knowledge in terms of business?*

This next research question deals with the ability of the universities to be business-orientated. Are the necessary assets (e.g. money, time, infrastructure, stakeholders) available and is there a constant flow of resources incoming to maintain this ability?

7.3.1 Potential revenue streams

The first part analyses the availability of potential revenue streams, necessary to guarantee, and maintain the ability to sell the produced knowledge, which has been put out through research, for example, in laboratories of sport medicine.

> DK: Do you think... well, it might not be your field, but do you think the university needs to be more orientated in business?
>
> No.3: It is a good question, but I think that we should be more active. But also we cannot close our eyes about the basic business that we do in here, because that is the main point we do in here.
>
> DK: You mean service to needs of the public?
>
> No.3: Yes. That is the basic.
>
> First interview with interviewee No.3 on 16 September 2011

This short, yet distinctive, description of the situation by interviewee No.3 shows the understanding of doing more to identify potential revenue streams and the ability to sell what they have (knowledge), but also not to neglect the primary deeds of a university, thereby providing education for the public. However, this might not be an antagonism, as the next discourse lines show. Based on Audretsch and Lehmann (2004), six years prior to the beginning of this research project, significant comparative advantage in competition was based on increasing knowledge. Public policy presents two options in response: "First, by providing an infrastructure that enables young firms to absorb necessary resources. This is shown by the positive effect of the regional knowledge capacity on firm location. Second, by influencing universities to increase their research activities, especially in the natural sciences and in providing well educated students" (Audretsch & Lehmann, 2004, p. 443). Modern sport facilities, including laboratories, for example, for sports medicine, are necessary to foster the infrastructure. This complements Schwarz, Hall, and Shibli (2015) who argued that "strategic human resource management for sport facilities involves an integrative approach to creating human resource strategies that seeks to accomplish goal based on the desired outcomes for the sport facility. There are numerous elements of having a strategic outlook for human resources in a sport facility, including strategic intentions of the ownership structure; the availability and allocation resources to meet the opportunities and needs of the sport facility; to attain a competitive advantage over similar sport facilities; and the strategic capabilities of overall organizational structure of the sport facility. In order to attain these strategy outcomes, sport facility managers must be able to efficiently plan, organize and control knowledge" (Schwarz, Hall, & Shibly, 2015, p. 140)

DK: We were talking about earlier a bit, but would you say... well, the answer is obvious, but I still have to ask, do you think the university going more into marketing, to market themselves within different areas, I mean, of course we have teaching, we have research and so on...

No.1: Hm.

DK: ...but in general, would you say it would be an improvement or setback?

No.1: Hm, well... to think of it...

DK: I am sorry, it is a tricky question.

No.1: Yes, it is sort of a tricky question, because, you know, the basic answer to that question would be yes, obviously. [already placing a 'but']

DK: Yes.

No.1: But, you know, who do we market to be one question and what do we market to them...

DK: Yes.

No.1: ...is obviously related...

First interview with interviewee No.1 on 2 June 2010

Cluster solutions in regional markets such as Umeå and Jyväskylä are needed, but also in metropolitan areas like Cologne due to the amount of necessary resources for the universities to market themselves, particularly in terms of sport facilities due to the variety of stakeholders. However, it remains critical to observe how much of this is possible and desirable to build up new revenue streams through sport facilities. The knowledge factor needed to 'sell' the knowledge and adapted to sport facilities has four categories (Schwarz, Hall, & Shibly, 2015):

1) Embedded knowledge: the information which is articulated within rules and regulations, and organizational policies and procedures.
2) Embodied knowledge: the practical skills, understandings, and applications of concepts exhibited by employees and management.
3) Embraced knowledge: the theoretical/conceptual/cognitive skills exhibited by employees and management.
4) Encultured knowledge: the collective intelligence, values, and beliefs of the entire organization.

The same content was subsequently argued in a different discourse line within the first interview session and there it was shown where exactly JYU needs to improve:

> DK: And do you think then there might be a relative lack of, well, experts concerning practical marketing, in terms of practical expertise? Like the university, I mean, the professors and so on they might know how to make it theoretically, but do you think there is some sort of a lack of, well, experts to take it into the practical field? Like if the university wants to go in this way?
>
> No.1: That might be one thing, yes, but you know, I have some serious doubts about the... even about the theoretical side of it .[doubtful tone]
>
> DK: Hm.
>
> No.1: Again, you know, I made maybe and I think I am biased in this especially, you know, looking from this perspective that I come from, the... [self-critical approach]
>
> DK: I know, I will take it into consideration.
>
> No.1: So, you know, that might sound harsh and I do not have any data backup for my claim, but I would say that the... there is even sort of, you know, basic theoretical understanding lacking about, you know, how do we actually create ourselves the mass of information, the mass of expertise that we have into something that could be called a service or product that could be marketed to somebody.
>
> First interview with interviewee No.1 on 2nd June 2010

The need for expertise in marketing within JYU is shown within this discourse line with interviewee No. 1. After the analysis, the same results were evident in UU as well as in GSU. There appears to be a lack of using synergy effects with other knowledge-intensive business services in the respective countries as there have been attempts in Europe to work more closely together as Gornitzka, Maassen, Olsen, and Stensaker (2007) found: "…the University's basic functions have felt the effects of Europe in areas such as intellectual property rights, and state aid rules, while they also have been affected by instruments and initiatives that have been explicitly designed to aid the construction of the European Research Areas or the European Higher Education Area." (Gornitzka, Maassen, Olsen & Stensaker, 2007, p. 189). The need for competitiveness in knowledge-intensive regions is displayed below by showing the triangle of a knowledge transfer region, which can be incubated by the KIO and KIBS models.

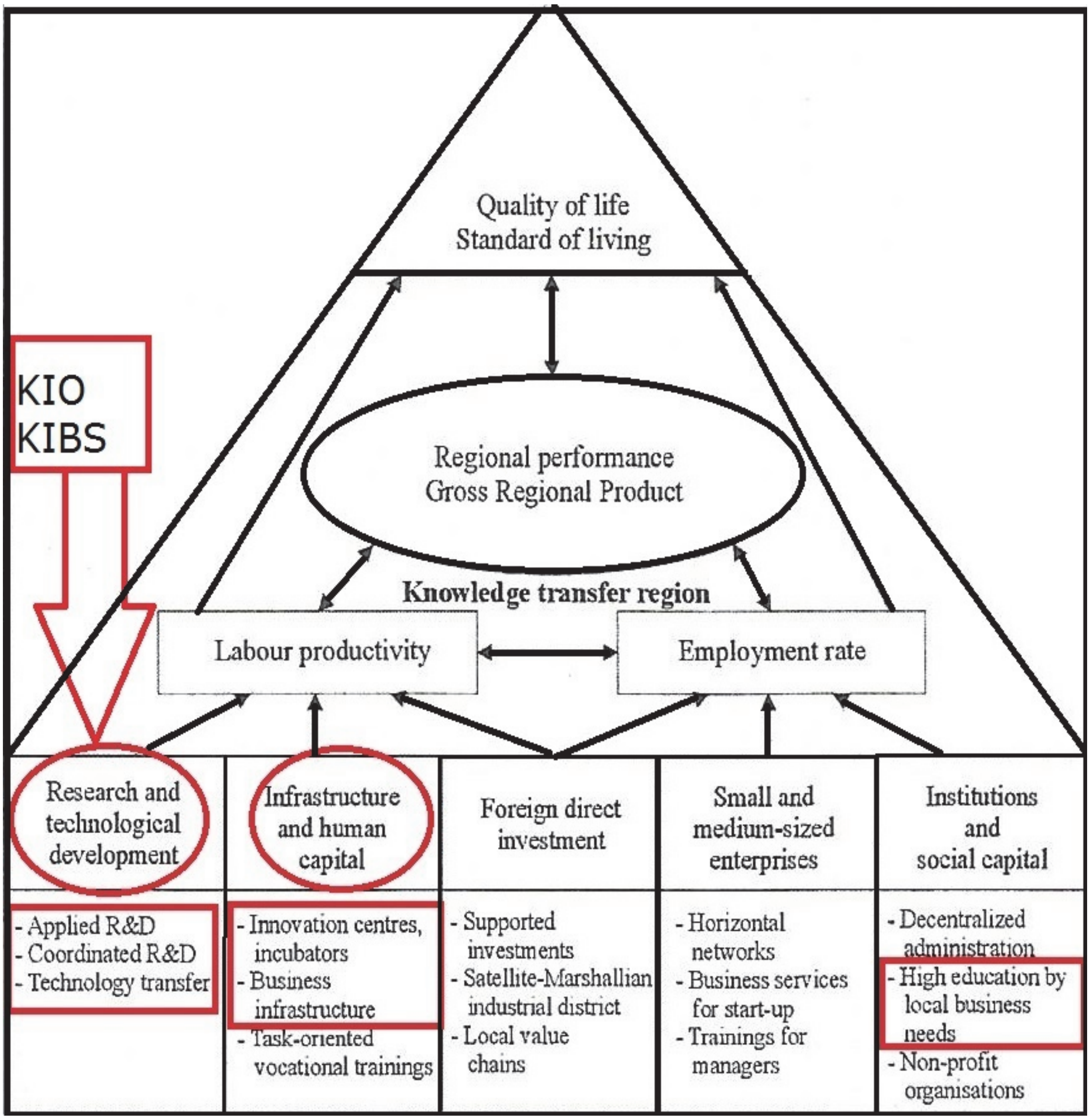


FIGURE 18 Enhancing competitiveness of a knowledge transfer region depicted through the pyramid model. Modified and adapted from Lengyel (2009)

DK: So, because the first session here is called 'determining the needs', so, the university is more like... you would say like, the needs go more towards specialisation, to consolidate yourself, to be more efficient and how to overcome maybe strategic management issues, risk management, strategic planning?

No.4: Yes, I think we need to come to terms that we cannot grow all the time.

DK: Yes.

No.4: We need to understand our place both in the sports sector, but also foremost in the university sector. We cannot be Stockholm, we cannot be...

DK: Gothenburg, Malmö.

No.4: No. We need to understand that we are located here. We have a regional responsibility.

DK: Yes.

No.4: We need to downsize our classes, have a lower admittance and have less staff. And do what we really are good at instead of trying to do, well, kinds of stuff just to satisfy partners or students or whomever. So, we need to be more careful in our decisions.

DK: So, to... not trying to maximise yourself in terms of size, but to maximise your outcome, your possible, well, results.

No.4: Yes, and find a suitable size that fits us. And not always just striving for expansion which we have done in the past. Always.

First interview with interviewee No.4 on 8 June 2010

The last line in this discourse describes the essence of the entire excerpt. In order to be able to sell (generally, not only as a university), you have to know your role, your abilities, and your size within the markets you want to enter. Otherwise, the expectations the firm (university) is attempting to realise will not be matched but undercut drastically. The orientation has to be decided by the university senates and faculty councils, which can cause problems in case of contrary interests. This is shown by Acs and Armington (2004b), who stated that "…knowledge spillovers can occur between firms in the same or different industries, fuelling the debate on the contributions to growth of specialisation versus diversity. Finally, no matter how richly endowed an economic environment with intellectual, social, human and financial resources is, someone has to organise these resources to pursue market opportunities" (Acs & Armington, 2004b, p. 301).

7.3.2 Potential size constraints

The ability to use knowledge production for business orientation of universities can also be hampered by eventual size constraints of the affected surroundings as well as by the university and its sport facilities itself. Without, for example, the necessary number of stakeholders or a too small market (area of research orientation and specialisation), it might be impossible to execute the orientation.

DK: Okay, we are nearing the end. Concerning sport on the local and regional level: What were the changes, respectively the... well, in the past, right now and which are expectable in the future? How does that affect your way of management and leadership in sports and also your connection with IKSU?

No.4: I think since the birth rates are again going down...

DK: Yes? [new topic within this discourse line opened by the interviewee]

No.4: ...we need to downsize our operations.

DK: Hm.

No.4: We need to expect smaller classes, less students and we need adjust both our operations, but also our facilities accordingly. So, in connection to IKSU I would see... say that we would need less facilities, less space in the near future than we used to rent from them.

DK: Yes.

No.4: And also we need to downsize our staff, we need to let people go.

DK: Hm.

No.4: But that of course sounds very negative, but I think also that is a chance to consolidate, to specialise and to focus on our strengths.

DK: Yes.

No.4: Both regarding research, both also regarding education.

First interview with interviewee No.4 on 8 June 2010

The first part of this discourse line with interviewee No.4 showed a dilemma which the sport faculties of this study need to be aware of. This has already been analysed by Olsen (2007), who stated that it is of great need to know "how to balance: a) the search for unity of purpose and the 'proliferation' of identities and accounts, b) the desire for unity of action and for protecting individual freedom, c) the need to secure adequate resources without being seduced or being abandoned, and d) the desire to embrace self-renewal as well as continuity"(Olsen, 2007, p. 47). Therefore, a consolidation of the universities needs to be discussed in the future, coming 'down to the needs'.

DK: And how do we do it.

No.1: Yes, related question. Because, you know, I think that the university as such has, you know, before we can enter to this more sort of entrepreneurial, more business-like thinking, we would need to do a lot of productisation.

DK: Yes.

No.1: Thinking of what we actually have that would be something that we can actually market.

DK: Yes.

No.1: And to, you know, to what groups? And, you know, trying to make the massive amount of expertise we have within the whole university sort of more visible to the outside.

First interview with interviewee No.1 from 2 June 2010

According to interviewee No.1, the ability of JYU to 'sell' their knowledge is mainly based on the connections among the various faculties and departments. This is correct because it is only possible to market yourself if a minimum number of people and groups not only know what you have to offer, but also are interested in this particular product. Acs and Varga (2005) argued that "while most R&D is carried out in large firms and universities it does not mean that the same individuals that discover the opportunity will carry out the exploitation" (Acs & Varga, 2005, p. 423). It is essential to determine whether such an approach is desirable in the future for the JYU, UU, and GSU. Therefore, the market orientation must be more active and visible to potential buyers for the produced knowledge. Potential solutions might include clusters such as the 'Hippos 2020' project to concentrate more market share.

> DK: Ah, they do not... And what do you think here in general, it should be established? Maybe not only in the private sector, but everywhere in general to go more towards research in sports marketing and sports economy to, well, inventory the resources you have?
>
> No.4: Yes, sure. But you need someone to be interested in that.
>
> DK: So... [asking and waiting for more data]
>
> No.4: But I cannot do it. I am not... [pausing] I am not trained in marketing, in financing, in those...
>
> DK: In accounting...[testing]
>
> No.4: No, I am at the Department of Education.
>
> DK: Yes.
>
> No.4: So, the Department of Economics has to take that responsibility. And as long as they are not interested in sports, that will not happen.
>
> DK: It is kind of weird. I mean, sports is definitely one of the... as far as I read it quite often in journals and others [like that], quite often the field which is named, which has a very big future concerning research in general. Also because of the public needs in terms of health.
>
> No.4: Yes, but it still has a low status. [status of sport]
>
> DK: Yes.

In the first section of this excerpt, it is shown that there is a distinctive need for causing a higher interest for sport within the other faculties of the universities in order to establish necessary collaborations and cluster solutions, as this can subsequently lead to market advantages, which was validated prior to this research by Andersson, Gråsjö, and Karlsson (2009): "Another reaction heard, for example in Sweden, is that the rich industrialized countries must increase the knowledge content and the degree of sophistication of their products to retain their comparative advantages in their export markets and to find new exports markets" (p. 85).

> No.4: At all departments sport research and sport education is very much lower in status than the traditional educational programmes and the traditional research. You... we do not have a Nobel-prize in sport research.
>
> DK: No, I do not think so.
>
> No.4: So, that is of course a blunt example, but it says something about the status of sport research and as long as the status is lower, the other departments will still focus more on their traditional focuses than on sports.
>
> DK: Hm.
>
> No.4: And it does not matter how much you and I think sport is important, interesting, fun or whatever. As long as people at those departments do not take interest in those issues, we will not see Swedish research in economics, marketing or whatever.
>
> DK: In sports.
>
> No.4: Yes.
>
> Second interview with interviewee No.4 on 26 November 2011

For the universities, one more problem of being business-orientated is shown here, namely the status in the public of the own-scientific field, but also (as discussed in the section of KIO and KIBS) within the own-discipline (e.g. sports medicine). Despite sport being a huge economic factor (Szymanski, 2010b) there are market and business problems for sport sciences, including the possibility of using facilities as a tool for business, which will be addressed in greater detail through the respective research questions.

7.3.3 Awareness and responsibilities

This section deals with the necessary awareness and responsibilities of the universities and faculties for being able to sell their produced knowledge. Without such an awareness, this business approach through stakeholder management and entrepreneurship will be impossible to adapt.

> DK: Okay, and you also that you think that there is a need for or an interest to move more towards stakeholder groups, respectively into entrepreneurship. In your opinion, which theoretical models, respectively possibilities do you have to move more towards this direction? Which models do you think might be applicable?
>
> No.7: Okay, I think that there are several possibilities. You can look to the entrepreneurial theories, you can... you mentioned also the new stakeholder approaches, but also you have to look into the marketing theories, how to build a brand and brand

equity. There you find a lot of models and rules and I am sure if a university would follow those things we teach our students in the first semester, that would help a lot.

DK: So, I know that there are a couple of models. In autumn I was reading a lot about this, although I had some pre-knowledge about it, but still... do you have any example or which model do you think might serve the needs the best way right now? If you have any?

No.7: For example, there is a very prominent model in brand equity by Keller and so, that is very good, because he describes very precisely how the customers - but you can exchange the word customers by stakeholders also - how they get familiar with what their university is or might be in their eyes.

DK: Hm.

No.7: So, it has somewhat of more customer relationship management and this is very close to the stakeholder theory, but more from a marketing way of thinking.

Second interview with interviewee No.7 on 20 December 2010

This selected discourse line showed the situation at the GSU throughout all the interview sessions (first to fourth) regarding this particular research question. There is a lack of awareness of universities on how to show which resources and expertise they possess; thus, this lowers their abilities to attract new business partners who are interested in buying knowledge services. However, it must be added that the "distribution of researchers between the private (laboratories of private firms and enterprises) and public sectors (laboratories funded by the state, universities and other institutions of higher education, and non-profit organisations) varies greatly from country to country" (Wright et al., 2007, p. 8); thus, this creates different possibilities for the JYU, UU, and GSU.

No.1 : Yes. I mean, yes, we are obviously hoping for more collaboration between the university at large and smaller organisations, smaller business organisations in the area. But the problem in that is that I think there is still sort of a sentiment in the smaller businesses in the region that, you know, how would we actually approach the university to establish some cooperation.

DK: Hm.

No.1: Because the university is such a large entity that, you know, looking on it from the outside it is very hard to actually sort of get equipped.

DK: Yes.

No.1: Who to contact, how to make the relationship happen. And so, that is sort of a problem.

Fourth interview with interviewee No.1 on 27 January 2012

This line is a criticism of approaching the university, despite the willingness, to be more market-orientated and dealing with the size of their business partners. This is also related to the area of Jyväskylä as a growing region, but like Umeå, both do not possess the size of Cologne and the GSU as a metropolitan region does. Therefore, despite attempts to 'sell' knowledge nationally and internationally, the regional approach needs to be very sensitive in order not to be too dominant in attempting to establish business connections. Within the graphic provided below, given by Wennekers and Thurik (1999), it becomes obvious that the universities would need to be aware of the requisite conditions for a more entrepreneurial approach of doing their business, which in turn can have positive effects on regional economic growth.

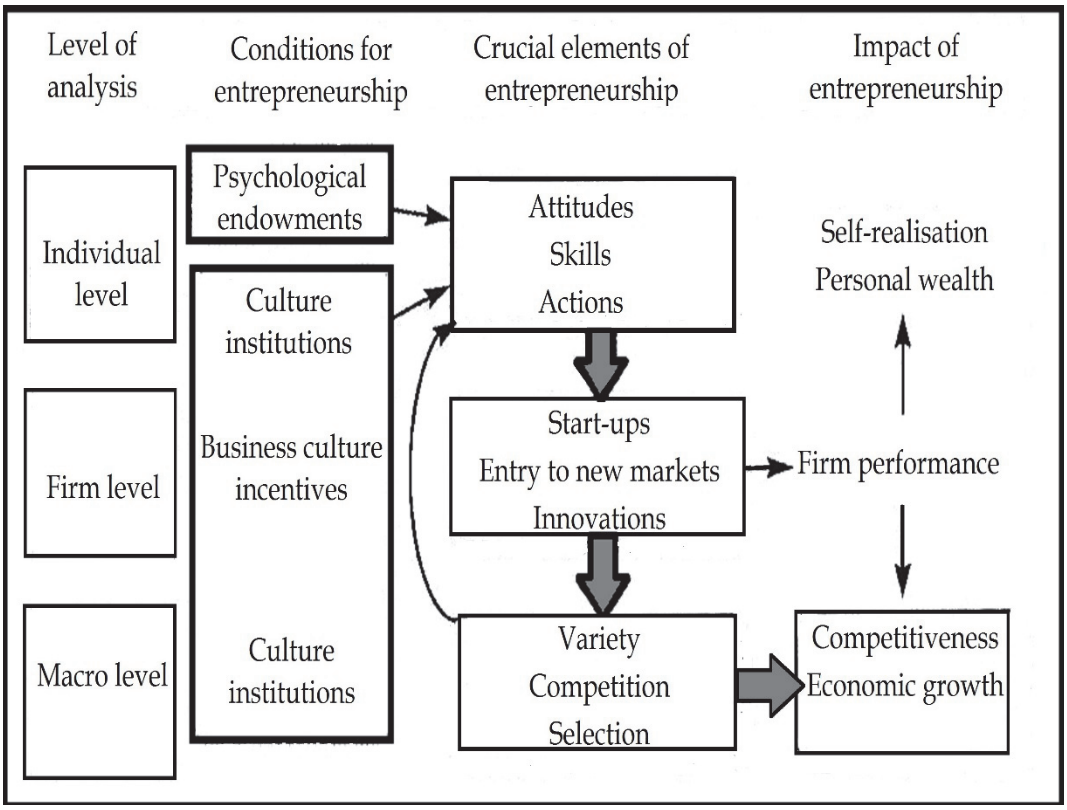


FIGURE 19 Linking entrepreneurship to economic growth. Adapted from Wennekers & Thurik (1999)

DK: Hm. Then also concerning this issue: Stakeholder and entrepreneurial orientation: US, marketing theories, like brand building, acuity; implementation of a culture of understanding how do the customers/stakeholders think about the university versus possibilities in the current system?

No.4: Yes, it is important to understand how our stakeholders think and how they understand what we do.

DK: Hm.

No.4: Traditionally there has always been a big gap between what we do and what they think we do or what they want us to do.

DK: Yes.

No.4: And I think both parties, but I guess especially the universities need to be clearer and more informative about what we can do and what we want to do. So, that we do not market ourselves falsely. I think that is a big problem that we sometimes maybe have given a picture to stakeholders that we can do this, we can do everything.

DK: Hm.

No.4: Just pay us and we can do everything. And then when the contract is signed the stakeholders get disappointed, because they see that you do not do what we expect. So, I think we need to be clearer in our marketing concerning what we do and what we are good at.

DK: So, you think that the marketing communication between you and stakeholders is pretty bad?

No.4: Yes, I think [so]. And especially in sport, but certainly also in other disciplines. There has been traditionally a sense of mistrust between the stakeholders and the society at large and the universities.

Third interview with interviewee No.4 on 24 August 2011

This discourse line shows another point of criticism addressed towards the willingness of universities to be more business-orientated, an inability of trusting each other, which is essential for doing any kind of business. This atmosphere has to be overcome in order to do be successful in 'selling' the knowledge the universities have to offer. Opportunities for doing so could be frequent meetings with the addressed stakeholders beforehand to discuss business approaches for establishing closer connections with each other and to introduce a climate of trust to help each other. Varga and Parag (2009) concluded that "it has also been suggested in the literature that universities may act as key nodes channelling scientific-technological knowledge accumulated in (national and international) research networks to the regional industry via different mechanisms of localised knowledge flows such as patenting, licensing, spin-off firm formation, consulting or participating in collaborative R&D projects (Goldstein, Maier, & Luger, 1995)" (Varga & Parag, 2009, p. 139).

7.4 The willingness to be a seller of knowledge

- *4) Are the universities willing to become and function as 'sellers' of knowledge in terms of business?*

The fourth research question attempts to analyse the willingness of the universities to employ a business approach in the future. Aspects of interest include the specific approach of decision-making within the universities as well as the necessary responsibilities of business partners in order to succeed.

7.4.1 Connection to regional development

The first sub-aspect reveals the connection of a business approach with regional development as this is elementary for a close connection to the closest stakeholders available. In addition, a growing region can have more potential partners for business.

> DK: But I mean, in the past has there been any attempt by the university to go towards, well, marketing, business or did they change somehow their way of leadership and management in the last, let's say 10 years or was it always, well, sticking to one... well, maybe some sort of old-fashioned model like keeping it the way like it is?
>
> No.1: No, I am... I do not think so, because the current director has been very proactive in many ways. I mean, she has been very active towards many different stakeholder groups that we have.
>
> DK: Hm.
>
> No.1: So, you know at least that is the sort of picture that we get, looking from the distance.
>
> DK: Hm.
>
> No.1: The activities of [the] rector and the top management, if you will, of the university. So, there have been attempts, but I do not know that... would I call that very, you know, business-like or entrepreneurial, you know. [trying to be persuasive?]
>
> First interview with interviewee No.1 on 2 June 2010

The willingness of being more open in that field of business has been promoted during the reign of long-time rector Aino Sallinen of JYU. However, as interviewee No. 1 highlighted, this approach should be followed even more deeply in order to take the next steps of potential business planning. According to Olsen and Maassen (2007), the European Commission has invented a 'new' model of promoting businesses, which "emphasizes leadership, management and entrepreneurship more than individual academic freedom, internal democracy and the organising role of academic disciplines. […] Universities should have more autonomy and also be more accountable and this requires new internal governance systems based on strategic priorities and on professional management on human resources, investment and administrative procedures"(Olsen & Maassen, 2007, p. 7). However, such an idea is highly controversial in countries such as Finland and Sweden as individuals striving for autonomy is highly regarded amongst universities. The major obstacles in doing so was described in another discourse line subsequently in the same interview:

> DK: You still have to, well, keep your position as a state university to, well, be a kind of a servant to the public...
>
> No.1: Yes, obviously.
>
> DK: ...so that the whole society can be educated. On the other way, with the changing economic situation you also have to look how to get monies.
>
> No.1: Yes.
>
> DK: And where to get that?
>
> No.1: Yes, and the findings of previous research related to the economic effects of universities within the, you know, the region...
>
> DK: Yes? [Awakening interest]
>
> No.1: ...have demonstrated that very strong. I mean, the...
>
> DK: The universities and...
>
> No.1: Yes, are the powerhouses of the regional development and that is something that needs to be kept more in mind, you know. And even trying to develop that further...
>
> DK: Hm.
>
> No.1: ...because if we are the engine, I think we are not running on all cylinders.
>
> First interview with interviewee No.1 on 2 June 2010

Within the universities, the most important internal and external forces for higher education and knowledge production are a) political, b) ideological, c) technological, d) economic, e) scientific/cognitive, and f) demographic (Nybom, 2007). These internal and external inputs have to be used by the universities to manage their decision-making approaches, as illustrated below:

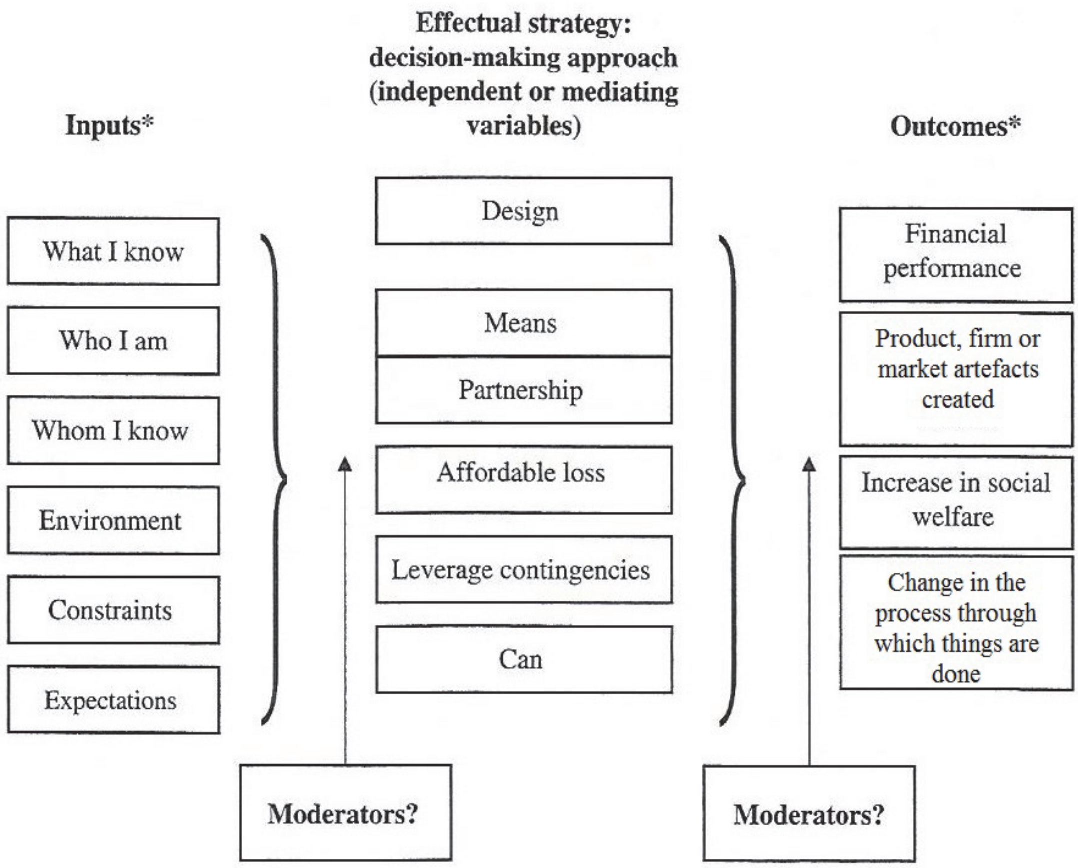


FIGURE 20 Effectual strategy and decision-making approach. Adapted and modified from Sarasvathy (2008)

No.4: And please them with what we do, it is small money.

DK: Maybe it is bigger in Stockholm or Malmö, in the south?

No.4: Yes, they have different partners there.

DK: And more possibilities.

No.4: Yes. And they have the national sport federations for instance which have more money of course.

DK: Yes.

No.4: But still, we have a lot of contracts with national sport federations. We have with the ski federation, the gymnastics federation and a number of others. But... and that is a good thing. Both concerning finances, but also concerning the access, I talked about it earlier. But I still think we also need to guard, to safeguard our autonomy so that we do not end up becoming a contractor.

DK: So, you would say... or would you say that stakeholder management could be useful, but it needs to be in a certain dose?

No.4: Yes. And we need to be aware of how stakeholders` interests affect our operations. We need to monitor that very closely. So, that we do not become something we do not want to be.

Third interview with interviewee No.4 on 24 August 2011

Both last discourse lines underpinned that the wish at UU to remain autonomous and the willingness to sell is only given while having a guarantee of full control over all business operations. This is sort of conflictive to the already cited statement of interviewee No.1, in particular, ***"it is a moral dream, the autonomous science***". Therefore, it remains debatable in which state the current situation can exist with the need for monies getting bigger and the available funds having a greater number of competitors. According to Olsen and Maassen (2007), ten years ago the American IVY-League (eight US elite-universities) argued that European universities need to become more like private enterprises in terms of operating in competitive markets (Olsen & Maassen, 2007). Based on the analysis in all three universities, such a transformation in Europe seems highly unlikely.

DK: Okay. Then concerning marketing theories: On the one hand you have to specify your, well, interests, but also here you have the university as a whole. How do you think that might pan out in the future? Are there changes necessary?

No.7: So, I would like to ask back if you speak about marketing, what you do mean exactly? Do you mean… is it the mission itself of the university or...?

DK: Basically, for instance in terms of brand building, equity.

No.7: Okay.

DK: Like implementing of a culture of understanding of how the customers, stakeholders think about the university.

No.7: Yes. So, I think it depends on the people and on the divisions, but generally speaking I would say that some parts of the university still have to learn that it is important how people outside the university think about the university. So, I think this is...

DK: And to improve this there might be a better, well, there might a need for a better presentation of the university?

No.7: Yes

DK: Like working outside, more connecting?

> No.7: Yes. I think still or again, the image is very good and other universities in Germany would be happy to have that image, but we also have to optimise that and to work on that continuously.
>
> Fourth interview with interviewee No.7 on 11 May 2012

The final interview with interviewee No.7 revealed another issue, which was also noticeable in Finland and Sweden. The willingness of universities to be more open towards business approaches is also dependent on how the university itself is seen by the people from outside. If the university does not get much 'love', the willingness to do so is subsequently much lower than the other way around. Why does entrepreneurship possess such a gaping role within the potential spillover of knowledge? This is explained in Acs, Braunerhjelm, Audretsch, and Carlsson (2009); they found that "new knowledge is characterised by greater uncertainty and asymmetry than other economic goods" (Acs, Braunerhjelm, Audretsch, & Carlsson, 2009, p. 140). Thus, the risk for any innovative organisation will be very high, which in return criticizes potential business approaches of universities.

7.4.2 Responsibilities towards regional development

A second strong aspect towards the connection of universities with regional development is the responsibility of the universities. The universities have three major tasks: teaching, research, and social services. This is not only by virtue of being one of the larger employers of the region, but also because they offer education as well as potential business through research for the local, regional, and national markets.

> No.6: Everything can happen. More or less we are going to be like the universities in the United States.
>
> DK: Hm. So, do you think really that within the next 10, 20 years or whatever... or even more, I do not know, do you think there is a direction recognisable for the universities, not only here, but in general, to go more towards business orientation...?[sceptical]
>
> No.6 Yes.
>
> DK: ... in order to get money?[Doubtful]
>
> No.6: Yes.
>
> DK: Do you think it is going to happen?
>
> No.6: Yes, I think so.
>
> DK: And...

No.6: It is like schools in Sweden.

DK: And do you think...

No.6: 55 percent of the gymnasiums in Sweden now are private.

First interview with interviewees No.5 and No.6 on 7 June 2010

This viewpoint of interviewee No.6 is debateable. In particular, in countries such as Sweden and Finland, where education is mainly organised by the state and a business orientation of universities or even a privatisation of these appears highly unlikely. However, with the ongoing economic crisis, the need to be more efficient and simultaneously to find more revenue streams, this might turn into reality. However, such an orientation would also require several law changes, particularly with regard to profit and tax issues. Wright et al. (2007) argued that "…European policy-makers are increasingly aware that economic growth depends strongly on the development of technology transfer from public research through industry, especially through the creation of new knowledge-based firms" (Wright et. al, 2007, p. 7), thereby leading to an eventual role of universities in the future with the role of sport facilities as sellers being rather vague.

This description in the last line offers serious criticism of the current situation of the university, thereby implying that the efforts for being more effective have not reached their full potential. Examples for obstacles are the already mentioned issues of mistrust, no history in business, lack of knowledge in marketing and approachability, as well as the difference between various departments and their resources. In 1994, Malecki claimed that "the presence of a university, a research or a science park, venture capital, or research and development activity are established variables focused on by regional policymakers. Experiences in Europe and North America, however, demonstrate that these factors do not ensure high-tech entrepreneurship (Cooke, 1985; Glasmeier, 1988; Malecki, 1986)" (Malecki, 1994, p. 34). This verifies that the potential within the universities is not used to its fullest.

DK: Then, overhead costs are the biggest obstacle to get the needed collaborations, for instance from the private companies. But as you are a likely small region you have only a few private companies here. Thus, there is a force to public cooperation, but you also said like before that you would like to have some private investors. How do you think it is possible to keep their interest?

No.3: Hmm... you have good questions.

DK: I am trying. I mean, of course I know that some questions might not be completely in your field.

No.3: But I think that we have to find something that is unique.

DK: Hm.

> No.3: We have to find something, these things they are unique in. And they are... [searching for descriptive words] we are doing other things so well that other opportunities are not interesting. So, that is how we make it.
>
> Second interview with interviewee No.3 on 8 March 2012

Here it is shown that willingness itself may not be enough to be active on the market for a university (and in general), and this is strongly connected to the previous research question dealing with the ability to do so. Another conjunction can be found with the used theory of effectuation, as this discourse refers to the ability of successful entrepreneurs to act and find new markets and niches.

> DK: Okay. We talked about it before, with the... in terms of funding and more, there is a problem that some people might think you need funding, but on the other hand they do not want to be a servant of the private sector.
>
> No.4: Hm, right.
>
> DK: So, there is a kind of controversy. The issue of independency of the university versus, that is a quote again, "it is a moral dream, the autonomous science."
>
> No.4: Hm.
>
> DK: So, do you think or what do you think can be done to overcome this gap?
>
> No.4: Well, I think we have to be aware of both aspects. We... sure, we need the money.
>
> DK: Yes.
>
> No.4: But we also need to be better at attracting good money.
>
> DK: Yes.
>
> No.4: From the research councils, which grants original autonomous research. It is easier to get other types of funding from municipalities or regions or whatever. But they tend to dictate the terms in a way that the researcher has a hard time in coping with.
>
> DK: Hm.
>
> No.4: So, we need to attract more types of funds that still avail our independence.
>
> DK: Yes.
>
> Nr.4: But also we need to, as we spoke about before, we need to be better in communicating with those parties that want to steer us. That... well, if you want to dictate the research, you have to go to Ernest & Young instead.
>
> Second interview with interviewee No.4 on 26 November 2011)

The willingness of the universities to function as a 'seller' of knowledge is also fenced by the fear of becoming a 'slave' for auxiliary persons, thereby implying that donors could not only dictate the outcome of research but also avoid any critical responses of, for example, the analysis of a case study. Therefore, such a fear might cause a strong reluctance in the future of being more interested in business connections.

> DK: Okay. Then are there any changes necessary or planned or wished concerning strategic management and leadership within the university and also your department?
>
> No.4: Well, I guess from my point of view you could wish for a management from above that is more literate in terms of sport education and sport research. The discussion we see right now is that the university wants to invest more in sports is of course welcomed, but their view about what sports is, is naive.[thick description]
>
> DK: Okay.
>
> No.4: They are educated people that like to see sports on TV, but that is not the same as having a profession in the areas of sport science education and sport science research
>
> DK: That is not the same.
>
> No.4: What they think investing in sport means and what we think investing in sport means is a completely different issue.
>
> DK: Okay.
>
> No.4: So, I would wish for that the university management would take sports as seriously as they take physics or mathematical education. But right now you see a lot of science that will [say] sport is fun, sport is good, sport is a way of attracting new students. But that is not our reason for interest in sport.
>
> Fourth interview with interviewee No.4 on 19 January 2011

This last discourse line offers another criticism found within this study, namely, diverse opinions of what the own-research field actually means. This thick description by interviewee No.4 regarding the understanding of sport sciences within a university can also hinder possible business approaches by single departments if the university senate has a different opinion about what sport in that particular case actually implies. If the universities are willing but a mutual understanding between the leading boards and the departments or faculties is missing completely, or at least in parts, a change of direction such as an orientation towards business is rather difficult and causes a search for an institutional identity (Olsen, 2007). The setting here, applying Yläranta's theory of KIO, needs to be adjusted towards the core elements, as depicted below.

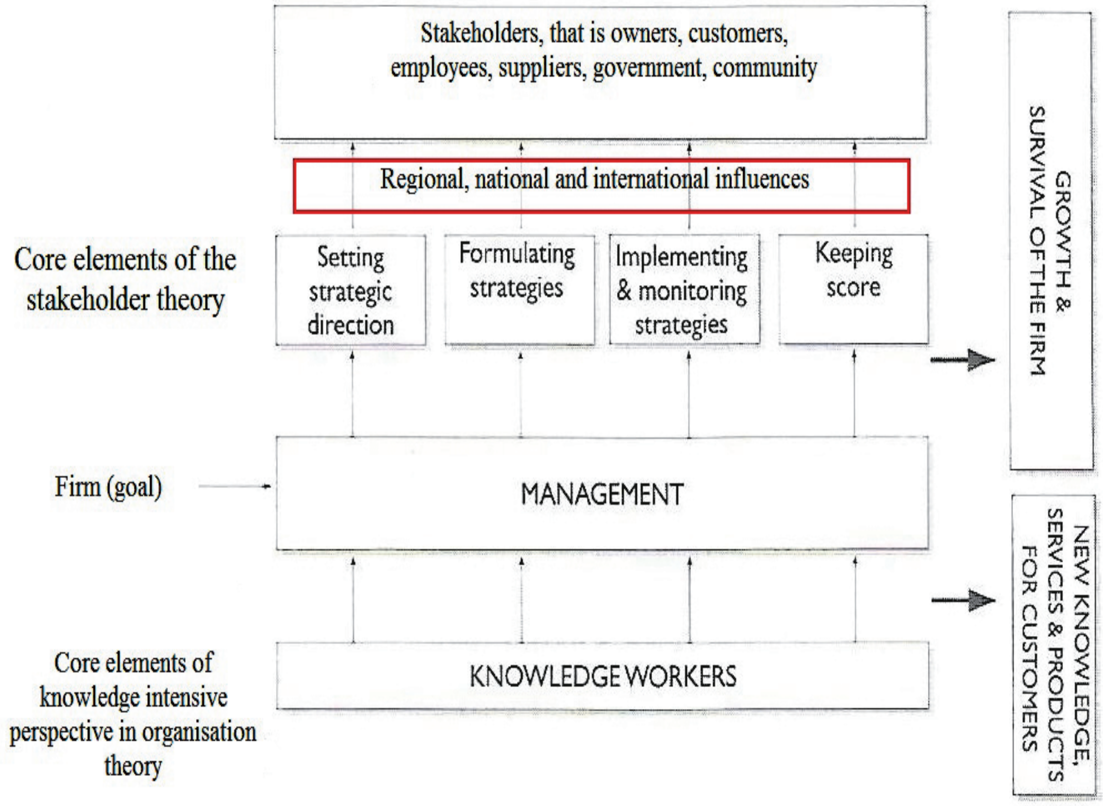


FIGURE 21 Core elements of KIO. Adapted and modified from Yläranta (2006)

7.4.3 Specialisation in the field of knowledge

The willingness to be a seller of knowledge (complementary to the ideas of KIO and KIBS) can also be dependent on the ability to specialise. Research offers from the state, private firms, organisations, or persons as well as from the third sector are usually dependent on the university's connections and skills in a specific area. Based on how much money of the available annual share can be used for improvements, this might determine a university's future position in a certain sector.

> DK: So, do you think in order to... for the university to go more towards business orientation, do you think there is a need specialise within special research fields your university has to offer?
>
> No.7: Yes, yes. I would agree, but... Okay, one of the peculiarities of this university is that we have this specialisation has a sports university.
>
> DK: Yes. No, I mean in terms of sport itself. But within your department that you say "alright, we focus on two or three special issues and the other issues have to, well, have to stay behind, because otherwise we are not able to offer the same as a university in let's say England or wherever."

No.7: Hm.

DK: And if you want to attract any investors, or if you want to compete and to attract private market or whatever, to get some revenues, do you think further specialisation might be necessary?

No.7: Yes, in general it is necessary. To show a well-shaped profile, to have some areas of specialisation.

DK: Yes.

This approach within the first part of this discourse line by interviewee No.7 has already been formulated by Scott (2006): "Typical active sites of knowledge-accumulation in the creative field are the individual worker, the firm, or the sector; other sites are represented by specialised institutions such as schools and universities, research laboratories, labour unions, or trade associations" (Scott, 2006, p. 74). It shows that the universities, faculties, and departments need to focus on their expertise in order to gain market shares, which can be adapted to special features such as sport facilities.

No.7: But I think again this university has some peculiarities and we have a lot of chairs in different fields of sport sciences, like psychology.

DK: I know.

No.7: And I think the... if you look at the picture of this university as a whole then perhaps we can manage it much better than other universities to have a broad approach to the field of sports.

DK: Okay. So, do you think due to diversity of the university, due to the many research fields you have, there is no special need of specialisation in... Well, or to [go] too much into one field? So, that the broad approach is the better one in this university?

No.7: No, no. Do not understand me wrong. What I mean [is] we also need a specialisation as every university needs.[repeating and clarifying his opinion]

DK: Yes.

No.7: But what I mean is that the specification at this university is that we are, due to our size, we are able to multiply the specialisation in each field.

First interview with interviewee No.7 on 29 June 2010

The longer second section of this particular discourse line shows that the GSU separates itself from the counterparts in this study, JYU and UU, with regard to the fields of sport. Due to the sheer size and the position of a sports university, the diversity able to be shown and produced is much larger than in Finland or Sweden. Multiplicator effects by having specialised research groups to strengthen the opportunities at GSU are a strong asset to have and give the GSU the possibility of becoming a strong brand in sports business. Such a focus can work out very well as Varga and Parag (2009) claimed: "Increasing specialisation and competition in research as well as the rapid development of technologies that ease sustaining and expanding linkages among scientists over large geographical distances make it both possible and inevitable that collaboration among researchers working in different institutions has become a key to high level research productivity" (Varga & Parag, 2009, p. 138). Therefore, this aspect has to be noted while discussing the universities' abilities of functioning like knowledge intensive organisations with an interest of providing business services (Yläranta, 2006; Mukkala, 2011). Interview No.4 repeated this viewpoint in the next interview, as is evident in the selected discourse line below:

> DK: Okay. Need of a stronger orientation towards stakeholder's interests versus no tradition in stakeholder management.
>
> No.4: My personal opinion is that we should try to stay free from stakeholders as much as we can. Even if we try to keep arm length towards stakeholders, they would always a say in what we do. We always have to relate our work to industry, to the general public, to the students, to whoever pays our research. So, on the other hand, we need to try to, as much as we can, stay autonomous.
>
> DK: Hm.
>
> No.4: I think that is important. So, that we do not end up being someone's...
>
> DK: Slave.
>
> No.4: Yes.
>
> DK: Although, maybe I am mistaken, but did you not say in one of the last interviews that a stronger orientation towards stakeholder management might be necessary in order to be more competitive?[Asking for the possibility of reversing former opinions]
>
> No.4: Yes, sure. But still, it is so rather small money we are talking about. Even if we can make a deal with a Västerbottens Idrottsförbund or Umeå Kommun.
>
> DK: Or whatever.
>
> No.4: And please them with what we do, it is small money.
>
> Third interview with interviewee No.4 on 24 August 2011

Academic entrepreneurship (AE) can and must be criticised as well. Based on Franzoni and Lissoni (2009), it can be suggested "that scientific advancements which are susceptible of practical applications do not merely drop from above, but are elicited and made possible by the latter, whose autonomous progress poses challenging research questions, produces data, allows for new experimental settings, and creates scientific instruments" (p. 165). Therefore, a stronger orientation towards stakeholder management must be implemented carefully by acknowledging the potential triangle between state, market, and academic oligarchy of strong university clusters.

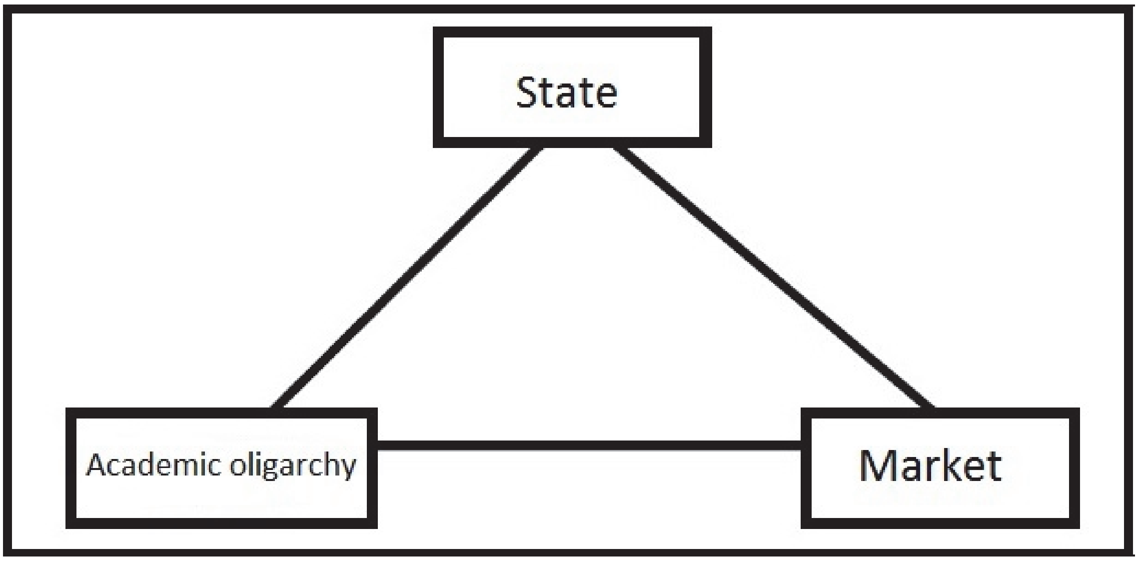


FIGURE 22 Potential oligopoly. Adapted and modified from Jesse (2007)

7.5 The general role of sport facilities for universities

- *5) What kind of role do sport facilities play in general for the university?*

After analysing the basic requirements for a potential business orientation of the universities, the fifth research question attempts to identify whether such a step is possible through the sport facilities of the JYU, UU, and GSU. Therefore, it is important to analyse the general role of these facilities for the universities.

7.5.1 Sport facilities, potential investors, and students

The first sub-chapter concentrates on the sport facilities itself, the potential people, organisations, and firms willing to invest in these facilities and also on the major users, the students.

> No.1: Yes. So, in that sense, you know, deciding on which sort of facilities are sort of [a] key in terms of operations of the university...
>
> DK: Yes.
>
> No.1: ...that is obviously related to the whole management and leadership and strategy of the… [thinking]

DK: Strategic planning.

No.1: Yes, of the university.

DK: Foresight.

No.1: Yes. So, in that sense it is sort of judged that, you know, let's say sport facilities are something that we could do without...

DK: Yes.

No.1: ...you know, I do not know if that is realistic or not.

DK: No, I do not think so.

No.1: Probably not, but, you know, trying to find a way of, maybe, you know, creating a joint venture. [unsure?]

DK: Hm.

No.1: So, that these facilities would be managed more efficiently and the usage rate would be as high as possible, so that, you know, the private investors might get some payback from that. So, in that sense, yes obviously, it relates to the whole management and leadership of the organisation, of the university.

First interview with interviewee No.1 on 2 June 2010

This discourse line has a conjunction with the one stated during the next interview session with interviewee No.1, as it shows the role of sport facilities for JYU and their significance, respectively, local value in general. This can be exemplified by adopting the approach of Rocha (2004) into account, who argued that "entrepreneurship is the creation of new organisations; cluster is a geographically proximate group of firms and associated institutions in related industries, linked by economic and social interdependences; and development is the expansion of capabilities rather than the increase in output" (Rocha, 2004, p. 541).

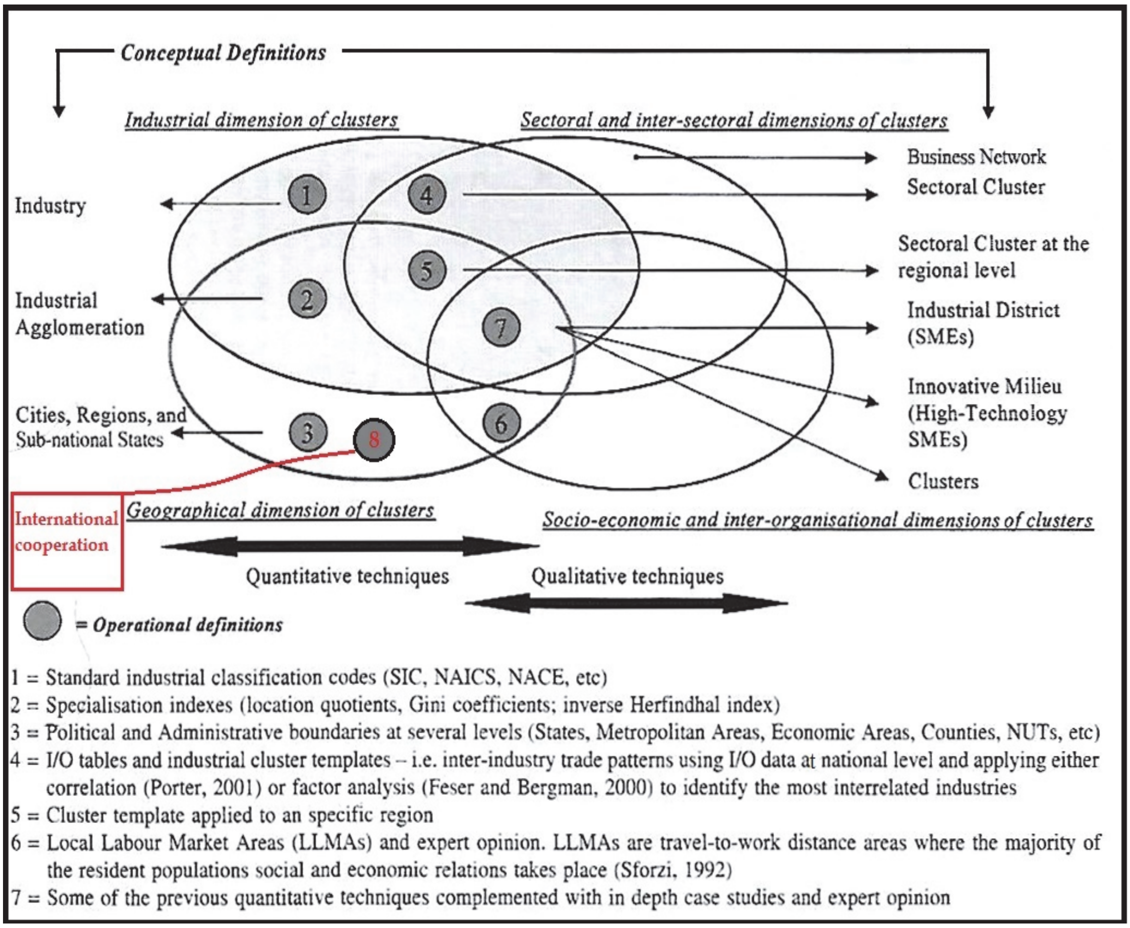


FIGURE 23 The role of cluster. Adapted and modified from Rocha (2004)

Small and medium sized enterprises (SME) can lead to high-technology agglomerations in which universities also might be able to participate within clusters and synergies, for example, through *Hippos* or *Sportpark Müngersdorf*.

Based on the quoted discourses, it is evident that the sport facilities of the GSU are essential for the students but doubtful for other purposes. It remains to be questioned whether economic value is feasible through research and, thus, whether there is an ability of combining knowledge output with entrepreneurship. Wennekers and Thurik (1999) argued that "essentially, entrepreneurship is a behavioural characteristic of persons" (Wennekers & Thurik, 1999, p. 23). However, innovation and autonomous role are of high importance based on the outcome of the interviews.

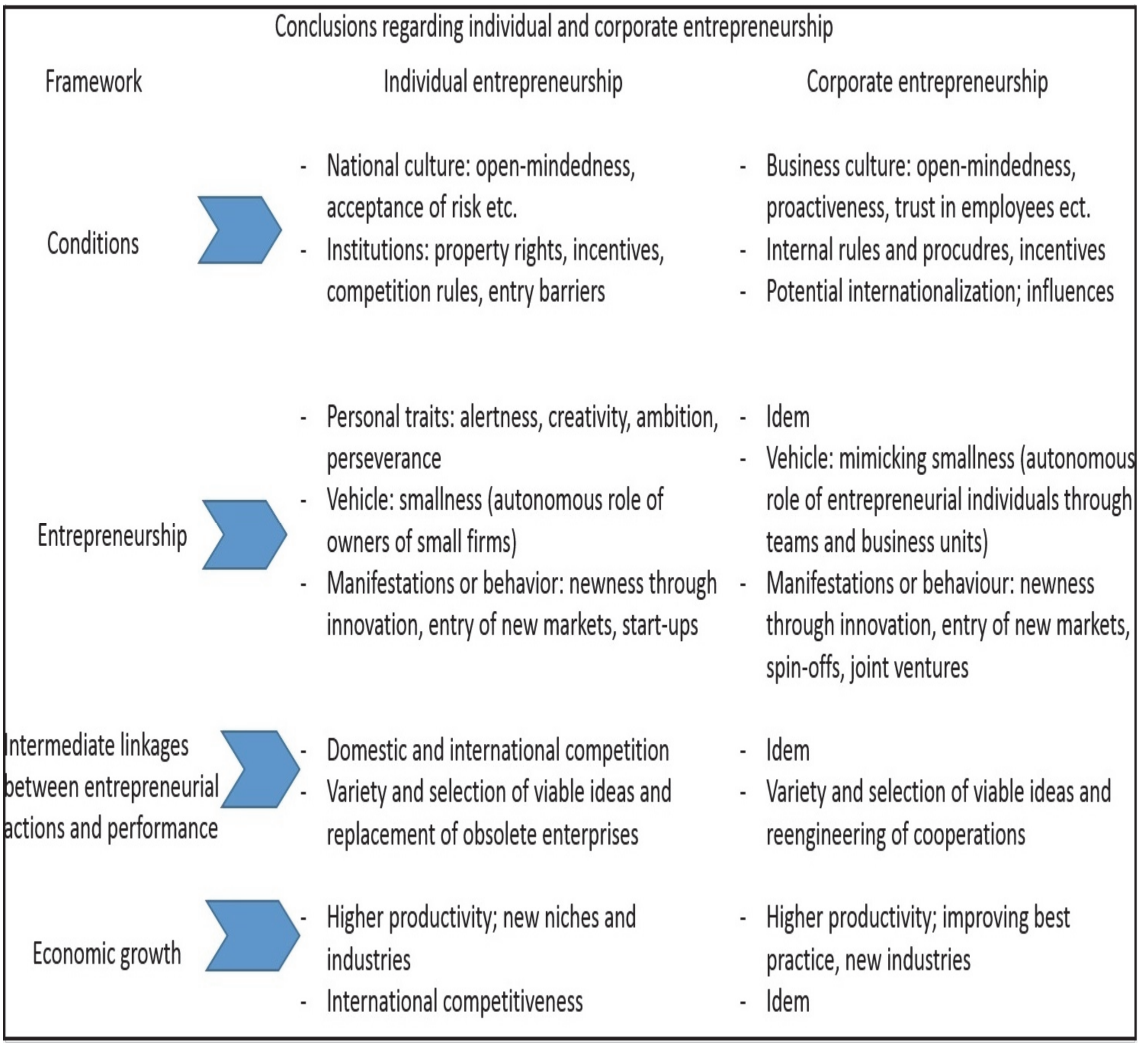


FIGURE 24 Conclusions in individual and corporate entrepreneurship. Adapted and modified from Wennekers & Thurik (1999)

Therefore, the general role of sport facilities is, at the end of the research period, seen as a tool to perform the basic tasks of a university, namely research in teaching.

> No.1: Yes, that is something. And also, you know, the property taxes, the municipality taxes have been increasing. And I would say that, at least for central Finland and Jyväskylä, I do not see many possibilities for increases in municipality tax anymore.
>
> DK: Hm.
>
> No.1: Because I think Jyväskylä is one of the most expensive [cities] in terms of taxation already in Finland.
>
> DK: Hm.
>
> No.1: So, you know, if that would go up even from the current situation that might get people thinking what is the point?

DK: Hm.

No.1: So, in that sense I do not see any major room for tax increases at least. And if that were to happen the money would go more pressing issues than sport facilities.

DK: Of course.

No.1: So, in that sense I do not see that tax rises would benefit the situation in sport facilities.[distinctive pattern]

Second interview with interviewee No.1 on 9 December 2010

The role of sport facilities here is not disputed, but it is arguable whether they have any significance for the strategies of the university (including the sports faculty) outside of the main users, namely the students. Interviewee No.1 criticized the value of those as he questioned the amount of potential free money going into sport facilities, eventually reducing their importance to premises mainly used for teaching and the students. It is necessary to see the usage of the sport facilities in the context of the overall direction of university operations and dynamics based on their ability, willingness, and potential. Olsen (2007) claimed that "in the market-vision, change is governed by competitive selection and the survival of the fittest, that is, those best able and willing to adapt market imperatives and incentives" (Olsen, 2007, p. 33). However, it is highly disputable how far universities can and want to go, as this would lead to a subordination of any other goals of the institution. The potential directions adapted from Olsen (2007) are depicted below:

Four visions of university organization and governance		
***Autonomy*:** ***Conflict*:**	University operations and dynamics are governed by *internal* factors	University operations and dynamics are governed by *environmental* factors
Fear of becoming a `slave` of the donor or the governing body Actors have *shared* norms and objectives	***The University is a rule-governed community of scholars*** *Constitutive logic*: Identity based on free inquiry, truth finding, rationality and expertise. *Criteria of assessment*: Scientific quality. *Reasons for autonomy*: Constitutive principle of the University as an institution: authority to the best qualified. *Change*: Driven by the internal dynamics of science. Slow reinterpretation of institutional identity. Rapid and radical change only with performance crises.	**The university is an instrument for national political agendas** *Constitutive logic*: Administrative: Implementing predetermined political objectives. *Criteria of assessment*: Effective and efficient achievement of national purposes. *Reasons for autonomy*: Delegated and based on relative efficiency. *Change*: Political decisions, priorities, designs as a function of elections, coalition formation and breakdowns and changing political leadership.
Actors have *conflicting* norms and objectives	***The University is a representative democracy*** *Constitutive logic*: Interest representation, elections, bargaining, and majority decisions *Criteria of assessment*: Who gets what: Accommodating internal interests. *Reasons for autonomy*: Mixed (work-place democracy, functional competence, *realpolitik*). *Change*: Depends on bargaining and conflict resolution and changes in power, interests, and alliances.	**The university is a service enterprise embedded in competitive markets** *Constitutive logic*: Community service. Part of a system of market exchange and price systems. *Criteria of assessment*: Meeting community demands. Economy, efficiency, flexibility, survival. *Reasons for autonomy*: Responsiveness to 'stakeholders' and external exigencies, survival. *Change*: Competitive selection or rational learning. Entrepreneurship and adaptation to changing circumstances and sovereign customers.

FIGURE 25 Four visions of university organisation and governance. Adapted and modified from Olsen (2007)

No.4: Yes, I guess. I do not remember really how much I told you last time, but maybe this with will be a repetition, but the university together with the local municipality has built this track and field arena above IKSU

DK: Yes.

No.4: And they have also in cooperation tried to attract more sport federations to side their university education for athletes at Umeå University.

DK: Okay.

No.4: And with that comes demands from the sport federation if we are to place our elite athletes, who wants to study of course...

DK: Yes, I mean, what would they do after their career? That is going to be a problem.

No.4: Yes. And if we are to put them end enrol them in Umeå University you need to provide facilities.

DK: Yes.

No.4: So, the latest addition is orienteering I guess.

DK: Hm.

No.4: But for obvious reasons orienteering does not need a specific facility.

DK: Not really.

No.4: But I guess we will see more and more of those kinds of cooperation. We have already one with the ski federation, the floorball federation, the orienteering as I mentioned, and a few more. So, with those contracts that are drawn up between the university, the municipality and the sport federation. There will be more money put into special facilities to provide those coming athletes with possibilities to train and compete at elite levels.

Third interview with interviewee No.4 on 24 August 2011

Interview No.4 considers the role of sport facilities for the university in Umeå to be very important. The interviewee did not reduce the role only for the actual students, but also saw possibilities to use it for other customers and as a business opportunity, which, compared with the 1st and 2nd interview at JYU with interviewee No.1, appears to be a different viewpoint and a potential discrepancy between JYU and UU in terms of the significance of sport facilities. However, the students remain the most important stakeholders of the university. According to Neave and Maassen (2007), "student funding systems become stakeholders in the student, just as students in turn, for the period of their studies, become stakeholders in the University: the former for the repayment of the loans, the latter for that training that will furnish him/her with the operational competencies and skills to ensure 'employability' and thus the permit to repayment of that loan" (Neave & Maassen, 2007, p. 149). This is more evident in US systems, but also more generic in European systems due to the implementation of the Bologna protocol.

> DK: And additionally…. even if not directly… although it is just a small sum, they pay for it and in that sense it is already an income. And could you imagine, if possible to be implemented, the capacities [sport facilities] of GSU, including in the semester holiday, to expand in such a way that this [usage] is possible for all sport halls? Would that be an opportunity to generate income, respectively to extend the operating grade to the utmost or the cost-benefit ratio?
>
> No.8: I do not think so that there is a market for this.
>
> DK: Hm.
>
> No.8: Because when we have semester holidays are for example at the same time holidays in schools, which leads to a problem of clubs would come at the times….[waiting]
>
> DK: True.
>
> No.8: …and the halls we have, those can only be run with a janitor, especially those which have assembly points and afterwards you have to look at the condition of the halls. And the usage times are already by now in the semester holidays at 70 percent. There is no extra space left.
>
> First interview with interviewees No.8 and No.9 on 5 July 2010

In the first interview with interviewees No.8 and No.9, hints were already given about the role of the sport facilities for the GSU. Not only because of monetary issues, but also due to the high usage rates, any extra bookings for the halls and other facilities seem to be very unlikely, which then led to the assumption that the students are most important as users; at the same time the high rates prove that the sport facilities are significant for the GSU. Based on Goldstein's (2009) assumptions, a stimulation of economic development through universities can be achieved by a) development of human capital (teaching), b) creation of knowledge (research), c) transfer of existing know-how (technical assistance), d) technological innovation, e) capital investment, f) regional leadership and governance, and g) co-production of knowledge infrastructure and creative milieu. Specifically, the last variable is important as this includes sport facilities (in which knowledge can be created) and due to the structure of the portrayed universities the basic infrastructure has potent fundaments.

7.5.2 Sport facilities and their expenses

The aspect of having sport facilities on the campus and using them as a potential business opportunity also needs to focus on the 'producing activity', which can be determined by the invested capital, as depicted in the discourse line below:

> DK: Firstly… premises are completely booked during the semester, almost completely during the holidays, as you said during the first meeting. Do the [halls] have now reached their limit… as you also said you need more sport facilities because of new students. And because of the double year of graduates entering the universities plus the end of the army it will be even more. How can you handle this, how is it doable?
>
> No.8: I think…. theoretically the limit has been reached. Practically, we cannot communicate [this], all courses happen in there. You have the feeling the limit is reached to 100 percent all the time, but is it true? Theoretically, it has been reached. This assumption has also been made, as I said before, that we rented external space for an institute and seminar rooms….
>
> DK: Hm.
>
> No.8: …which are not located on the campus, e.g. Gedelphi-house. Yes, that is the way I think it is.
>
> No.9: And I think in the past there were discussions raised for extending, for instance, the usage times [in sport facilities] for teaching and training purposes.
>
> DK: Hm.

According to Goldstein (2009), the specific usage of facilities can serve as a tool for building up revenue-producing activity. "Universities, whenever they have added to their physical facilities, invest capital in the built environment, which creates economic activity" (Goldstein, 2009, p.16). Therefore, the first part of this discourse line portrays the importance of economic value created through facilities.

> No.9: And this becomes difficult based on the workers as you might have to organise multi-shift working times. For instance, in the swimming halls, there we have two shifts. We are doing this. But if we do that for all other sport facilities… well, for the other sport halls, two shifts?
>
> No.8: They have this as well.
>
> No.9: They also have early and late shift. But going beyond this becomes very, very difficult. Because at some point two shifts are not enough, you have to introduce three shifts. But from where the personnel?
>
> DK: And who should pay for it?

No.9: Yes.

Third interview with interviewees No. 8 and No.9 on 19 July 2011

In the second interview, it became evident again that the major role of the sport facilities for the GSU is usage through the university itself, thereby creating high value, as a sport university needs these facilities to teach, to do research, and to serve the needs of the public (e.g. sport clubs, students, etc.). If the financing of sport facilities is only feasible if there will be profit for the university and at the same time there are still sceptical viewpoints (as for both interviewee No.8 and No.9), the university will remain the major user, taking up most of the available hours; thus, the university will have an important role to play. The cost minimisation leading to allocative efficiency needs to remain in the focus at the GSU and their sport facilities (Salerno, 2007). The manner in which the facilities are used is strongly connected to the human resources. Over 20 years ago, Malecki (1994) stated that "the efficient use of local human resources leads to productivity enhancement for firms as well as for regional economic development" (Malecki, 1994, p. 34). Such a growth could be assumed through facilities as well suppositional appropriate usage.

The importance of the students and, thus, the role of the sport facilities in general, became clear again in the following excerpt of a discourse six months later:

DK: You said during the last time [interview] that if the sport facilities are going to be used in their entirety theoretically you would need to do something [shifts] in the late afternoons or in the evenings. On the other hand, you will not have money for personnel, for janitors, and other things.

No.9: This is one side. Additionally we are not able to guarantee a sufficient coverage of the staff.

DK: Yes.

No.9: This is difficult. Because especially in our university because of money saving decisions… there were over 100 extra hours accumulated in the past etc…. additional personnel is basically impossible these days. And that…. additionally, starting at a certain time, meaning the evening hours, also the attractiveness of usage [of the sport facilities] goes up, but simultaneously the willingness to pay appropriate salaries, becomes less and less.

DK: Yes.

No.9: Who wants to rent a sport hall in the night at 3 am?

DK: Not many. Maybe those are [were the times in the past] the times which … I say… could be named gap times… like early or late evening or something like that. But you have to…. or during the semester holidays.

No.9: The sport facilities are in use even during the semester until 9 pm or something like that I think….

No.8: 10 pm.

No.9: …in use until 10 pm. And going beyond this it will be very difficult to find really potential interests [for our sport facilities].

Fourth interview with interviewees No. 8 and No.9 on 5 January 2012

This discourse line reflects the difficulties of dealing with the expenses of sport facilities and to use these as a revenue stream due to an eventual lack of interest, which might be dependent on a different usage (e.g. through enhanced research in the future, as the next research question will discuss.

7.6 The economic role of sport facilities

- *6) What special kind of role do sport facilities play in the university's economy?*

The sixth research question within this dissertation reflects the potential economic role of sport facilities within the revenue streams of the universities and how these can be used as such in the future. The question is divided into three different parts dealing with business and development, the financial scope, as well as the necessary supply and demand.

7.6.1 Business and development within sport facilities

The first discourse lines presented below attempt to discover the eventual business options, which are also dependent on the frequency of usage as this determines the necessary equipment as well as eventual costs for maintenance and rents.

DK: Of course. And in terms of facility management, if you use... if it is possible to use this as a vehicle? Would you say the possibilities are higher in terms of research to get cooperation or do you think it might also be possible to include, well, any private organisations or clubs or whatever, into the use of sport halls or would you say it is more possible in research stuff?

No.2: I think that we cannot do business with our facilities. That is impossible. I think so. But... but with research and develop...

DK: Development?

No.2: Yes... and innovations... with these we can do [it] sometimes, maybe.

DK: So, do you think the university should go more into business, but within the halls it is quite difficult?

No.2: Yes, yes.

DK: And what do you think are the main, well, obstacles in terms of facility management to go towards business? What are the main problems?

No.2: There are some problems. I do not think we can go towards business with our facilities.

First interview with interviewee No.2 on 31 May 2010

The viewpoint of the facility manager was pretty pessimistic and the interviewee did not change the opinion throughout the interviews, and the successor, the general manager, had a similar opinion. Consequently, it is necessary to strengthen the triangle between research, higher education, and innovation. A similar option was shared by interviewee No.1 who also did not have a positive viewpoint, but only towards the possibility of adopting this business approach with the sport facilities:

DK: And concerning... well, I do not know if you have it, but as I wrote here concerning resource issues of all the halls, facilities and that stuff, do you have any, well, numbers concerning usage, how much you use it or whatever?

No.4: No, there are not such numbers available.

DK: Okay.

No.4: IKSU... well, they have numbers, but they are not very reliable numbers and you... they do not distinguish if they are students or just other citizens. So, first all of all, there is not much data. And secondly, the data available is not very reliable in terms of who they are and what they use.

DK: Yes.

No.4: But that is a common problem in Sweden. I was in Gothenburg yesterday and talked on a convention for sport facilities together with a Danish researcher and a Norwegian researcher. And compared to Denmark and Norway the numbers, the facts, the research in Sweden on sport facilities are really, really bad.

DK: Hm.

No.4: We cannot... we cannot even be close to compare ourselves to Norway and Denmark in terms of which facilities do we have in Sweden, who uses them, do the facilities match the demands and wishes of the people.

DK: Yes.

No.4: We have no such knowledge at all. That is really... [disappointing tone]

Second interview with interviewee No.4 on 26 November 2011

One severe lack in knowing the role of sport facilities for the economy of a university is the lack of analysed data, respectively the implementation of a nationwide system which can locate and register all sport facilities within the country. In Finland, the so-called LIPAS-system is in use, which is based on GIS, providing insight to all sport facilities available, both indoors and outdoors, Sweden has now begun to implement this system as well, which was created by Suomi (2013). In Germany, such a system has not been invented yet. Then, again, the interviews also revealed a sign of disinterest in such a system, as shown in the following discourse line:

DK: So, it is then like interviewee No.4 (anonymised for the transcript) said maybe a general problem of Sweden that in Finland you have all the data nationally and the interviewee said like to me "we do not even have them locally."

No.5: I do not know. If we had those numbers today...

DK: What to do with them?

No.5: ...what would those numbers do to make us happier? I think we are doing a good job now. It will only prove something which is already obvious.[seems uninterested]

Third interview with interviewee No.5 on 24 August 2011

This short discourse also shows the different level of interest in such numbers. While scientists would like to analyse the situation in detail, here it appears that the facility owners are somewhat not so interested in the numbers. It is now debateable how much an analysis of such numbers would support IKSU, but this is also a matter of preferences.

DK: And this money… do you get this or who else?

No.8: No, this goes into the general budget.

DK: Okay. And if I got that right…. for instance money for renovations is taken from there?

No.8: You have to accept that…. [sincere] because we are giving those hours almost exclusively to non-profit organisations, the rents are either not are just equalling the costs.

DK: That means you only reach the black zero.

No.8: Correct. We do not make any surplus.

First interview with interviewees No.8 and No.9 on 5 July 2010

This again shows that within the current system in Germany, the sport halls cannot be used as 'vehicles' for doing business, that is, it is only possible through research. Sport clubs do not have much money, and the ones that do have their own sport facilities. Greis (2014) cited Neuerburg (2010, 7) to show that there is a variety of aspects for doing business with sport facilities, which is also reflected through this research: „A sustainable sport facility management [...] refers to the demand- and target oriented design, construction, governance and development of sport venues with regard to their entire life cycle, under consideration of economic, social and environmental aspects and mainly comprises the phases of need assessment, planning, (re)construction, operation and reuse" (Greis, 2014, pp.31–32).

7.6.2 The financial scope

The financial scope of the sport facilities is derived from the strategic dimensions of their usage and from taking into consideration their future planning capabilities. Such planning can, for example, be changed by changes of the dean of a faculty as well as a change of the university's rector both of which occurred in autumn and winter of 2017 at JYU.

DK: And do you already have people who are, well, experts in, not only in the theoretical ways, but also in the, well, practical fields of that? How to implement, how to establish, well, sports or sports facilities for those people? What they like and what they need?

No.5: We have the competence to...

DK: Hm?

No.5: ...to apply in our buildings. For sure. But then you have to do the market research what they want...

DK: Yes, what they want.

No.5: ...and what they like, of course.

DK: And this is, well, a kind of I would say an upcoming field, it is still a lot of work to do there.

Nor.6: I think it is an upcoming field

No.5: It is one, yes

First interview with interviewees No.5 and No.6 on 7 June 2010

While the structure of IKSU has already been displayed, here its role as a facility provider is revealed. If there is need for special facilities, these can be built and, if applicable, used to serve the economy of the university. This requires a distinctive planning process; a possible option would be the approach of participatory planning (Suomi, 1998). Olsen (2007) concluded that "due to the changing nature of science, some types of research require large-scale facilities and huge budgets. Individual research is replaced by team-work and the disciplinary organisation of knowledge is supplemented with or replaced by cross-disciplinary, application-orientated research and institutes" (Olsen, 2007, p. 31). Thus, as the results in that regard were similar in all three analysed universities, there needs to be an emphasis on collaborative planning by the JYU, UU and GSU. Such a necessary heading is depicted in the figure below:

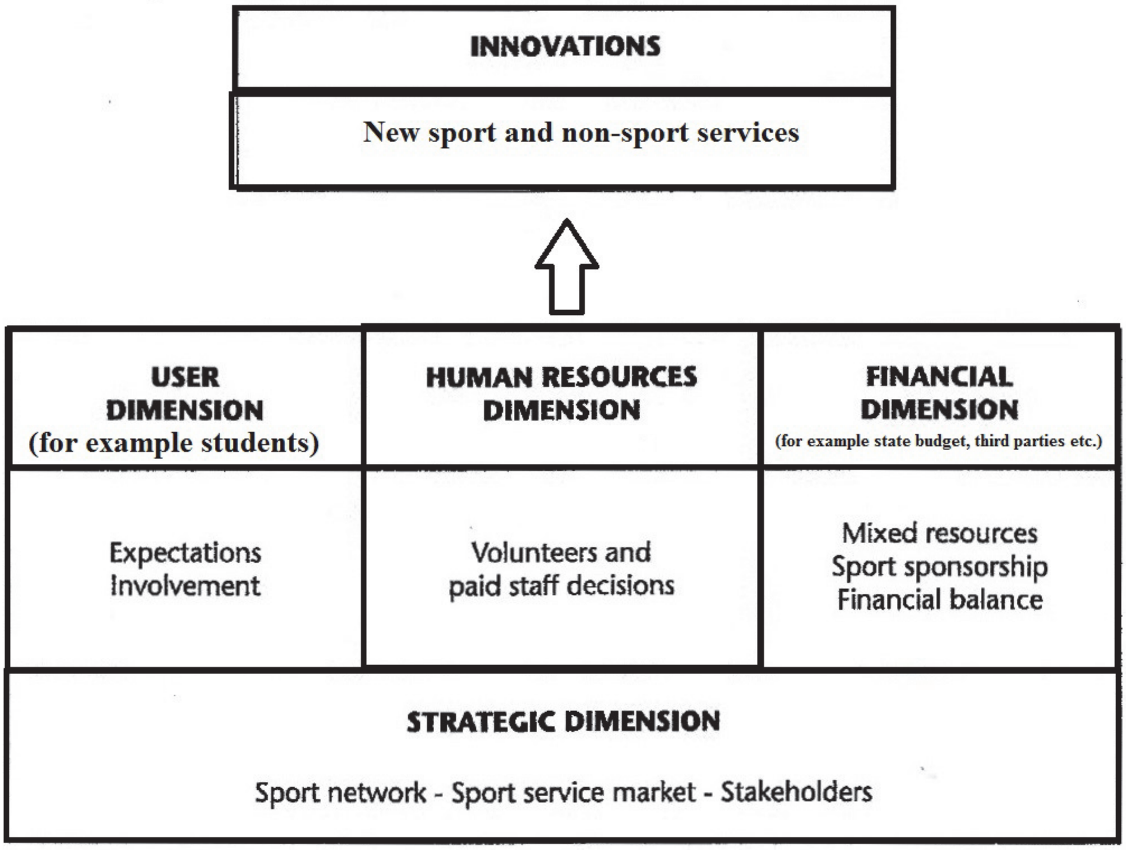


FIGURE 26 Innovation capabilities. Adapted and modified from Ratten and Ferreira (2017)

No.5: But the strategic point is figuring out what to do with those empty hours. So, you do not have to be a brain surgeon to figure out we need it. But we cannot come up with what to be it in order to maximise the usage rate in all facilities.

DK: Hm.

No.5: And when it comes to the university, they rent a lot of facilities, but they as well do not maximise their usage. They rent this much facilities from us, but they do not maximise it. They just have it.

DK: Hm.

No.5: So that they can use it. So, I think both the university and we have maybe the same problem. They do not either know how to maximise their usage. So, they have to rent in just in case...

DK: Hm.

No.5: ...they might need. So, it is not a problem for us, but of course we would be more strategically aware if we had the statistics.

DK: And all of them analysed.

No.5: Yes.

Third interview with interviewee No.5 on 24 August 2011

Strategic planning, as to be interpreted in this discourse line, is an important factor in university performance. However, this is strongly connected to the ability of innovation. As Wright et al. (2007) claimed, Europe performs well in science, but badly in innovation. Therefore, it is necessary to analyse the potential of the universities as well. This is strongly connected to the potential of strategic operations, as Jablecka (2012) argued; this influences the potential economic decision towards sport facility management. This is also then an area of interest on how the decision-making boards (e.g. university senate) are interested in using different tools as revenue streams, which also includes potential sport facilities.

Characteristics of a world-class university, as a goal-orientated strategy of higher education institutions applied to improve their positions

Potential (strategic options)

- Creating opportunities to attract the most talented students
- Creating opportunities to keep on top academic staff
- Creating opportunities for students and staff recruitment in the international market
- Creating opportunities to attract staff and students at higher levels of education and research
- Striving for a collection of considerably high resources
- Acquisition of large funds and the development of own capital (endowment) => *Business-minded approach*
- Diversity of funding sources: state appropriations, private sector companies, research revenues and fees paid by foreign students => *(might interfere with EU-law)*
- Creation of excellent conditions (infrastructure, buildings, campus) for education and research and for staff and students alike
- Acquisition of superior managers with a strategic vision and plans for its implementation

Strategic areas, the strategy

- Identifying and building strengths on research, outstanding reputation and focus on the leading (top) items
- Effects on the global market in many areas of activity, participation in global scientific networks, staff and student exchange, inviting staff of international position to work at a given university
- Constant comparison with leading universities and departments in the world
- Faith in the achievement of own objectives
- Creation of a number of world-class institutes and faculties – though not necessarily all
- Employment of a number of leading researchers - world leaders - in a given field

Direct results

- Implementation of research and getting extraordinary results recognised by academic experts and award-winning ones (including the Nobel Prize)
- Production of graduates, who will occupy positions of power and the highest influential positions in politics (prime ministers and presidents)

A further effect

- Obtaining an international research reputation
- Obtaining the international reputation for top education process
- Recognition not only by other leading academic centres, but also an excellent reputation in environments outside higher education institutions
- Significant and contemporary times

FIGURE 27 Characteristics of a world-class university, as a goal orientated strategy of higher education institutions applied to improve their position. Adapted and modified from Jablecka (2012)

DK: Hm, and renting [the facilities] to externals, is this your business and handled by the office for real estates?

No.8: No, via the GSU. That means the blocking of shifts for the term is done by the students' office. And afterwards a specific setting for the leftovers the halls and rooms are given and rented. Of course, there are also hours blocked in which we have to make repairs and reconstructions. The pecking order is No. 1 studies, No. 2 teaching, and research and No. 3 is for students if they want to train. There are more numbers afterwards and at some point you reach those where you have to pay.

DK: And regarding those where you have to pay, which groups are affected? Clubs for instance and others?

No.9: Externals have to pay anyway.

No.8: Yes.

First interview with interviewees No.8 and No.9 on 5 July 2010

From this excerpt, it becomes evident that the abilities of the universities to use their facilities for business or knowledge production are dependent on their grade of importance, which can in return limit the other user groups. Goldstein (2009) argued that the best measure for new knowledge is annual amount of expenditure in research. Olsen and Massen (2007) found that "in particular, Europe's capacity to compete in the global "knowledge economy" is seen to be affected negatively by the perceived incapability of her universities to meet the fast-growing demand for higher-level skills and competencies, and research-based commercial technologies" (Olsen & Maassen, 2007, p. 3).

No.4: So, and that is all part of the modernisation agenda. I guess that the whole society and especially the municipalities they want to maximise usage and thereby maximise efficiency.

DK: Hm. And about your department here, what do you think? What is going on here?

No.4: Well, as I said earlier there is not really much we can do. We have even, if we pay a lot of rent to Akademiska Hus for our offices and facilities at IKSU, we have favourable contracts. We do not pay market prices. If anyone else should rent the facilities we rent, they would pay more. So, I guess it is not really much we can do about that situation.

Fourth interview with interviewee No.4 on 19 January 2012

This last interview shows the advantage UU possesses with the existence of IKSU, but also of AH. Whilst AH has a monopoly, and during the interview this status was also criticized several times; the advantage of having cheap prices for sport facilities offers the opportunity of reinvesting the saved monies elsewhere. Since the 1990s, ongoing public debate on which role the universities should play in the society and how dependent they should be on other institutions than the state, which is also linked to the reduction in public research funding (Wright et al., 2007). However, Howard and Crompton (2014) argued that such an approach should also benefit the local residents.

7.6.3 The supply and demand of sport facilities

This last section argues the demand of sport facilities demanded by the users and which approach is used to run the facilities, for example, through a cost-effective one.

> No.7: I think first of all that there is no structural need. [For] long time there was no...
>
> DK: Ah, no one asked for it?
>
> No.7: ...no structural need. But I also guess that there... we have different cultures in the departments.
>
> DK: Okay.
>
> No.7: So, in the facility management department... So, I have not analysed that in a scientific way, but I would guess, as far as I know the people working there, I would guess that we have [a] much more engineering orientated culture in the facility management. Also a more cost orientated culture. And okay, a typical marketing orientated culture in the marketing department and these...
>
> DK: Ah, okay. And in the marketing department they lack some experts concerning, well, cost-benefit equitation and stuff and in the facility department they lack some people who have knowledge about marketing?
>
> No.7: Yes, but moreover, it is not only a question of the knowledge, it is really a question of culture, how do they think. And I guess in the facility management department they think that the facilities are proper, clean, are in a good shape in technical sense...
>
> First interview with interviewee No.7 on 2 June 2010

The role of the sport facilities is also dependent on the connection within the various departments in-house and how their approaches towards management. As interviewee No.7 showed, there are various approaches, for example, cost-orientation, avoiding too many risks, and attempting to save monies wherever this is possible. Although a successful business orientation can only be fulfilled if the departments agree on one mutual direction. Such an orientation needs to be analysed carefully to judge the performance accordingly, as Salerno (2007) explained: “Cost escalation coupled with institutions’ inability to clearly demonstrate the value of their services has done much to erode the public’s trust (Ehrenberg, 2000; Cole et al., 1994; Massy & Zemsky, 1994) and prompted unprecedented efforts to regulate or monitor universities’ performance” (Salerno, 2007, p. 119). In the same interview, interviewee No.7 criticised the possibilities to do so in the excerpted discourse line below:

No.7: But even if the state saves money and the university has to look for other revenue streams or for increasing other revenue streams, then my position would be that there would be other possible revenue streams which could be increased much more likely than the revenue streams coming from the facilities.

DK: Ok.

No.7: Yes, I think what an idea could be is to... that an agency for example would be responsible for coordinating supply and demands of the facilities.

DK: Yes.

No.7: That means, as another field here, the university sells the free slots to an agency and the agency is market-driven....

DK: Yes.

No.7: ...and is looking what could be the best...

DK: Buyer for the university.

First interview with interviewee No.7 on 2 June 2010

The idea of using facilities as a potential revenue stream faces problems such as eventually not creating enough money. Other revenue streams which might be more successful here could be human capital, for example, the annual output of students or achieved awards as Goldstein found prior to this study: "The best measures for university activity in creating human capital are the number of degrees awarded annually, disaggregated by discipline and by type of degree, but only for those graduates who remain in the regional labour market" (Goldstein, 2009, p.17–18).

No.1: Yes. So, in that sense, you know, deciding on which sort of facilities are sort of [a] key in terms of operations of the university...

DK: Yes.

No.1: ...that is obviously related to the whole management and leadership and strategy of the...

DK: Strategic planning.

No.1: Yes, of the university.

DK: Foresight.

No.1: Yes. So, in that sense it is sort of judged that, you know, let's say sport facilities are something that we could do without...

DK: Yes.

No.1: ...you know, I do not know if that is realistic or not.

First interview with interviewee No.1 on 2 June 2010

Strategic planning is, as visible in this discourse line, the most concerning issue. In case of an entrepreneurial approach based on Sarasvathy's (2008) studies, by using effectual logic, it remains to be seen whether universities can act as such by learning to do so over time. The necessity for growth can determine how much the university is able and willing to invest in the facilities.

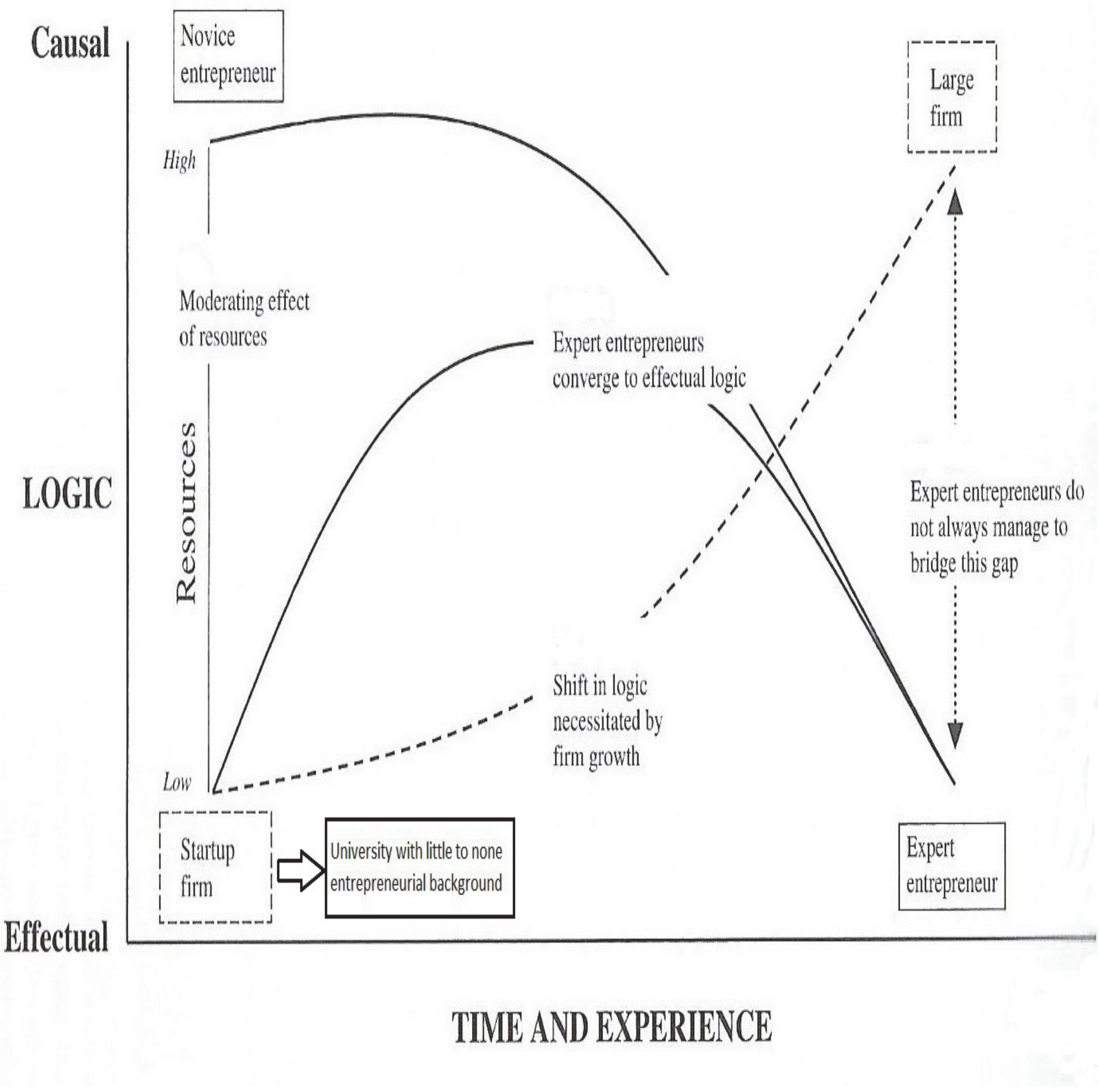


FIGURE 28 Performance implications of causal and effectual logics over the career and life-cycle of a firm. Adapted and modified from Sarasvathy (2008)

DK: Okay, then usage control, efficiency and maximizing quality? Checking availabilities. What do you think? And changes there, planned or wished?

No.4: Yes, I guess if you look at the whole municipality of Umeå the doctoral project I was talking about is, the initiative to it is taken by Umeå municipality and Umeå Fritid, which has started to monitor the usage of the sport facilities in the whole of Umeå. They have a digital system of over 14 activities where sport clubs report all activities, all participants, and all leaders digitally.

DK: Hm.

No.4: And what Umeå municipality wants to do is to do research on those data, to control the usage, to see who uses that facility at what time? How far has that kid travelled to do that soccer practise and all that.

DK: Yes

Fourth interview with interviewee No.4 on 19 January 2012

Maximising quality is also dependent on the ability to know about the own strengths and potential. As Acs and Varga (2005) stated: "The uncertainty inherent in new economic knowledge, combined with asymmetries between the agent possessing that knowledge and the decision making of the incumbent organisation with respect to its expected value potentially leads to a gap between the valuations of knowledge" (Acs & Varga, 2005, p. 423). Thus, due to an eventual lack of experience or interest in the KIO and KIBS theories, these effects might not be exploited as much as possible. However, it remains questionable at what costs KIO and KIBS can be exploited to the utmost.

No.7: Yes, yes. For example... but if that would take place on the other hand the university would run into the danger that the agency makes something out of the resources which could be not so good in the mind of a lot of stakeholders.

DK: Yes.

No.7: So, the question is... so, if they maximise profit, that does not necessarily mean that they also maximise legitimacy.[thick description]

DK: Yes, yes.

No.7: And... so, the question is what is of higher importance for the university. And at the very last end perhaps legitimacy could be of more importance to secure a financial stability or viability.

First interview with interviewee No.7 on 2 June 2010

This thick description of the status of the facilities also touches the point of what is ethically acceptable. This includes the treatment the universities can receive from their stakeholders, as Olsen (2007) argued: "…an instrument for external 'stakeholders' and 'customers' treating the university as a service enterprise embedded in competitive markets" (Olsen, 2007, p.29). While the interests of the stakeholders are important, it is unsure how far the universities are willing to go, creating another dilemma: Where does the need for profit ends and how much do you need to make? Another ‘limit’ of business orientation was given one month later in the first interview with the real estate managers of the GSU:

> DK: Okay. Then do you think, okay that is a statement of the people from Sweden and Finland, do you think that business with the facilities is only possible in case of research and development? So, halls are difficult and research might be the only option available for the university in order to get another revenue stream.
>
> No.7: Hmm, difficult to answer. [laughing]
>
> DK: Sorry.
>
> No.7: It depends I think very much on the market. For example in Cologne there are a lot of sport organizers seeking for space.
>
> DK: Yes.
>
> No.7: To organize sport programmes. And typically these are clubs or sometimes the adult education centre or sometimes commercial sport providers. But... so, it depends on the environment of the university. For example, if the municipality of Cologne would not offer any sports facilities it would be the perfect market for us.
>
> 2nd interview with interviewee No.7 on 20 December 2010)

Here, again, the difference in the opportunities of the JYU, UU, and GSU becomes obvious. Due to the location of GSU within a metropolitan region like Cologne, the business opportunities are somewhat different than in Central Finland or in South Westrobothnian. Nevertheless, universities can help to increase regional productivity based on knowledge spillovers, but this is also dependent on the regional structures and contingent conditions. In addition, larger regions have more potential partners and are also more diverse (Goldstein, 2009).

> No.7: I mean, it is a question of priorities. As I said before, first and foremost comes research and teaching and then if you have enough facilities available you can put it on the market, so...
>
> DK: But in which factor or in which part especially would you say was a lack in strategic management, as you said last time there was?
>
> No.7: In the moment I do not remember exactly what I said last time [laughing], but that... yes, it is often... this university has a lot of other organisations only operating in daily business and so it is a little bit difficult to think strategically. To build up a vision and follow the objectives...
>
> DK: Yes.

No.7: ...of such a vision and such a mission of the university. And especially in this connection I do not see which role... or I do not see a strategy where the facilities of this university are included. For example, at the moment we are working at a strategy for information technology.

DK: Okay.

No.7: So, this is also part of the infrastructure, but there is a strong link to strategy. And I do not see this strategy with...

DK: Facilities?

No.7: Yes, facilities.

Third interview with interviewee No.7 on 19 July 2011

The idea of having the sport facilities within the economy of a university also depends highly on the current marketing strategy, that is, the management of the university. For interviewee No.7, such an approach with the facilities only would not work at the GSU, thereby leading to the conclusion that again research within specific facilities is the only way of generating money through those. Examples here are the project Hippos 2020 at JYU or the new IOC doping laboratory at GSU. According to Anselin, Varga, and Acs (2004), "an important aspect of studies of technological innovation at the regional scale is the role of spatial interaction and spatial structure, as expressed in the form of organisational networks of innovators, regional innovation complexes and regional knowledge infrastructure. Universities play a central role in this process, not only as producers of basic research, but also by creating human capital in the form of higher skilled labour" (Anselin, Varga, & Acs, 2004, p. 392). Therefore, the use of facilities for creating new knowledge infrastructure and, thus, potential revenue streams must be followed.

7.7 Possible economic surplus through research or teaching

- *7) Is it more suitable to use sport facilities for research or teaching issues in terms of a business strategy?*

The next research question argues whether the major revenue stream through sport facilities should be based on research or teaching. While the latter can only collect money through either tuition fees or higher subsidies by the state for a grown number of students, research within sport facilities attempts to increase the number of buyers of knowledge produced within this field, for example, through laboratories.

7.7.1 The option of research as a business tool for sport facilities

The first section of this research questions attempts to compare the different viewpoints on research of the interviewees and how research in sport facilities can produce or even increase a steady income.

> DK: Then... by the way, before going to the next question, would you say that this more marketing driven approach, I mean, we will talk about later again, but would you say that not many people would be happy with it? I mean, I know how the people are thinking here, at least a bit. You have this striving for autonomy and nothing with market-based, at least in universities. There is still some hesitance like well, we have never done it before and we do not want to have any inclusion of third parties or whatever. You know what I mean?
>
> No.1: I really do not see it that way. Now that we have a... the new board with...
>
> DK: From the whole university?
>
> No.1: Yes. Where there are a number of business people involved, I think.
>
> DK: Ah okay.
>
> No.1: You know, they have a broader perspective on this. And I think what the aim should be basically, is that if we can save in facility costs by using sort of the market mechanisms. Sort of going out and trying to find the best suitable facilities at the lowest price.
>
> Third interview with interviewee No.1 on 8 September 2011

The possibility of using research as a business tool depends on the knowledge of market mechanisms, which includes many potential obstacles such as the inability to attract initial funding from investors, lack of suitable facilities (e.g. equipment), or the lack of suitable personnel. Within new firms, this is particularly severe as Wright et al. (2007) argued, as spin-offs of joint ventures usually lack financial and human capital (managerial) resources to fully exploit commercial possibilities (see Appendix Figure 10). Therefore, this can be seen as a potential threat for universities within the development phase of a business orientation, in which sport facilities would lack better equipment for scientific research to exploit the potential business options. These traits could occur at *Hippos*, *Sportpark Müngersdorf*, or in the IKSU area.

> No.4: That is the key issue concerning research. And we need... if we talk about linking research to the knowledge in the sport facility sector, we need funding from municipalities, from Riksidrottsverbundet, from the state, from the parties interested or they should be interested in the facility issues.
>
> DK: Hm.

No.4: But judging by what we know today, there are no or very small interest from these parties. Me and a colleague from Stockholm, (anonymised for the transcript), are writing a contract soon with Riksidrottsverbundet on a research project concerning these large event arenas. But it is a very small grant...

DK: Yes.

No.4: ...and him and me are the only people almost doing research on sport facilities in Sweden. And there is a great need of more... both research, but also just basic facts about the types of facilities we need and all that.

Second interview with interviewee No.4 on 26 November 2011

In this discourse line, interviewee No.4 reveals another issue which causes problems before it is even possible to occasionally think of determining the business strategy for sport facilities. Initially, there is the need for monies to do research; moreover, without a solid budget, all other issues regarding business plans are secondary. Based on his assumptions, the interest among donors to fund such research also is very low. Acs (2009) argued that "to collaborate with universities in applied research, firms tend to choose local academic institutions whereas basic research collaboration can be carried out over larger distances" (Acs, 2009, p. 40). Such a tendency by firms could cause opportunity for collaboration, particularly in the regional sector, as interviewee No.7 also reflects in the discourse line below:

DK: Yes.

No.7: We have the classical accounting system of a public administration and we try to change somewhat, to move to a more market-orientated system, which is used in enterprises.

DK: Yes.

No.7: And if we come to that system, then we know what the value is, the financial value of our resources and especially of our infrastructures and perhaps that can also change the minds of the deciders here in the universities, that they see... So, I guess that most people do not see the value of the facilities, because it is not written in the books and perhaps, if we come to another accounting system we have to write down precisely what the current value of is... not only of the sport facilities, but also of the seminar rooms, lecture halls and so on.

First interview with No.7 on 29 June 2010

One week later, in the first interview session, the facility managers of the GSU provided another way of thinking of how money is hidden in their sport facilities:

No.8: Yes, and there are also… if there are single events our unit takes care of the booking. If the numbers are booked by bigger groups, e.g. apparatus gymnastics team Toyota Cologne [first division team] there are special contracts made with our marketing staff, which either calculate with sponsoring deals or a certain amount of money will be transferred. And for the latter I do not know the sum. This is going via the marketing people. It [the space] will just be provided. Marketing [group] knows if that is valuable enough for the GSU.

DK: Yes.

No.8: There are also politically supported events. Such as the Gay Games which are about to come.

DK: Yes.

No.8: Those will of course be for free. Firstly, the GSU participates from the brand, GSU and Gay Games… [interrupting]

DK: Of course.

No.8:…and secondly it is political will, which was made somewhere and all were told "alright, let's get this done…"

DK: Of course, especially this will…. alright, we can talk about it later specifically. It is the same with the Gay Games, to use the name for marketing reasons, to make the GSU more known, also to acquire potential patrons and donors, to get more revenue streams.

No.8: Yes.

First interview with interviewees No.8 and No.9 on 5 July 2010

Stopper, Gnädinger, and Kempf (2011) argued that sport has become a more important aspect for the image, economy, and location factor of cities and regions. Thus, the marketing for sport in terms of all of its aspects, also scientifically, currently plays a bigger role. In their theory, they asserted that huge sport events can begin a positive campaign for cities, regions, and the economy. Fifteen years before Stopper et al.'s study, Klein (1996) already claimed that any mega event in sports has several positive side effects. These can be tourist effects, urban development, economic effects, sociocultural roles, or an adventure and free-time virtue. Further, smaller events can be important for regional areas, albeit on a smaller scale. The image transfer can happen, for example, through good organisation, enthusiastic spectators, media interest, and improved infrastructure due to former events (Wössner, 1996). Other factors can be the surroundings in the city, acceptance of sport, weather, date of the event, and marketing (Thiel, 1996).

7.7.2 Budget interferences

Another potential detriment in planning sport facility usage and a future orientation are budgeting interferences. The amount of money available for different research areas might interfere with long-lasting strategic planning.

> DK: ...as they told me in summer. But would you think it might also be necessary or as you said before concerning drawing connections, to, well, expand on the scientific sector?
>
> No.4: Hm.
>
> DK: To concentrate maybe more on research and, well, I am not saying like "build complete new facilities only for that", but maybe to add some, well, rooms to a house or whatever, like to expand the research sector itself?
>
> Nor.4: Yes, I think... well, the main problem from my point of view as a head of research is that we need first and foremost research for working time, doing research.
>
> DK: Hm.
>
> Nor.4: It is not a question about facilities or people or... we just need money to buy us time to do research.
>
> DK: Yes, yes.
>
> Second interview with interviewee No.4 on 26 November 2011

According to Goldstein (2009), “universities serve as repositories of stored knowledge in the form of faculty, non-faculty researchers, books and documents” (Goldstein, 2009, p. 23). He added that an additional duty is their role as a connector to other knowledge-producing organisations in their regional areas and concluded that “thus universities are critical actors in a particular type of infrastructure that helps increase the productivity of knowledge workers and firms through spillovers, and increases the attractiveness of the region to bright, creative, and entrepreneurial individuals, who may not have any direct economic relationship with the university or its faculty” (Goldstein, 2009, p. 23). To combine Goldstein’s research with the discourse line above by interviewee No.4, the conclusion is that without the essential resource of money, the eventual market-based approach through research within sport facilities cannot be obtained. Greis argued that “it is crucial that regional characteristics of the sport demand are taken into account and all stakeholders (municipal decision-makers, representatives of organized sport, concerned citizens) are involved” as because of that “the yield-oriented sport facility management follows a consistent market orientation. Whether a new market entrant sport facility has prospects of success and growth depends on the current and future supplier buyer-relationship [e.g. demand analysis and competitor analysis (also applied on a local level)” (Greis, 2014, p. 33). Breuer and Schlesinger (2005) argued that in sport facility management, new approaches of financing go together with approaches of public-private funding, leasing contracts, private holdings, or joint venture strategies.

> DK: Hm.
>
> No.1: It is not always the SYK or Senaatti...
>
> DK: No, no.
>
> No.1: ...which would come out as the winner in that case.
>
> DK: Of course. Otherwise, you would not have taken the buildings from Technopolis for instance.
>
> No.1: Right, right.
>
> DK: Or others.
>
> No.1: Yes. So, in that way I see it as the way of the future. You know, looking at the bigger picture, figuring out what is best in terms of the whole university, sort of its strategy, its purpose and all the research, the education and the third sector.
>
> DK: Hm.
>
> No.1: In that sense I see basically no other way than to re-orientate the thinking more towards market based.
>
> Third interview with interviewee No.1 8 September 2011

The idea of using special facilities, in this case sport facilities, for a market-based approach is also heavily dependent on the mechanisms of the market, thereby implying what is in demand and what is not. In this case, JYU might have a good case as it hosts the only place in Finland where it is possible to study sport sciences. Olsen and Maassen assumed that "the conditions for perfectly functioning markets assumed by economic text-books are difficult to achieve in higher education (Geiger, 2004) and there are a number of flaws in the interpretation of this vision in current reform debates" (Olsen & Maassen, 2007, p. 16). Thus, reforming and transforming the universities into market-orientated businesses, particularly through their facilities, needs to include the big picture as mentioned by interviewee No.1.

> DK: Then concerning new facilities, not only training, but also other areas possible... Specialisation, well, for the university it means very likely that some departments have to concentrate on a few areas only and the rest has a bit to decrease, because otherwise they cannot compete.
>
> No.5: Hm.

DK: Would it also be then possible... I do not know if you have any... well, you this sports lab here and so on, do you think for them it might a possibility to, if possible, to get more space or to build maybe a new facility and to expand concerning their research issues in order to be, well, a better competitor if I may say so?

No.5: Hm.

DK: Because, if I may shortly add, because the problem is with facilities, if you want to make money with that or if you want to boost somehow your reputation, it is not possible to do that with sport halls. It is absolutely impossible, because the clubs do not have money and if clubs are rich, they have their own stuff.

No.5: Hm.

DK: And the only possibility then is to improve in research areas and you get more stuff there. However, interviewee No.4 (anonymised) told me also that it is a bit difficult, because in sports there is a diversity. You have one the on hand those social sciences of sport, also education and stuff, they do not get any, well...

No.5: Funding?

DK: Yes, not only funding, but also they would not attract anyone from outside, because that is nothing people are interested in. If you want to have funding, also from the private sector or whatever, you have to make some research in sports biology, sports medicine and stuff like that.

No.5: And that is exactly what we have here.

2nd interview with interviewee No.5 on 26 November 2010

The first part of this long discourse line shows the possibilities that such a re-orientation of the universities might have despite the aforementioned critics, which in return, should never be taken too lightly. However, according to Gornitzka and Maassen (2007), a market approach might link the universities closer to the economy in areas outside of the traditional cores and, thus, offering new opportunities, for example, in the private sector. Due to the enormous maintenance and operational costs of sport facilities—for example, due to expensive and sensitive equipment—the major idea underlying organisational management is to reduce costs while maintaining effectiveness. Greis argued that "a reduction in operating costs can be achieved primarily by optimizing the utilization of a sport complex. With regard to an efficient use of sport facilities, use controls, bundling of demand groups with small numbers of participants, temporary seasonal closures, incentives to release unused field periods need to be considered. The costs incurred for the maintenance and cleaning of a sport facility can be reduced through the establishment of cooperative relationships with other sport venue operators'" (Greis, 2014, p. 35), which is an approach that must be tested within the universities.

DK: Yes.

No.5: So, and I think the way we look at it is, if sports medicine or sports lab would come to us and say that they need more facilities...

DK: Or a laboratory or whatever.

No.5: Yes and the sports lab is evidence just on that. They asked us, we said "yes, we can build that for you. It would cost this much in rent. You want to rent it on this many years? Yes or no?" So, we have the muscle power to accommodate any needs. And that is basically what distinguishes us from other sport clubs

Second interview with interviewee No.5 on 26 November 2011

This example from Sweden shows one option where money is not primary, but also again showcases the diversity within sport sciences and the fact that these days only a few research fields do have options to select sport facilities and research conducted therein as a valuable option. In addition, as Olsen (2007) claimed, research is becoming increasingly de-nationalized and less hindered by borders of countries, for example, within the Erasmus + IMPALA (Improving Physical Activity in Local Area) Project (Suomi & Kotthaus, 2017), which was based on experiences from former international comparisons on fostering strategic planning in sports.

7.7.3 Inclusion of strategic sport facility management

The final section of addressing this research question attempts to elaborate how strategic sport facility management can be included into the future strategies of the universities, which are often based on the interests of the rector and, for the faculty, of the dean.

DK: And also... I mean not now, but also the same situation in the past, like that there is a lack since a couple of years already concerning... well, foresight of strategic management?

No.7: Yes, and I think, for example that... if you think for example of strategic facility management, then we should also think about how to create some links between other fields. For example hosting events here as facility management would be...

DK: Yes, yes, and to attract foreign investors.

No.7: So, so, thinking in the structure of our administration, that would mean that for example [the] marketing department and the facility management department should work close together. There should be…

DK: A link?

No.7: A link, yes.

First interview with interviewee No.7 on 29 June 2010

Leaning towards the idea of using research through sport facilities as a more direct connection between departments and administrative organs is necessary at the GSU. Gornitzka, Maassen, Olsen, and Stensaker (2007) stated that "university developments are also strongly embedded in institutional arrangements and traditions and there are path dependencies" (Gornitzka, Maassen, Olsen, & Stensaker, 2007, p. 190). Therefore, the university must remember their irrefutable role as a responsible organisation for social services (including their sport facilities to support social health), which does not block market orientation, as Leja (2012) showed: "The socially responsible university must acknowledge the expectations of its stakeholders—of students, businesses, government, the social sector and society as a whole" (Leja, 2012, p. 210); this is also depicted in the graphic below:

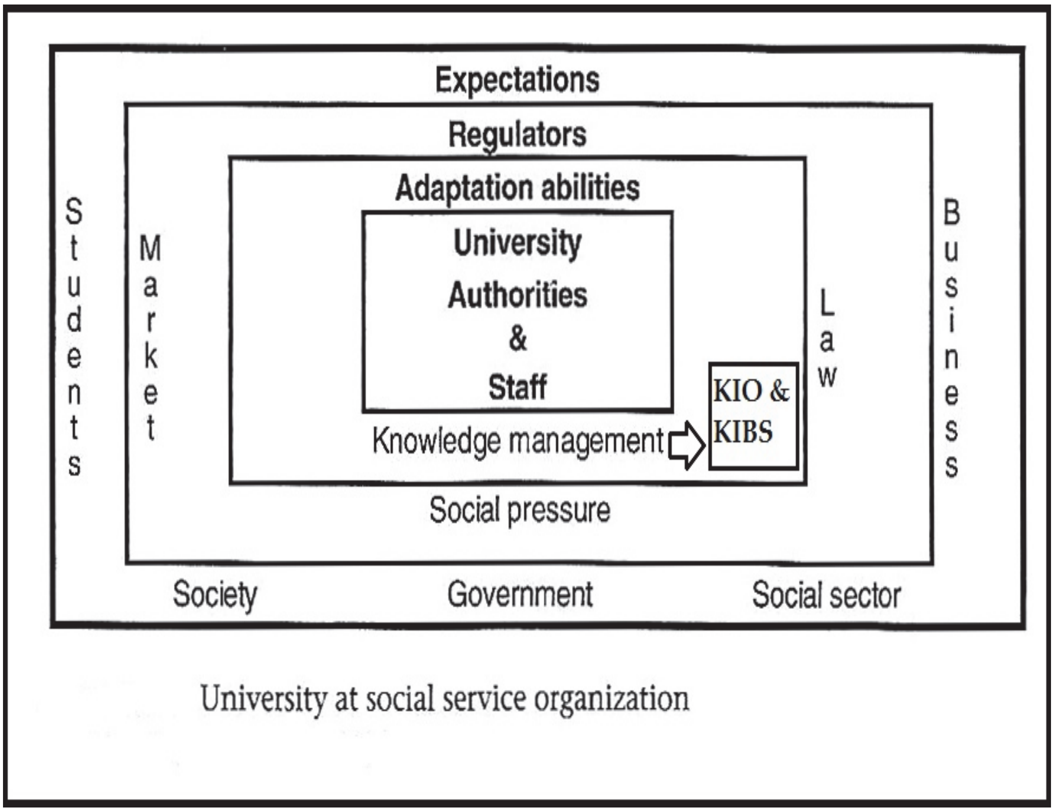


FIGURE 29 University as a social service organisation. Adapted and modified from Leja (2012) and Wawrzyniak (1999)

Interviewee No.7 went on to argue in the same interview within another discourse line that it is crucial how the infrastructure is used in the most efficient manner:

> No.7: That means that if you would be interested into a question how the infrastructure can be used in the most effective way to increase [the] utilities of the university in different ways, then the first and foremost important thing would be implement that thinking that you should try to transform all of your resources into utilities of the university
>
> DK: Yes
>
> No.7: And that is a quite... [thinking] that is much more management orientated way of thinking than the classical way of thinking in an administration, a public administration.
>
> DK: Hm.
>
> No.7: So, and this has to be done first, I think. And if we have implemented such a way of thinking, then we can have a look at the lower levels of management reasons and one of that could be of course risk management. But at this phase I would think that we have a more general...
>
> DK: Yes. I mean, that was just a special point. In general, it is probably still in the beginnings here, as you said, because of this in recent years still more, well, way of conservative thinking and in order to implement any change... of course, you have to analyse the situation, you have to develop the possibilities to make any changes. And so, would you say that for any possible change in strategic facility management there is more cooperation needed between the single departments in order to be able to proof their... well, outputs?
>
> No.7: Yes. Yes, but I think with regard to some subjects there is a quite good cooperation between the departments. Again, I think it is a question of the general way of thinking of the university, and coming to your idea with risk management, I am not sure if it is the risk management, but I think it has perhaps also something to do with the accounting system.
>
> First interview with interviewee No.7 on 29 June 2010

Organisational changes within organisations, as suggested within the first part of this discourse line, do possess several characteristics, which need to be evaluated given the degree of desired change. Therefore, based on Leja's (2012) study, the universities in this research must decide between a first-order or second-order change. This also includes the importance of stakeholders and customers within their sport facilities.

Organisations and the characteristics of first- and second-order changes

First-order change	Second-order change
• Change in one or a few dimensions, components or aspects ***(for example department of universities)***	• Multidimensional, multicomponent change and aspects ***(for example new direction in education by a new government; leading to different money allocation for universities)***
• Change in one or a few levels (individual or group level)	• Multilevel change (individuals, groups and the whole organisation)
• Change in one or two behavioural aspects (attitudes, values) ***(for example through change of staff)***	• Changes in all the behavioural aspects (attitudes, norms, values, perceptions, beliefs, world, view and behaviours)
• Quantitative change	• Qualitative change
• Change in content ***(for example new dean's strategy)***	• Change in context
• Continuity, improvements and development in the same direction	• Discontinuity, taking a new direction
• Incremental changes	• Revolutionary jumps
• Reversible changes	• Irreversible change
• Logical and rational change	• Seemingly irrational change based on different logic
• Change that does not alter the world view, the paradigms	• Change that results in a new world view, new paradigms
• Change within the old state of being (thinking and acting	• Change that results in a new state of being (thinking and acting

FIGURE 30 The characteristics in first- and second-order change in organisations. Adapted and modified from Leja (2012)

> DK: Well, we talked about this point already. Is business with the facilities only possible in case of research and development? Halls are very difficult, research might be an option. We talked about it.
>
> No.4: Yes.
>
> DK: So, the only possibility there would be... in terms if you want to make business within the university concerning sports, the only possibility would be research.
>
> No.4: Yes.
>
> DK: And the problem here is how to attract the sponsors [donors].
>
> No.4: Yes, exactly.
>
> Second interview with interviewee No.4 on 26 November 2011

This short excerpt from a discourse line dealing with business opportunities through sport facilities shows and supports the already quoted findings from Finland and Germany that the only possibility of creating business opportunities is through research. Rents from third parties or teaching do not deliver sufficient yields to make it a suitable alternative. According to Koschatzky and Hemer (2009), "apart from their role as knowledge producers, universities and non-university research organisations can actively contribute to transferring implicit knowledge into economic value added" (p. 191–192). It is debatable though if this can be applied to any knowledge-producing institution as the local, regional, and national circumstances may differ substantially. Therefore, in order to use the facilities efficiently, the research focus should be placed on a triangle that includes entrepreneurship, development, and clusters, as Rocha (2004) claimed (See Appendix Figure 11).

7.8 Comparative students' sport culture

- *8) How does the students' sport culture in the three different countries look in comparison to that of sport facility users?*

This research question focuses on the major users of the sport facilities of the JYU, UU, and GSU—the students.

7.8.1 The varying role of students, partnerships-, and the availability of space

Here, it is analysed which kind of role the students play in the strategic direction of the sport facility usage as well as the future planning process with regard to space and budgeting, as this can influence future business orientation.

> DK: Okay, and what do you think about the students' sport culture? I mean, I was talking with interviewee No.2 (anonymised for the transcript) about it and he said that they are of course taking it into consideration, how the students' sports culture affects facility management. Like if there is one sport which is very famous, take salibandy for instance, if that affects how they manage facilities, how they give hours for free training, how they spend money on equipment and stuff like that. Because, I think you will agree here, that the sports culture definitely affects facility management, because they are the main users, at least here in the university.
>
> No.1: Yes
>
> DK: And do you think or how do you think could students' sports culture influence the way of leadership, management and business issues within the university?
>
> No.1: Hm.
>
> DK: Some tricky questions.
>
> No.1: Yes, yes. I am... That is something that I really do not have an answer to.

DK: Oh, I got you [laughing].

No.1: Because thinking of the sports culture, if you mean the free time sporting activities that take place through...

DK: In general.

No.1: ...also in clubs within the...

DK: ...in general, but also...

No.1: ...student population.

DK: Yes, student population in general, but also in a special way how it affects the university itself. In both ways. Like in general, as you said...

No.1: Yes.

DK: ...and also in terms of managing the university itself.

No.1: Hm, yes. It is very hard to say if that would actually affect the whole university or its...

DK: The whole not, but in terms of managing facilities it does.

No.1: Yes.

First interview with interviewee No.1 on 2 June 2010

In general, the factor of the students' sport culture at JYU was not considered enormous. However, as the main users of the sport facilities, the influence should, according to interviewee No.1's opinion, not be neglected or slimmed down. The effects of international students would also be interesting to see as JYU is a very international university and international students do bring their own culture and understanding of sport with them. This also adds to the social responsibility of universities towards the society. Yläranta (2006) used Carroll and Näsi's study (1998) to highlight that the society expects certain behaviours and results. Corporate social responsibility can be defined in the following manner:

Corporate social responsibility = financial responsibility + legal responsibility + ethical responsibility + philanthropical responsibility. (Yläranta, 2006, p. 35)

DK: Okay, and concerning students' sports culture: How would you say does the students' sports culture your leadership, management, business issues in general? Not only with IKSU, but in general your… well, possibilities of going towards the market, respectively your… [searching for the right word] well, annual output towards the job market and business sector?

No.4: Yes, if you look at our staff here, we have some 30 staff in the... in the sports research and education and I think you would maybe find one or two of them who is either not a PE-teacher back in the days or a sport manager, health-promotion student.

DK: Yes.

No.4: So, of course that influences the way how we interact with each other, what times of activity we do when we celebrate something. Then we play maybe Brännboll, in the way we dress, in the way we interact with other people. So, of course the sports culture at our department is very strong.

DK: Yes.

Within the first part of this discourse line, the connection between the students' sports culture and potential effects on the university are visible. Such cohesion and synergy effects might also be possible through the facilities, for example, at JYU, a potential conjunction can be made with the *Hippos Master Plan*. Audretsch and Lehmann (2004) used Varga's (2000) study to show that "university graduates may be one of the most important channels for disseminating knowledge from academia to the local high technology industry" (Audretsch & Lehmann, 2004, p. 436).

No.4: If you compare to the department of psychology or chemistry or whatever, it is completely different. And that is also a very important ingredient we have discovered in our cooperation with clubs, associations and all those actors.

DK: Yes.

No.4: Our credibility as researchers, funny enough, is dependent on how sporty we are.

DK: A sporty academic.

No.4: Yes. If you... if you... in their eyes, in my analysis, you are a more credible sport researcher if you have... if you used to be an athlete. You cannot understand the inner life of sport clubs and associations if you have not been an athlete yourself. So, in that respect we have very high credibility with our partners, because all of us have... we can show papers on our track records. We have been Swedish champions in this and we do not care about that. But I think it matters to our partners.

First interview with interviewee No.4 on 8 June 2010

The students' sport culture at UU has always been a very important one. Like in Finland, the teachers, researchers, and people working particularly in the faculties—that is, departments dealing with sport sciences—need to be sportive themselves. The analysis of the interviews proved what was already described in the description of Sweden and Umeå—a high standard of sport within the society and also amongst students. This again affects the internal orientation of the university, as Olsen and Maassen argued: "It is necessary to rethink and reshape their internal order and role in society simply because European universities do not learn, adapt and reform themselves fast enough. Reform plans comprise the purposes of universities, that is, definitions of what the university is, can be and should be, criteria for quality and success, the kinds of research, education and services to be produced, and for whom" (Olsen & Maassen, 2007, p. 3).

> DK: Hm. Alright, we already spoke about it, today we are trying to mesh it. Students' sport culture, adaptations are possible, but only if it serves the GSU. I spoke, that was actually a coincidence, the day before yesterday when I spoke with interviewee No. 7 (anonymised for this transcript), I met a sport sociologist, just because of it [this topic] and we had some chat, although he will not be a major source, as this are you and the sport marketing people like interviewee No.7 and I asked of how the students' sport culture is looking like at the GSU… and the interviewee (anonymised) replied that the GSU is actually very static and conservative in that regard. He said that for instance golf, one of the most famous sports in the world. Is this available here? Just for testing, if at all. Although there are many courses around Cologne. He went on that it is mainly due to the conservative departments and institutes. For example swimming, athletics, apparatus gymnastics, these think everything should stay like it is. We have our disciplines, it should stay path and even if it is not that fancy, but soon accepted, such as golf, it would not stand any chance at the GSU. Not the facilities or resources, the infrastructure, nothing will be changed, because in parts it is just too conservative, respectively several institutes say no, we do not want this.
>
> No.8: I cannot say how the single direction of some….
>
> DK: Understandable.
>
> No.8: …institutes is going, but based on my own experiences I would disagree. And do so heavily. Examples are, not recently, [it is] always difficult, disciplines needing a lot of space simply do not fit here.

Within the first section of this discourse line, it can be concluded that the modification of infrastructure for reshaping the available space into a more user-friendly one and with a more efficient environment may need upper-level decisions from the regional governments to re-orientate the structure of the university. This fits with Reynolds, Storey, and Westhead (1994), as they claimed that "Governments may use public resources to improve or modify the infrastructure in such a way that it facilitates the gestation process. This would, indirectly, encourage conception." (Reynolds, Storey, & Westhead, 1994, p. 172)

> DK: Hm.
>
> No.8: That is how it looks like. I cannot put a golf course in here, there is no space.
>
> DK: Yes.

No.8: I do not know where the teachers want to head to. But to avoid adapting to several disciplines, if the monies are there, I do not want, no. For instance beach volleyball was a new discipline which has become fully integrated. We started already quite early, if you think 10 years back, with a very innovative model and built those pitches for beach volleyball. Young graduates made the service back then as we had not resources to do so ourselves.

DK: Yes, okay.

No.8: We did that. No problem. Afterwards the new boom of climbing started. Look, we gathered forest rangers, thought how to make this climbing parkour in between the various halls. There are courses right now. You think, the financial situation is unclear, but you still think about a climbing wall at the track and field indoor hall. We are talking with the city if this is legal. The monies of course have to come from elsewhere.

Third interview with interviewees No.8 and No. 9 on 19 July 2011

This discourse line provides a good example of how important the students' sport culture is considered to be at the GSU. It will be supported at all times if the GSU itself also sees a benefit without getting only losses. This internal pressure which can cause changes might also be influenced by external pressures coming from external collaborations, influencing the orientation of the sport facilities and the manner in which the students' sports culture will have a share in the decision-making:

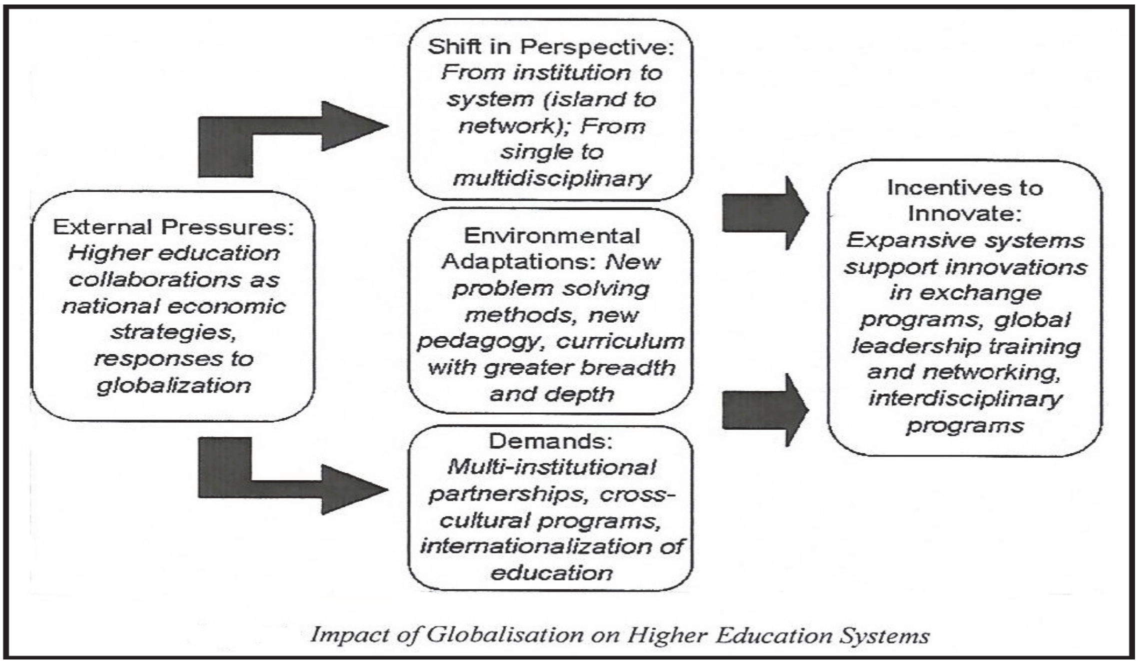


FIGURE 31 Impact of globalisation on higher education systems. Adapted from Bash, Greenwald, & Goodman (2007)

7.9 Potential business effects from the students' sport culture

- *9) Does the students' sport culture have any effect on the potential future business orientation of the universities, despite students usually being poor customers?*

The second last research question depicts the potential role of the students' sports culture with regard to future business effects. As major users, the equipment, interiors, and availability of the sport facilities can have effects on future orientation.

7.9.1 Internal decision-making, students' influence, and costs

The major questions to be answered within this sub-chapter are: How much can the students influence future planning processes of the facilities? How much do the costs affect the future building plans as well as renovation and maintenance costs?

> DK: I know. I just wanted to ask you as the head of this estate managing if in your opinion the students' sports culture has effects on managing.
>
> No:2: Yes, that is right. It is my opinion.
>
> DK: And do you think it is important to continue with that or do you think there might be any changes or adoptions necessary in the future or it can stay like it is?
>
> No.2: We can take it like this.
>
> First interview with interviewee No.2 on 31 May 2010

While the students' sport culture was considered to be important in all three countries and universities within this study, it has to be critically remarked that the responses to some aspects were rather short, like in this case. It could now be questioned whether the interest in the students' sport culture is not that high as originally stated or if the interviewees at JYU were not too keen to divulge details. An internal resource allocation can cause problems, as these do not take the different habits of the consumers into account and can influence internal decision-making processes (Salerno, 2007).

> DK: So, you think there might be, well, some new ways of managing or rethinking of the ways of leadership and managing within the clubs, associations and the university to make some progression, to make them contenders?
>
> No.1: Yes. I mean in that way of trying to connect the education, you know, creating ways of attracting people from the sports sciences,...

DK: Yes.

No.1: ...those who are... who will be graduating from top sports management for instance

DK: Yes.

No.1: ...so that there would closer connections with the local sporting clubs, so that there would be opportunities for those interested in that. I mean, trying to manage sporting organisations more professionally, more entrepreneurially...

DK: Yes.

No.1: ...and more sort of business-like thinking. So that if they were those people, they would have a place to go...

DK: Yes.

No.1: ...try out things, train and then see if something can be done.

First interview with interviewee No.1 on 2 June 2010

The students' sport culture though could be beneficial in terms of subsequent connections to local and regional businesses dealing with sports (including the facilities) and providing close connection opportunities for the JYU in the future. Firms in the same segment of expertise demand similar types of highly-skilled experts. "This in turn implies high, local competition for one of the most important inputs in knowledge-based industries, particularly if one assumes that the high transaction costs associated with relocation preclude the rapid equilibration of labour supply and demand in professional labour markets" (Reynolds, Storey, & Westhead, 1994, p. 190). While for local and regional cluster solutions, the assumption of Reynolds et al. is sufficient, universities also compete nationally and internationally, creating an even larger competition.

DK: And concerning the students' sport culture: Of course, here it is a bit different than in Jyväskylä as the Student Union partly owns IKSU. So, the students sport culture definitely, would you say, affects IKSU and thus, also your way of managing sport facilities? So, fitting to the needs of the students?

No.4: Yes, for sure. I would say that the needs of the students are at the first place, always. And I think that IKSU is very sensitive to the voices from the students regarding what types of facilities do you... would you choose. "We are planning to invest 5 million Euros. Would you like this, this or this?"

DK: Yes.

No.4: And I think the students have a very big vote how IKSU develops their facilities.

First interview with interviewee No.4 on 8 June 2010

At the UU, the role of students regarding the usage of the sport facilities due to share of 1/3 of the student union within the foundation of IKSU is rather big. Salerno claimed that "…because the limited available statistics, at least for education, suggest that students grossly under-utilise a considerable amount of the resources placed at their disposal" (Salerno, 2007, p.125). Therefore, it is particularly an issue for universities where resources are usually bundled in a common pool and used for several needs. Consequently, interviewee No.4 highlighted in the next interview round that this connection is likely to endure and be beneficial as a resource for several years to come:

> DK: So, do you think there... or if you... how you look at facilities, is it acceptable, respectively do you think it might be necessary not only to see them as a tool, but also as a useful, well, asset?
>
> No.4: Yes, of course it is a useful asset. We need the facilities for our teaching, for our education programmes. And at the same time the students are our most stable source of income.
>
> DK: Yes.
>
> No.4: So, we have no elsewhere to turn.
>
> DK: Hm.
>
> No.4: We have the students and we know that we will have students for many years to come.
>
> DK: Yes.
>
> No.4: And to think that we can cover those kind of resources from another source, that is... I cannot see that happening.
>
> Second interview with interviewee No.4 on 26 November 2011

Foreign student systems can provide opportunities for obtaining more resources, but taking the US system as an example, it very unlikely to be implemented in Europe, as Salerno (2007) argued:

1) Open admission policies prevent top students from clustering in particular institutions
2) Distribution of wealth is far less pronounced among European universities
3) The public character of most European universities has historically created little need for institutions to compete with another, either at national or international level

Arguably, predominant public funding caused universities not to compete as far as possible. However, globalisation has caused a transformation in this process.

DK: Okay. Then, are there any changes necessary or planned/wished within the cooperation of the university and IKSU?

No.5: The University is just at this moment renegotiating the deal with IKSU. I do not know if he mentioned that one.

DK: No, he mentioned that the university will get more funding money for sports, but there not, well, there are not certain yet how to use it. For instance, Josef said that they would like to have it more for research and so on and the board is more for like teaching and getting more high-class athletes interested in coming to Umeå. And I was also asking Josef about it how he thinks would IKSU react. He said like probably IKSU would like to keep the focus more on students and they are not that much interested in athletes and so on.

No.5: I think it is both. It depends on the cooperation. It might depend on the cooperation with the sports lab.

DK: Yes.

No.5: Among other things. Because they have... So, we have to become a trinity in some kind. The university is the lead section with the sports lab and IKSU.

Fourth interview with interviewee No.5 on 19 January 2012

In the last interview session with interviewee No.5, the difference of interests between students and an economic approach was evident. Here, the aim was to keep both directions open, although there appears to be a difference among priorities, which also shows the potential differences of interest between UU and IKSU despite their union within the leaderboard of IKSU. This again refers to the discussion of autonomy of the universities and the need for monies to be obtained, as Olsen (2007) stated: “There is individual autonomy—*Einsamkeit und Freiheit,* yet the shared vision of the University provides integration and keeps functionally specialised sub-systems (Schelsky, 1971; Habermas, 1987)” (Olsen, 2007, p. 29).

DK: Yes, yes. This will be the second last question then concerning... do you think the students' sport culture as your main users, how could this influence the leadership, management and business issues? Because if you say the students' sport culture... I mean, the students are your main users of the halls and do you think that... in which way they are interested and their needs of using the halls, how do you think could they influence the way of managing them, respectively how could it be possible to take the best possible, well, output?

No.7: Okay, hopefully I am not too pessimistic, but I doubt somewhat the students' way of thinking and the students' sport culture can really change the way of thinking in the facility department. But I got another idea. It could be... so, we spoke about the possibility of... the possible role of an agency in that field.

DK: Yes?

No.7: And perhaps it could be a very good idea to install such an agency, but it should be a student-organised agency. For example in sport management.... so, you give... you found or you create a student-driven...

DK: Agency.

No.7: ...agency, for example sport management students, and give them the free slots and they have to organise the rental or the providing issues and you make half-half. Half of the earnings gets the university, half of the earnings the students' agency. So, and that would also be perhaps a good solution, which fits very well to logic of a university.

First interview with interviewee No.7 on 29 June 2010

The above is a more sophisticated viewpoint of interviewee No.7 that the students are not able to economically influence the sport facility management of the GSU. This also, at least to a certain extent, supports the viewpoint of the facility managers that the GSU is only catering to the students' wishes for new facilities if those are profitable and offer a surplus. The segmentation process can be found in the process of effectuation by Sarasvathy (2008):

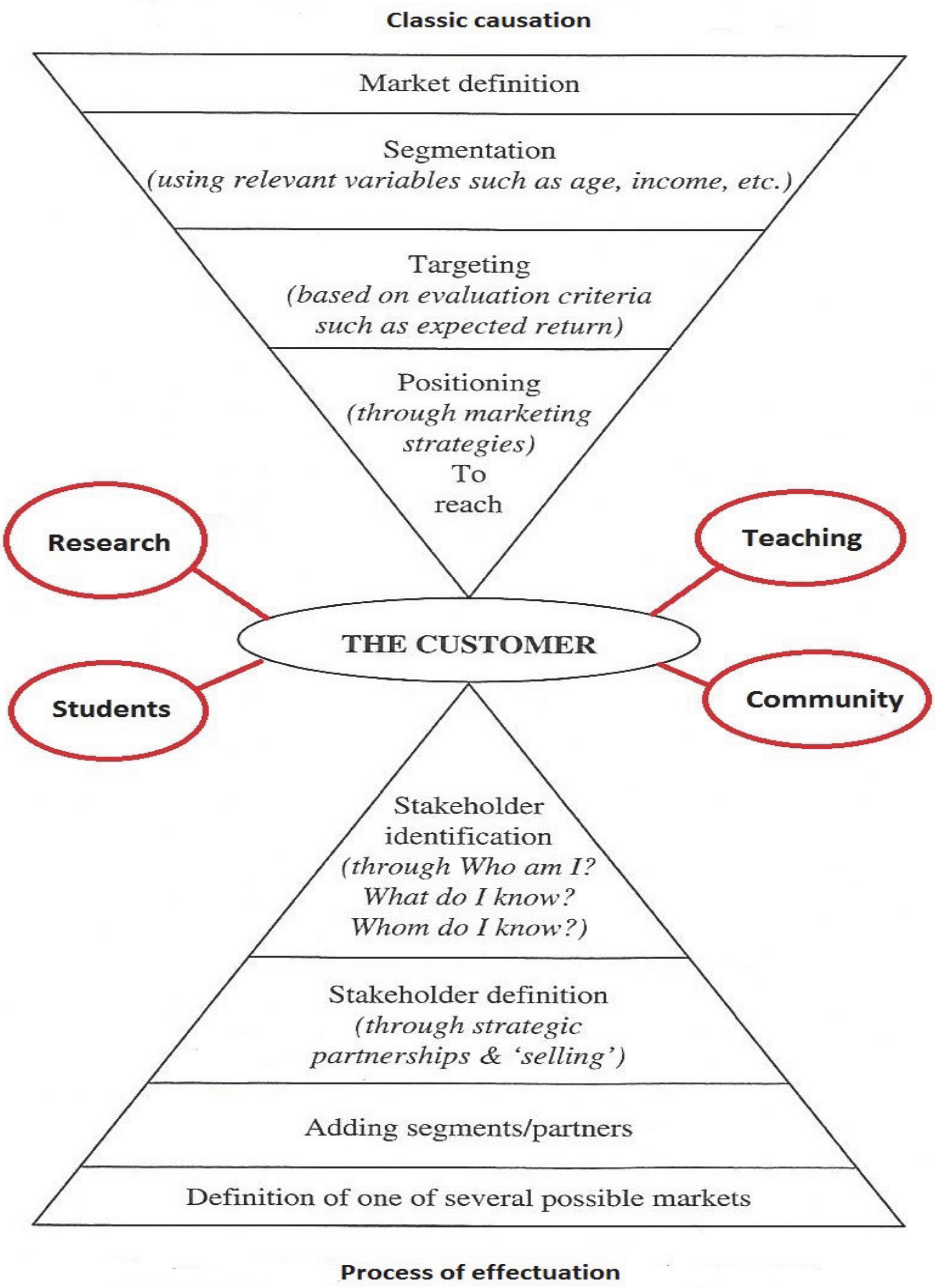


FIGURE 32 Classic causation. Adapted and modified from Sarasvathy (2008)

In another discourse line in the same interview, interviewee No.7 went on to argue that the power of students in such economic-based decisions might be over now that the tuition fees are gone in Germany and at the GSU:

> DK: Okay. And then, due to the tuition fees the student has become a customer. But the tuition fees will be over soon.
>
> No.7: Yes!

DK: How do you think that could go on then in future? It is a huge amount of money, which will drop off.

No.7: I am not sure. On the one hand I think the students will still behave like a customer, but on the other hand they cannot put some much pressure on the university as they could before.

DK: Hm. So, like in the past they could say we are paying, we want some better quality or whatever.

No.7: Yes, yes.

DK: So...[waiting]

No.7: What the hell am I paying for?

Third interview with interviewee No.7 on 19 July 2011

In conjunction with this discourse line, research by Brezis (2012) (see Appendix Table 12) showed that there is not necessarily a correlation between the number of institutions within higher education on the best lists of universities and the GDP per capita. Thus, the difference here has to be in the management system and the strategic planning, not only in terms of the amount of money available. Students as customers and stakeholders of the university need to rethink the way they are being treated.

7.10 The use of saved monies

- *10) Can the universities save some money over the evaluation period and will that money be spent on personnel or to improve the standard of the existing facilities?*

The final research question attempts to investigate how eventually saved monies can be used more effectively within the JYU, UU, and GSU.

7.10.1 Personnel or sport facilities

The research focus on this section is based on either personnel to improve the teaching and research opportunities based on human resource management or to improve the situation of the sport facilities itself.

DK: Okay. Then: are there any issues in terms of personnel? As you know, all the people like to stay here; are there still no issues with salary diversification compared to the south? Or are there any adjustments necessary?

No.1: You mean within the university?

DK: Yes.

No.1: Well, at least in business most likely we cannot compete with salaries in, you know, like Aalto.

DK: No.

No.1: That is not reality. But in general terms I would say we have a new personnel strategy in planning. I have not seen it yet. I think it will be made public in a few weeks.

DK: Hm.

No.1: Because it is still in planning. But I think the general idea in the new personnel strategies is to try and create more permanent positions.

DK: Hm.

No.1: I mean, nowadays we have three years periods, then five years periods and so on and so forth.

DK: And then it is okay, it will be renewed again for those three or five years again and so on and so forth.

No.1: Yes. But I think there is a plan towards sort of more towards a ten years track.

Fourth interview with interviewee No.1 on 27 January 2012

Here, the strategy leans more towards personnel for creating permanent positions. This equates to shutting down several buildings at Mattilianiemi as those facilities were not used properly and also to save monies spent for rent. However, due to the ongoing economic crisis in Finland, this situation might change quickly. Here, the basis for beneficial effects, in particular regarding financial foresight, can, in addition to KIO and KIBS, be found in the knowledge spillover theory from Audretsch (1995), which is based on knowledge production and implies "that firms exist exogenously and then endogenously seek out and apply knowledge inputs to generate innovative output. It is the knowledge in the possession of economic agents that is exogenous, and in an effort to appropriate the returns from that knowledge, the spillover of knowledge from its producing entity involves endogenously creating a new firm" (Audretsch & Lehmann, 2004, p. 434). This is linked to the total number of university activities which affect the production of general knowledge and, thus, the marketing mix available, which is necessary to advertise the potential outputs of the university. External expectations can be influenced by different countries and cultures, as depicted below (see also Appendix Figure 12):

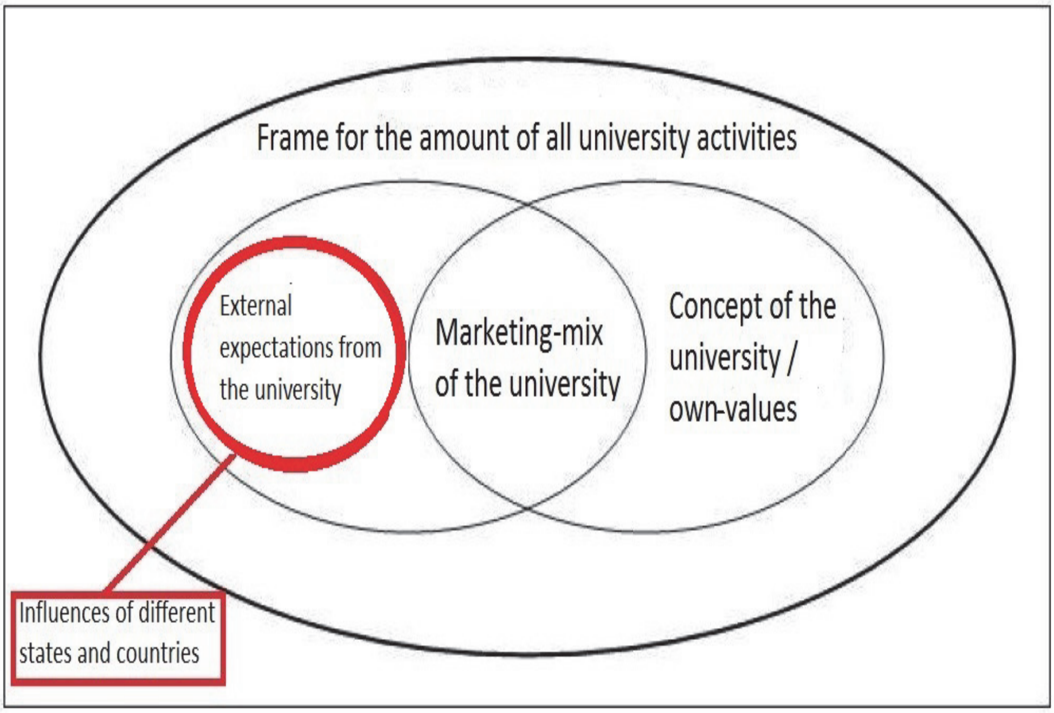


FIGURE 33 University activities. Adapted and modified from Jesse (2007)

No.4: Right now the university has not figured out how much or in what way new resources have to be used.

DK: Hm.

No.4: Should the resources be used mainly to create more sport education or should... that is what they think.

DK: Or should it be put into research.

No.4: Into research, that is what we think.

DK: Okay. I am not surprised.

No.4: If you do not invest in research, we cannot guarantee the quality of the educational programmes.

DK: Yes.

No.4: Or the third: should the money be spent on promotional activities?

DK: Marketing.

No.4: Yes, marketing, making it more attractive for students that are athletes or students that want to be athletes to come to Umeå instead of Stockholm or wherever.

DK: Yes.

This first section reveals the problem of how monies should be invested and how the quality is linked to it. It is necessary to acknowledge the knowledge filter (Acs et al., 2003), which describes the difference between 'new knowledge' and 'economic knowledge' and, thus, the ability of financial strategic planning.

No.4: So, right now the biggest question is how much money should be spent on sports related activities at the university, and how much research should be put in? And in what way should the research be divided?

DK: Ah okay.

No.4: And along or included in that discussion is of course the discussion of staff and facilities. Staff is included in order to be able to offer good opportunities for athletes coming in here we need qualified coaches that can take care of them.

Fourth interview with interviewee No.4 on 19 January 2012

The eventual usage of saved monies was often mentioned during the interview sessions not only at UU, but also at the JYU and GSU. The various interests of the different faculties and departments (also within sport sciences) cause a lot of stress and tensions as due to different histories and backgrounds, the idea of investing either in facilities or personnel is problematic and requires a solution. In particular, with the financial crisis in the EU, the states must save an increased amount of monies, thereby leading to a complete cessation of capital expenditures for both personnel and sport facilities. With support from the public sector, Koschatzky and Hemer (2009) argued that "academic organisations, that is, universities and non-university research institutes, can act as breeding grounds for knowledge intensive start-ups" (pp. 191–192).

DK: Now concerning the key factors of this interview, how can these issues be combined? First: University as University as a server of the needs of the public vs. financial standpoint, other tasks of the university. So, teaching and research. How does that mesh?

No.7: I think it is a question of setting priorities. And to my understanding first and foremost the university has to fulfil a task in research and teaching. And then if there would be some opportunities to rent facilities for example, then that would be an option. But only to raise some money which can again reinvested in research and teaching.

DK: And then that is mentioned by the facility managers, I mean, half a year ago, the [next] interview with them will be conducted on Thursday. So, the university needs

> to pay the rising energy costs versus striving for keeping the standard. How do you think that can be accomplished?
>
> No.7: I mean, there are some opportunities how this could be accomplished, but I am not sure which strategies for seeking and striving for more efficiency, for example, are adopted by the university, because this is their responsibility. But as I know from sport facility research in general, there are a lot of tactics how to improve efficiency of facilities.
>
> Third interview with interviewee No.7 on 19 July 2011

The biggest concern, as well as the biggest need, for the universities is to improve strategic planning in order to make better expenditures, to improve the efficiency of facility managers, and concentrate on priorities; for universities, this means first and foremost research and teaching. Within the European 'knowledge market', it remains to be examined whether universities in the specific countries of this study may become more closely related to and dependent upon external stakeholders, which can be seen as a trait towards the striving for autonomy, particularly in Finland and Sweden (Gornitzka, Maassen, Olsen, & Stensaker, 2007). An improvement in efficiency is even more important, as revealed in another discourse line from the same interviews

> DK: Okay. Then improvements, the university, the, well, community so to speak and your institution as well, is there anything which could be done better or what would you think is lacking anywhere?
>
> No.7: Okay, we need more space, more money, more financial resources, but I mean, this is relatively stable.
>
> DK: But if you need more financial resources, I mean, you said that in general the situation is not that bad.
>
> No.7: Yes, but money is always lacking.
>
> Third interview with interviewee No.7 on 19 July 2011)

With the GSU eventually being forced to save monies wherever possible, it is a consequence that in order to maintain standards, the level of efficiency has to rise. This is linked to the 2001 White Paper of the EU Commission in which five principles that are important to highlight good governance within all sectors of universities are presented: a) openness, b) accountability, c) effectiveness, d) coherence, and e) participation (De Boer & Stensaker, 2007). Thus, a resetting of priorities in the future will be inevitable, as proved in the discourse line of the last interview at the GSU in 2012:

> No.7: So, you are asking for the general budget of the university?
>
> DK: Yes.

No.7: I mean, it is still a challenge and I mean, the direction or the avenue is clear that the university tries to get more third party funds...

DK: Yes, yes.

No.7: ...and that is it... of course the university has to save money.

DK: Yes, yes.

No.7: And I am also in the IT commission and more and more money is going to the IT field. If you want it or not. And that is a dangerous development you can also see in each enterprise

Fourth interview with interviewee No.7 on 11 May 2012

Audretsch and Keilbach (2004) found that "research laboratories of universities provide a source of innovation-generating knowledge that is available to private enterprises for commercial exploitation" (Audretsch & Keilbach, 2004, p. 129). In comparison of their results with this discourse line of interviewee No.7, it is doubtful whether the universities want such an orientation as it could lead to a full loss of their autonomy. Ten months earlier, the general facility managers of the GSU already explained the biggest problem from their side and what to do in order to achieve access for needed monies, which then in return could be reinvested in either facilities or personnel:

DK: Well, now we have finished the part of meshing the needs and the inventory, especially the parts we discussed during the first two meetings. Those were the interesting points. Now, this is like always the closing part, what were the positive and negative aspects of the last 6 months in our working group?

No.8: The work with the BLB: Improvements and better efficiency [are necessary] all property rights back to the GSU, abrogate the BLB. Period.

[all laughing].

No.8: Yes.

DK: Okay.

No.8: Do you have anything more to say?

No.9: No, that is the quintessence cut down on two sentences.

Third interview with interviewees No. 8 and No.9 on 19 July 2011

Here, the problem of the facility managers is how to improve the standards if the property rights are detrimental in their opinions. Sherman, Lamb and Aspegren (2009) concluded that "governments often use public universities as vehicles for direct investment, to encourage private sector collaboration, and to facilitate faculty participation in economic development activities" (p. 351). Critically speaking, this notion should be observed as at the GSU this is contrary to the orientation of the facility management. It should rather be followed to enhance economic development by creating research centres and industry councils. An additional problem there is how to save monies. One example here is energy costs. The ministry of NRW evaluates the potential energy costs at the beginning of the study year. If the winter is cold and the energy costs are higher, this will cause budgeting issues for the GSU, as the university has to pay the difference independently.

8 DISCUSSION OF THE RESULTS

In this chapter, the results of the interview analysis and the overall dissertation will be discussed and potential future strategic implications are shown from both positive and negative aspects. Also in this chapter, it was attempted to draw conclusions by insertion of results from cross-sectoral studies other than mentioned in the theoretical framework to allow a connection to other research fields such as marketing strategies.

8.1 KIO and KIBS within universities

Overall, the interviewees in general agreed that the universities need to know what they have to offer as a knowledge-intensive organisation. However, there was, at least partially, a disagreement between the interviewees of how business-orientated the university and faculty can or should become. As shown earlier, the only possibility of doing business with the sport facilities is by using them for extensive research as a tool to enhance knowledge-based business services for interested investors. It requires future studies if the universities can (also within the current laws) allow themselves to maintain the status quo instead of attempting to invest more money, which they could obtain via sold knowledge, to be able to produce a better product. The need for stakeholder management and entrepreneurship for the universities within sport facility management was a major consensus amongst the interviewees. Adapted to the theories employed, it can be claimed that without such an orientation, KIO and KIBS cannot be implemented. The quotations also show several critics regarding not only the management of the universities, but also towards the higher institutions within the country and their orientation towards sport, universities, and business understanding. The ongoing economic crisis did not affect the universities that much within the earlier years of the research process, but ongoing economic problems have caused the Finnish, Swedish, and German state to save monies, which also affects the role of potential business partners.

Businesses that rely on services require highly capable and knowledgeable people. Sport faculties are in competition with the other faculties of the university for the same amount of money that is divisible among them. However, Acs and Armington (2004) argued that "highly educated populations provide the human capital embodied in their general and specific skills for implementing new ideas for creating new businesses" (Acs & Armington, 2004, p. 219). This leads to the aforementioned theory of Williams and Chinn (2010) and the benefits of social capital. KIOs also tend to be clustered in their respective areas and strive to generate virtues from agglomerated economies and synergies (Yläranta, 2006), for example, through joint usage of sport facilities. This implies that there needs to be a closer networking of the universities and the regional economies. It is necessary to acknowledge the need of knowledge exchange among various companies and knowledge-intensive organisations, as this is the ability to generate greater returns of economic knowledge. In addition, with rising innovation activity, this could help the universities to produce more valuable and sellable knowledge through research, which again requires suitable facilities. A solid scientific base within the university can support additional and previously hidden economic growth. "The role of HEIs both as innovative environments and as part of the innovation system is significant. HEIs are responsible for developing regional knowledge potential and increasingly also for making knowledge and know-how available to users through a collaborative effort" (Mukkala, Ritsilä, & Suosara, 2006, p. 55).

For local, regional, and national economies, it has become increasingly important to foster innovation, learning, and knowledge to make them more competitive on the market. New knowledge invented by universities needs to be channelled into more business-related usage and the possibilities within this new knowledge has to be identified to be able to produce greater economic growth. "Instead of the aim being the development of some specific industry, the focus becomes the role of new types of innovations (e.g., cultural and social innovations) and their horizontal exploitation as a prerequisite for regional growth and competitiveness" (Mukkala et al., 2006, p. 14). In such economies, the researchers at the universities are used to place a huge interest on conversation and collaboration amongst each other. Within the idea of a knowledge-based economy, human capital is willing to spend a lot of their time to maintain their abilities and get better as within the highly active global market there is a necessity to stay competitively. For HEI's such as universities their sport facilities possible to be used for business orientation, it is necessary to get into collaborations with local, regional or national players, meaning possible valuable stakeholders. To create a better future for the universities as a knowledge-based economy there has to be an emphasis of teaching entrepreneurship amongst the students, also in sport sciences. This can strengthen the position of the region, which in turn can be helpful for subsequent business actions by the university. By fostering the business interests and ideas of not only the students but also the staff, the HEI's can make numerous additions to assist and develop their internal processes (Mukkala et al., 2006).

The ability to control own-costs and finances is essential for the universities. This refers to the theory of real options logic by Williams and Hannes (2007): "For many organisations that are no longer significantly able to decrease costs, entrepreneurial growth has become the mantra of their CEOs and hoards. Simultaneously, staff members involved with strategic development and department heads seeking to update and expand their technologies and services are constantly competing for the CFO's time and the organisation's resources" (Williams & Hammes, 2007, p. 76). Thus, it is important to carefully select the most suitable workers. Finally, based on the results of this research study, the adaptation of the KIO and KIBS theories can be within reach if the universities follow a more entrepreneurial and stakeholder-friendly approach within their future strategies. However, it must be noted that KIBS can only work for the universities if it is connected to high-end scientific work, thereby implying that the universities must undertake research for the companies, which yields serious amounts of money in return. According to Jesse (2007), the amount of money in Germany used for financing the universities has increased in its significance. The money not being given from the state and coming through research has reached 90%.

> If you only ran your college like a business…!' It's a phrase we in university administration hear almost daily from our friends in the business world".
>
> Robert l. Woodbury, Dean of the University of Maine, USA, 1993 in: Jesse 2007, 60

8.2 Effectuation and business

8.2.1 Predictive vs. Non-predictive logic

The results showed that the interests of the universities to act as a company are seen as a likely outcome in the future. However, this also implies that some reconstructing of the university organisation might have to happen as the structure is a different one than that in a normal company (in addition to required, albeit unlikely law changes). The converging cycle of constraints while implementing a business idea is something the universities still have to find out in order to make the implementation of the theory successful. For the university boards as 'effectuators', it implies that they need to learn how to make successful decisions in a changing environment. The new approach of becoming entrepreneurs, that is, to function as competitors in the market is mainly dependent on the kind of possibilities there are in the region and how closely the universities are connected with regional and local businesses, which can be used to implement successful synergies. As explained earlier, the use of effectual logic is non-predictive. Hence, it follows that the universities as 'effectuators' are only willing to spend as much as possible without receiving a loss in return. Thus, non-predictive strategies are the focal point for decision-makers. If influence can be gained due to such behaviour, valuable stakeholders of the universities might be willing to cooperate more closely with the 'effectuator'.

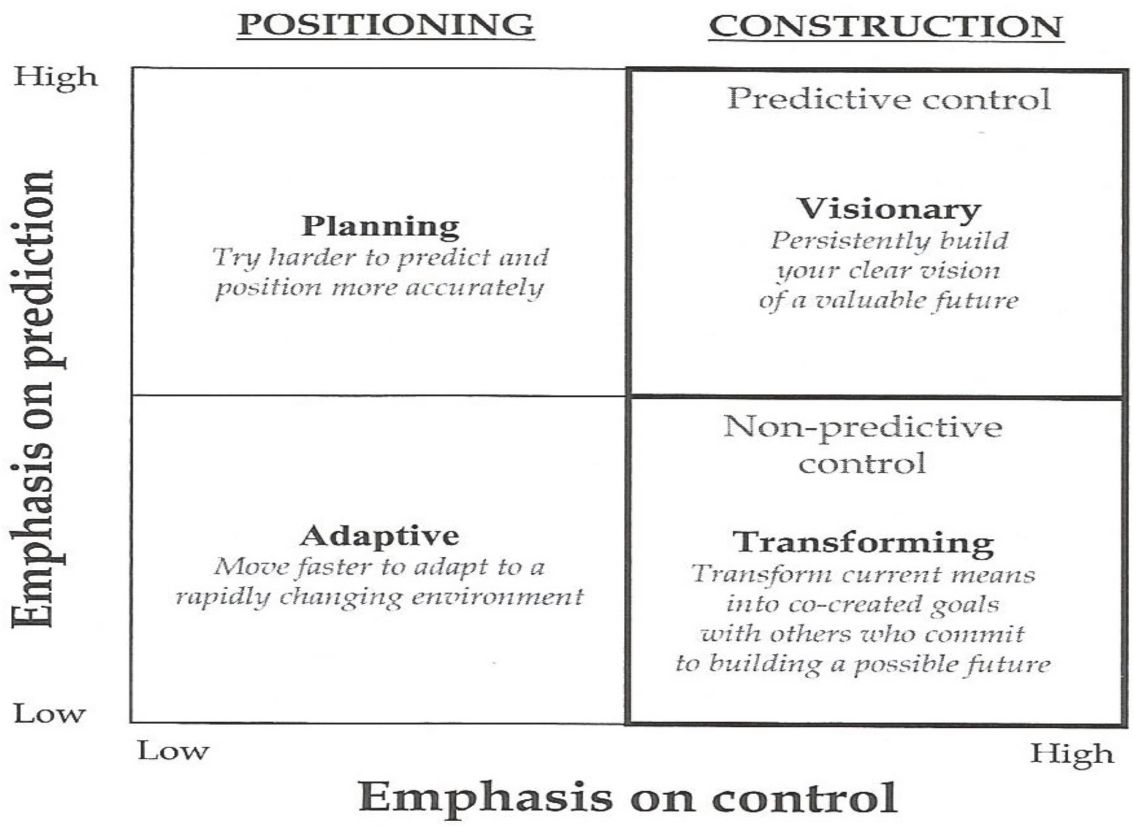


FIGURE 34 Predictive vs. non-predictive strategies. Adapted from Sarasvathy (2008)

The interviewees agreed that the universities need to be more explorative in their decisions in order to gain market shares. Exploration and exploitation are two key segments of the model of effectuation. Hence, it follows that the universities need to be more aware of their own possibilities to exploit market niches in sport sciences that they can fill in. However, as the universities are acting more at the national level, it might be difficult to ensure cooperation at the rural and regional levels as there can be certain hidden value. Another deciding factor here is the location as the business possibilities, for example, in southern Finland and southern Sweden are different from those in Umeå or Jyväskylä. Nevertheless, it is crucial for the universities to know what stakeholders want. This implies that they do not market themselves falsely. It can be said that it is a big problem that, according the interview analysis, the universities have given a picture to stakeholders that "we can do this, we can do everything."

8.2.2 Approaching causation and effectuation in sport facilities

In order to adopt effectuation in universities, a distinction between the approaches of causation and effectuation must be made. As Chandler et al. (2011) argued, the differences between the two ideas are "1) a focus on short-term experiments to identify business opportunities in an unpredictable future (effectuation) versus prediction of an uncertain future by defining the final objective up front (causation), 2) a focus on projects where the loss in a worst-case scenario is affordable (effectuation) versus maximization of expected returns (causation), an emphasis on pre-commitments and strategic alliances to control an unpredictable future (causation), and 4) exploitation of environmental contingencies by remaining flexible (effectuation) versus exploitation of pre-existing capabilities and resources (causation)" (Chandler et al., 2011, p. 377). Consequently, causation can be seen as unidimensional, while effectuation is multidimensional formative. Adapting this to the results of this study implies that the universities must be flexible in the market of knowledge services of sport, reacting to changes in their environment such as the regional stakeholders, not only to exploit existing business areas but to be creative and develop own ideas. By using the approach of effectuation, the universities might be more successful in using their sport facilities as business tools, thereby leading to potential cooperation (e.g. Hippos, *Sportpark Müngersdorf*).

The positive effects of entrepreneurship on wealth creation are backed up by Ireland, Hitt, and Sirmon (2003). They argued that entrepreneurship is used as a stimulus to fabricate wealth in prospering countries due to the actions of individual companies. The sport faculties should function in a more business-orientated manner in their attempts to sell their knowledge, that is, act more like a firm. Ireland et al. (2003) stated that "similarly, strategic management is concerned with understanding the reasons for differentials among firms' wealth creation in various economies. Wealth creation and firm growth are interrelated. In general, effective growth is expected to help firms create wealth by building economies of scale as well as market power. These outcomes provide additional resources and contribute to achieving a competitive advantage" (Ireland et al., 2003, pp.963–964). They went on to argue that additional wealth provides the opportunity to use and reserve available resources to excite additional growth: "This relationship is especially critical to new venture firms—firms that often create wealth by growing rapidly. Our work assumes the importance of firm growth while examining wealth creation as an outcome of the effective use of entrepreneurship and strategic management" (Ireland et al., 2003, p.964). The implementation of this theory within the JYU, UU, and GSU would lead to a completely new approach of running universities. Currently, a full implementation is not feasible as all of the featured universities are state-owned and have no right to earn money for themselves as a private organisation. Based on the research in Finland, it is indicated that the current university law appears to be a step in the right direction. A stronger orientation towards stakeholder management and entrepreneurship would also lead to a more intensive inclusion of marketing, which is something the universities still lack. It can be assumed that the required linkage among several university faculties for intensive collaboration is not sufficient. If the university wishes to function like a firm and be more business-orientated, cluster solutions and expert groups for each research project within the single units of the faculties can be helpful. Not only would this increase the chances of the university on the national and the international market due to a concentration of experts, but it could also help to create a stronger relationship within the university's institutions from which all could benefit.

As the model of effectuation is still rather immature, there have not been many attempts to measure and test effectuation by case studies. According to Perry, Chandler, and Markova (2011), this lack of research is rather "surprising because effectuation suggests how individuals might act in situations in which the assumptions of causal strategy are not met and because effectuation research has the potential of making a significant contribution to the entrepreneurship literature" (Perry et al., 2011, p. 838). In today's universities, it has become increasingly difficult to obtain revenue and market shares. In case of a legalisation for the universities with regard to making profit through sport facilities (e.g. laboratories), to market themselves, and to become more entrepreneurial and stakeholder-orientated, there is still the need for innovations in order to be successful. However, potential lack in risk management experience can cause financial and strategic problems. As stakeholder commitments generate and provide new resources for the effectual process, they also create limitations on the commonly created goals. As Ireland and Webb (2007) put it, "In your view, are not most of them faced with the challenge of changing frequently in order to meet the needs of those they serve, such as customers, suppliers, and shareholders? Indeed, for many organisations, using their resources and skills to change in ways that will create value for stakeholders, and perhaps especially customers, is becoming increasingly difficult" (Ireland & Webb, 2007, p. 49).

8.2.3 Effectuation and competitiveness

Based on these results, the universities are seeking to be more competitive on the market, to 'collect' available investors for the sport facilities. If the universities would become more entrepreneurial and more orientated towards stakeholder management that could also help the students by learning and studying in such an environment. "Effectuation matters, not merely because expert entrepreneurs prefer an effectual logic over a causal one, but because of the details it offers of a *comprehensive alternate frame* for tackling entrepreneurial problems" (Sarasvathy, 2003, p.23). Scientists would need to put themselves in a position of a manager of the own-firm, drawing the right conclusions to be a successful entrepreneur, a seller of the knowledge they have to offer. Moreover, managerial quality is of high importance to provide sustainable organisational performance (Fricka & Simmons, 2008). By adopting this approach to be used in practise as an outcome of this study, it also implies that excessive gambling is not desirable; rather, it is meant to take the principle of *affordable loss* as a management direction. According to Blake and Cox (1991), the key issue to increasing the organisational competitiveness of companies is to deal with several cultural diversities within. Adapting Blake and Cox's (1991) study to the situation of the universities in this dissertation, it implies that five key components are needed to transform traditional universities into flexible multicultural ones which can function not only nationally but also internationally.

The effectiveness between urban and regional areas can help to generate more economic attractiveness and develop worthy entities such as companies and entrepreneurial innovativeness, which is important for cities such as Jyväskylä and Umeå. The OECD argued that "governments should set up a framework to help local stakeholders co-operate outside the constraints imposed by administrative boundaries" (OECD, 2013, p.16). Ultimately, it is possible to take the idea of effectuation as a model for the universities as entrepreneurs, since the market the universities are acting in is, as already discussed in earlier chapters, highly flexible and the problem of uncertainty is rather high. Thus, acting according to the principles of Sarasvathy's (2001), the idea of effectuation is assumed to be a well-known approach. However, measuring the effects of effectuation and causation is rather difficult. It may be possible to construct scientific tools to measure both parts, but the problem is to be found in the criterion of validity as all those tools are dependent on the correlation of the experiment and its environment (Chandler, 2011). The results of such an analysis are often dependent on the subjectivity of the researcher and the familiarity with the company being analysed.

8.3 The ability to sell knowledge

The lack of revenue streams from outside the state has bothered the universities. The universities need to be more active in the private and public sector to attract potential investors or to use the existing resources more wisely. In the optimal case, it is a combination of both. The lack of strong players and business partners in Jyväskylä and Umeå in comparison to a city like Cologne is evident. As regional engines, even in rapid growing centres, the JYU and UU still cannot fully exploit their potential if "*they are not running on all cylinders*". Both JYU and UU hope for more collaboration with medium and smaller organisations in the local and regional areas. However, there is still a sentiment in the smaller businesses in the region regarding how the universities as a large entity would actually approach these to establish some cooperation. The decisive aspects include the question of "Who are you going to contact, and how can you establish a relationship?" Such constraints may cause problems for eventual collaborations. These issues can also be caused by different hierarchy models within the universities. Taking the government hierarchy model as an example, where the government is responsible for funding and regulation of the universities operations, which in turn might limit institutional autonomy. In Sweden, local governance was close to the control of regional governments. In addition, sector ministries steered and funded sectoral research that was executed by the universities (Gornitzka & Maassen, 2007)

Andersson et al. (2009) cited a study from Faggian and McCann (2006), which showed that "migration effects of embodied human capital in students and graduates is of great importance than (informal) university-industry spillovers" (Andersson et al., 2009, p.86). Thus, they concluded that the effects of graduates and students at HEI has an effect on R&D in their location. Thus, the steady 'output' of human knowledge capital produced by universities can have an influential effect on the local and regional institutions dealing with KIO and KIBS, for example., through sport biology and sports medicine with national training centres for elite athletes (which the JYU, UU, and GSU all possess). In addition, there is not much business history in certain areas, that is, from the faculties. The idea that sport faculties have the latest knowledge is something that needs to be built upon as it is the most likely business that any university could create, if they are eager to create some sort of extra revenue. This leads to the conclusion that the JYU, UU, and GSU need to set aside money that enables their researchers and staff to be more visible. This implies going to conferences, meeting politicians, meeting practitioners, and presenting their ideas and competence.

8.4 The willingness to sell knowledge

The need for investors is huge as there is not that much money anymore to be spent by the universities. The quotations above show not only the problem of obtaining any potential investors, but also the problem of having many parties fighting for the available monies. Due to the problem of obtaining other valuable revenue streams (e.g. the reluctance of selling naming rights for sport facilities), the money allocation might become more difficult. The greatest concern visible here is the local possibilities for doing business. To be more connected to the region around the region of location must be strengthened, thereby attracting more potential investors which the universities and sport faculties might be able to use for clusters in the future. For both the UU and JYU, together with other universities in these two countries, like in the capital region and outside the cities of Stockholm, Gothenburg, and Malmö—that is Helsinki or Tampere—it is important need to find better strategies in terms of attracting students, research funding, and partners in business and industry. However, locality also possesses positive effects, as showed by Acs and Armington (2004): "… higher education trains individuals to rationally assess information, and to seek new ideas. Therefore, more educated people who are more likely to acquire useful local knowledge spillovers from others who are involved in research or in managing some service business" (Acs & Armington, 2004, p.221). At GSU, this issue is also relevant enough to acknowledge, but its size and the number of multi-purpose sport facilities helps to ease the situation. However, potential enlargements of IKSU and *Hippos 2020* can also help JYU und UU to be more willing to sell their expertise.

8.5 General role of sport facilities for the universities

The analysis of the situation at the JYU, UU, and the GSU showed that the general importance of sport facilities differs among the universities, but the major use of these facilities is still based on the demands of the students as well as for research issues. Expanding the possible economic role of the sport facilities appears to be possible, but still requires changes in the environment, thereby making it suitable for economic expenditures and a new orientation. High knowledge creates entrepreneurial opportunities by exploiting spillovers of that knowledge. "Thus, the knowledge spillover view from entrepreneurship provides a clear link, or prediction that entrepreneurial activity will results from investments in new knowledge and that entrepreneurial activity will be spatially localised within close geographic proximity to the knowledge source" (Audretsch & Lehmann 2004, p. 438–439). The conditions necessary to create an economic role for the sport facilities at these three universities requires further research in the next two decades, for example, to observe any influences by other projects in the near future (Hippos, Müngersdorf, IKSU).

8.6 The economic role of sport facilities

It was obvious that the interviewees were not pleased with the usage of the existing resources (facilities) in the past. Money, personnel, and time were not used in an efficient manner. Reducing the number of personnel and hiring experts instead was amongst the solutions the interviewees believed could ease the situation. One example could be undertaking marketing initiatives to create awareness of what the universities have to offer. In addition, the rising energy and construction costs are causing huge problems for facility managers. The have the choice either to lower the standards of the facilities or to shut some of them down to save money. This again might cause problems for the users of these premises. On the other hand, a specialisation of the facilities, faculties, and departments can also detect and develop new business opportunities, as Anselin et al. (2004) showed: "…the spatial extent of the "local" geographic effects that university research may have on the innovative capacity in a region, both directly and indirectly through its interaction with private sector research and development (R&D) efforts" (Anselin et al., 2004, p. 393).

8.7 Possible economic surplus of sport facilities

The connection to the Gay Games (2010 at GSU) is one example of how sport facilities can be used to acquire monies and also to use it for brand building. However, on the one hand, the universities need monies and public recognition; on the other hand, the possibilities of the facilities are restricted, thereby implying that the various faculties of sport sciences have a different access to revenue streams through facility management. This implies that there is also kind of diversity within the sport sciences itself. Some institutes such as sports education might have to rely on the state and the other public sector organisations, while others such as, for example, sport medicine or sport biology might have benefits due to their connection to elite sports, which can also affect the ability of attracting grants in competition from research councils. Thus far, there have not been many thoughts regarding the idea of using sport facilities as a revenue tool. It is arguable whether the universities maximise profit and does that necessarily mean it also maximises legitimacy? The analysis showed that the interviewees are convinced that making a business out of sport facilities is only possible in case of research and development and not for sport clubs and other users of the premises. There is still a strong tradition that the university does not need the sport facilities for research, so that certain partners, such as clubs and non-profit organisations etc. can use them. However, on the other hand, the university faces new challenges. An increase in the number of students leads to a stronger usage. This leads to a potential shortage of possibilities to use the sport facilities by stakeholders and external. Salerno (2007) argued that profits and revenue streams of universities have caused concerns within the society and, thus, such a development needs to be explained carefully to related stakeholders: "The growing attention given to diversifying universities' revenue streams, promoting competition, encouraging mobility and creating organisations that are far more responsive to their customer's needs reflect a societal shift in what universities are for and how they are expected to function" (Salerno, 2007, p. 119).

8.8 The comparative students' sport culture

The opinions of the interviewees differ with regard to the possible influences of the students' sport culture towards the facility management of the universities. However, this has always to be seen under country-specific as well as university-specific circumstances. Due to the different sizes of the JYU, UU, and GSU, a comparative cross-cultural study is difficult. Nevertheless, despite the different viewpoints regarding the students' influences, there was a general agreement that the students are the most important customers and stakeholders the university has to take care of. In addition, these cited opinions did not change during the entire interview periods. The students as the most important stakeholders of the university might require strategies based on performance, for example, how often the facilities are frequented and used. As the facilities are also used for research purposes, maintaining quality is as important as, for example, an exclusion of foreign scientists to research monies hurts the quality of research (Salerno, 2007).

8.9 Potential business effects from the students' sport culture

As part of this research question, the role of students as one of the major stakeholders of the university was generally accepted and considered a positive asset. However, the quality of students was also a very important aspect amongst the interview partners. The increasing number of students might generate a problem in the longer term, with regard to the number of students per teacher becoming negative. There is some concern regarding the quality of teaching given by the interviewees, also leading to the most visible problem the students themselves are able to acknowledge. In addition, it also relates to quality of research and that the lecturers and researchers need to spend more time on teaching than they have been used to. This can lead to a severe lack of time available for research, hindering potential business effects through sport facilities. However, as the students are the most important stakeholder group of the universities because of being the most frequent users, the interests of the students' sport culture must be acknowledged.

8.10 Use of saved monies

The money received needs to be spent wisely by the universities. Overhead costs and a new approach to attempting to receive external money might be the greatest challenges in the future. The means of turning the university at least to a certain degree into a business is completely new in all three selected countries. Therefore, it is a natural habit to be reluctant in the beginning to such new approaches. In addition, it is also open how the various departments and faculties are prepared to face these new challenges, which can again be determined from the interests of new rectors and deans.

9 POSSIBLE ADDITIONAL REVENUE STREAMS

This third-last chapter will show other potential options for the university to increase its revenue streams by not taking the sport facilities in particular into account. The following solutions have been suggested by the various interviewees and have been discussed accordingly.

9.1 Four potential options

Several suggestions have been provided to solve the problems that were not discussed to their entirety during the interviews that asked the research questions. The suggested solutions deal mainly with how to present ideas for the universities to earn more money, to find suitable revenue streams, how to be more effective, and how a more business-orientated approach could be possibly implemented. This is meant for the sport facilities of each university as well as the other premises, but also a for business orientation in general. It must be acknowledged that due to the different circumstances within each university, the degree of possible success of the selected method may vary considerably. In addition, different laws in each country can also cause problems while attempting to use one of the proposed opportunities.

9.1.1 Tuition fees

Tuition fees offer a steady flow of income for the universities, but on the other hand, can also cause social inequality amongst the students. This is one reason why this option is often considered a debatable solution. The incoming money could be used to strengthen the quality of teaching and research, which in return is essential to be successful in a knowledge-based economy. In addition, there would be fewer students, which would also help to raise the quality of teaching. Due to the currently high number of students, it is not only the best that are now enrolled in a degree programme but a mass of students. Many of the interviewees stated that not everybody could study, and that there has to be some sort of selection. Neave and Maassen (2007) argued that “as enrolment fees are introduced across Europe and repayable loans replace grants or indirect subsidy, so the cohesion symbolised by inter-generational investment transmutes into an instrumentality representing individual competition as well as individual accommodation to rapid economic change.” (Neave & Maassen, 2007, p.149)

9.1.1.1 The situation in the Nordic countries

While in Sweden only private universities charge tuition fees, in Finland, tuition fees are mandatory for non-EU citizens, who have to pay €8.000 per year at the Master’s level. All other students and programmes are for free. In both countries, there is a fear that this might stop top international students from enrolling, and the introduction of tuition fees for international students might only be the first step of putting a high fee into force for the national youth as well (Välimaa 2015). Välimaa concluded that the universities would lose too many international students, thereby lowering the level of academic quality. Thus far, although there have only been a few discussions regarding whether to implement such a system for international students, the idea has been taken down every single time. This discussion might come up again in the future if the universities want not only to maintain but also to increase their quality levels, which also opens the door to being more valuable for business partners.

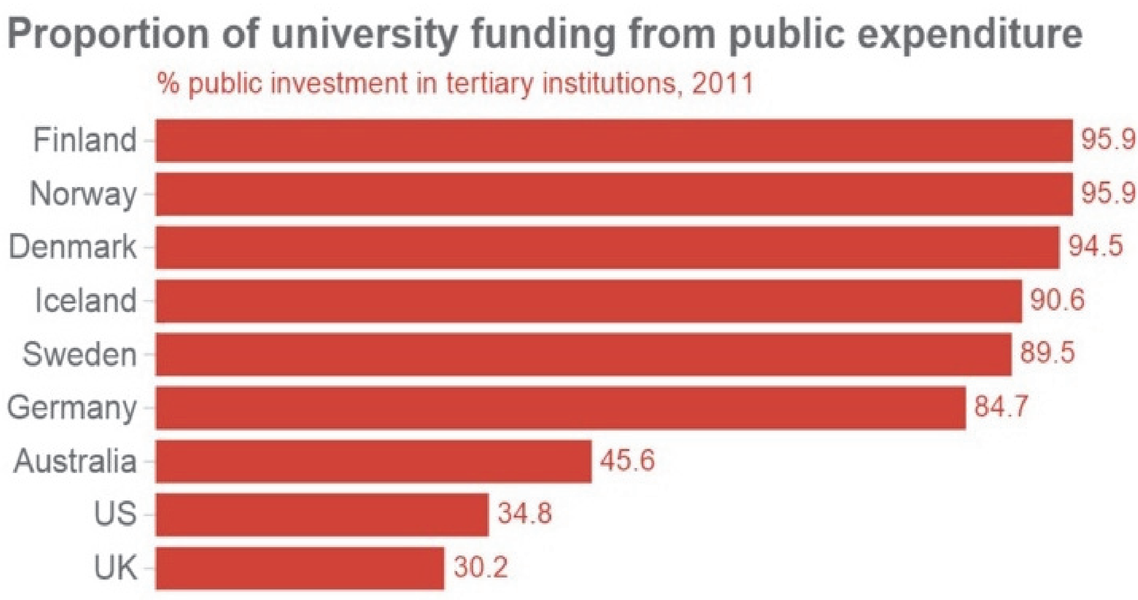


FIGURE 35 Proportion of university funding from public expenditures. Adapted from Välimaa (2015)

9.1.1.2 The situation in Germany

In Germany, there has been an increase in the number of students at the universities. An increasing number of students make it difficult to maintain the quality of teaching and research, which in turn increases the difficulties for university to provide excellence in their knowledge-based economies. There is a general consensus in Germany to give everybody the right to study without having to pay for it; however, on the other hand, there is a lack of money to finance the additional personnel and equipment. The increase in the number of students in the universities, including the GSU, is mainly based on two factors. Firstly, neither the basic military service nor the civil service are obligatory anymore. Thus, the students can go to university directly after finishing school. Secondly, the amount of school time required to obtain the university-entrance diploma has been lowered from 13 to 12 years in several states. In addition, an inflation of bureaucracy has flooded the university with the enforcement of the Bologna reform. The conferences regarding the money allocation for the universities often deal with facility issues and elite research, but there are critics who claim that nobody cares anymore about the students (Kaube, 2014). Dräger, senator in Hamburg for science, argued that the tuition fees were correct, but the implementation was not done wisely (Preuß & Osel, 2014). As Brinck (2013) found, the universities really needed the money received from the tuition fees. There is a persisting fear that the lack of money will cost the German universities a place amongst the best universities in Europe in terms of their level of excellence. This was also mentioned by the interviewees in Sweden and Finland, that without a constant, sufficient, and guaranteed flow of money either coming from the state or raised by the universities themselves, it will be very difficult in the future to be able to at least hold the level of quality the universities have to offer right now.

9.1.1.3 Conclusions

Schleicher, OECD vice-rector and expert for education, claimed that tuition fees are not unfair, but are a necessity in order to guarantee good preparation to be successful in subsequent working life (Kerstan, 2013). He added that there are two possibilities to finance the current system of education: either by tuition fees or by raising the tax level. In Finland and Sweden, the costs for the universities are covered by the state due to high taxes. The top performers within the economy basically guarantee the education of the next generation. However, the money received by the state is, also influenced by the inflation, not sufficient anymore to keep or even raise the level of quality offered with regard to teaching and research, which led to the introduction of the aforementioned tuition fees in Finland. Stromsoy (2011) argued that tuition fees in combination with a huge investment of the state into the infrastructure of the university can certainly help to improve the quality of teaching and research as well as the academic achievement of students within a university based on the experiences achieved during a decade of analysis within British universities. The tuition fees could be used to help the students to take their first steps as entrepreneurs, for example in the form of start-ups.

9.1.2 Specialisation of the universities

One other solution to improve the financial situation as well as the effectiveness of an upcoming business orientation of the universities would be a specialisation within the research fields. Based on the information collected within the research, there is a general lack of money within all faculties and departments of the university, and not only the sport faculties. The faculties and departments within the universities can decide to specialise in their research fields instead of offering the entire programme of research possibilities. It is likely that the most suitable way of getting recognition and attracting more possible business partners is to excel in specific scientific disciplines.

9.1.2.1 General issues

A specialisation serves as an option for the universities to become more effective and to establish a better foundation for becoming more business orientated. One option is to decide to foster the situation within their respective cities by helping establish companies by providing them, for example, scientific expertise, for example, in terms of marketing. The research process showed that several locals returning from the metropolitan areas to the regional centres to do their businesses from there might help in this situation. This has already been the case at JYU and UU. However, without a strong commitment of the universities to ease the problems of a connection between the business community and the governmental institutions, a positive turn of the regional situation in both Sweden and Finland will be very difficult to achieve. A resurgence of the economic situation in both cities would definitely help the universities as well. The situation in Cologne is different, mainly due to the size of the city and particularly for the GSU as the biggest sport university in Europe, and thus, heavily profiting from its excellent reputation. There are good connections to the industry as well as to other universities worldwide with regard to the scientific sector. However, there are also several problems: a better connection of the university to the public might help to generate a better business linkage for the benefit of all participants. Moreover, several institutes might still need to specialise at least to a certain degree in order to use the available money more wisely. As a conclusion, in several research areas, this might be the only opportunity for generating money.

9.1.2.2 Different departments and faculties

The faculties, departments, and smaller divisions need to find a suitable focus. This implies carving an image for the organisation in the scientific field in the first place and through that also demonstrating the utility of the staff for the wider society, which when combined leads to specialisation. This is also linked to the issue of overhead costs, as these can literally decide whether or not business partners are interested anymore in the services the university can offer. If the university must actually attract more money from the private sector, the value of comparing what to invest and what to receive in return must be known and understood. Thus, the overhead for the university charges now should be lower to make it more attractive for external parties to invest. However, these possible investments must be cleared. It has to be specified whether private investors are interested in either sponsoring the research unit or in simply donating the money to the organisation either due to philanthropic reasons or by benefitting from the public fame of being a donor to the university. In the past, research in the sector of sport management was not built much on sponsorship. This has changed now, as Papadimitriou and Apostolopoulou argued (2009). According to their findings, sponsorship has gained a positive momentum and could lead to a different way of behaving within the possibility of building a competitive advantage. They went on to claim that "building on previously published work on resource-based theory and competitive advantage, scholars argued that sponsorship is a resource that if managed and leveraged properly could become a source of competitive advantage for a firm and differentiate that firm from its competition" (Papadimitriou & Apostolopoulou, 2009, p. 91).

9.1.2.3 The potential effect on sport facilities

Some sport facilities (other facilities, but also universities in general) might closed in the near future to save money. Lack of space also forces the universities to specify in research, which mainly helps the major fields of interest and expertise. Based on the information received by the real estate managers, the annual costs for keeping the premises in good shape in connection with the heating costs and the rent are the biggest setbacks for the annual budget (see appendixes 2.12 –2.17). Saved money could be reinvested into other fields of the university. This applies particularly to the JYU. Even at the GSU, the amount of space available is not enough, although some of the premises there could also be closed or renovated and be used differently, like some of the tennis courts which are barely used anymore. In Umeå, the sport facilities are courtesy of IKSU, but due to the trinity of the board (IKSU, the university, student union), the university is always involved in any decision of enhancing or diminishing the sport facilities. As those premises are also used by private members of IKSU, it bedevils to specify the building only for the required specialities of the university. However, this does not affect the other facilities of the university owned by AH. The interviewees expressed the wish that several faculties, departments, and institutes need to focus on the market and see in which areas they could be most successful. Due to the location and domestic migration, Umeå has problems in competing with the universities and the private sector in Southern and Middle Sweden and to attract highly qualified personnel to come up to Lapland. Improvement could be made by saving money through specialisation and to foster the research situation as well as to generate a higher salary for the best possible personnel. Specialisation might also help to obtain more market share nationally as well as internationally.

However, to get potential research offers, the university, that is, the faculty or department must be the best available one within their field, based on what all interviewees explained. Daumann and Römmelt (2013) used an earlier definition of Garvin (1984) in which "quality is synonym with 'innate excellence'. It is both absolute and universally recognisable, a mark of uncompromising standards ad high achievement (Garvin, 1984, 25)" (Daumann & Römmelt, 2013, p.37). They went on to claim that quality plays a fundamental role in sports business. Any service relies on quality has its most important variable. Spinning that idea further to any business-related ideas in strategic planning by the universities; it shows that there is a great need to provide excellent quality in terms of the products a firm (the universities) has to offer.

Until 1970, Sweden had a great number of specialised colleges, but in 1977 those were merged into one university per county (Dahllöf 1996a). Vilhelmson (2005) stated that within the last two decades in Sweden several new universities were founded, mainly in regional centres. He argued that "higher education accordingly has become more accessible than before, at least from a geographical point of view" (Vilhelmson, 2005, p.7). This leads to the question of how many universities a country can take without letting them being too small, that is, having financial problems as this case is visible in several smaller universities such as Sundsvall. If the aforementioned specialisation of universities would occur, the fields the universities and faculties want to specialise in are already of high class. Otherwise, a specialisation would not have the desired effect. If the faculties concentrate, for example, on three research fields instead of five in order to use the money they have more efficiently, for example, for better equipment and better personnel. The biggest issue in matching the need with the resources of the university is money. Interviewee No. 1 argued that funding agencies such as *Suomen Akateemia* (Finnish Academy) revised their financing policy. Instead of the required 20% of the entire budget of research projects, which comes from the private sector, it has been lowered it to 10% or even 5%. Another issue is the lack of private companies, which are sufficiently large to assist the university and also represent an area in which the university could help with their expertise, thereby leading to greater collaboration. However, the faculties still have the opportunity here if they are able to prove to the private sector that actually what the faculties do here is beneficial for them in many ways, it might create a positive cycle in that.

9.1.3 Enterprises and synergies

Marketing and future business issues of the universities could be attempted by the invention and improvement of enterprises and synergies within national universities. One example of such a synergy can be found in Finland as well as in Sweden. In Finland, the UEF comprises three campuses in Joensuu, Kuopio, and Savonlinna. It was originally designed as a fusion of the Universities of Joensuu and Kuopio in 2010. The campus at Savonlinna features a teacher training camp, although this is going to be closed in the near future. The reason for that dates back to 2009, as the University Act of 2009 (558/2009) was introduced by the Finnish Government. To have a better 'scientific production' and to gain the positive effects of synergies, the universities decided to merge. For the JYU, and the sports faculty it is also not possible to seek a conjunction with another sports faculty in Finland as the JYU is hosting the only one available in Finland.

Polytechnics do offer sport sciences (e.g. the JAMK in Jyväskylä), but only at the Bachelor level and with a rather practical approach, although there is a growing collaboration between the JYU and JAMK.

A similar idea has now been introduced in Sweden, where several universities decided to make alliances. The UU has signed a deal with Linköping University for extended cooperation. The UU together with other universities outside the cities of Stockholm, Gothenburg, and Malmö need to find better strategies in terms of attracting students, research funding, partners in business and in industry if they want to avoid 'being a second class university', as interviewee No.4 put it. In particular, rural universities such as Sundsvall or Luleå need to improve if they want to avoid getting shut down, although these universities are essential for rural development. Recently, Norway has put a reform in place that shuts the smaller sides down and separates full research universities and smaller teaching colleges. The positive effects in such a system of synergies are multiple but can also have its pitfalls and potential problems (Baker, 2011). Examples include the interconnectedness within different research fields, the possibility of specialising in certain areas, saving money by concentrating the available resources or having a higher flexibility to react to new situations, as the available expertise because of the merger is usually higher. The idea of running a university like an enterprise is still rather uncommon in Europe; it is much more commonplace in the USA and Japan. In the future, if the universities decide to use such a model, the current wish of the interviewees to go more towards stakeholder management is a step in the right direction, as it provides a deeper understanding of how the market works, which in turn is necessary if the university model of running it like an enterprise should ever come into force.

9.1.4 Sponsoring of the universities

Lagae (2006) defines sponsoring as a business agreement between two parties. The sponsor provides money, goods, services, people, and/or know - how with regard to an activity by a commercial organization and receives, in exchange, rights from the sponsored party. This is supported by Özatürk (2011), who cited a study of Roy and Cornwell (2004, pp.186–187): "Sponsorship involves two activities. First, an exchange between sponsor and event property occurs whereby the event property receives compensation (i. e. rights fee) and the sponsor obtains the right to associate itself with the event. Second, the sponsor leverages the association by developing marketing activities to communicate the sponsorship" (Özatürk, 2011, p.11). Smolianov and Shilbury (2005) argued that the strength of sponsorship, particularly in sport, is the ability to mediate a commercial message and simultaneously the 'skill' to interact with the consumer in a more designed manner than a standardised commercial would do. "The strength of a conventional advertisement is in its propensity to send a direct and specific message. Sponsorship of an event, on the other hand, facilitates an opportunity to indirectly deliver a message (e.g. increase brand awareness and enhance brand image, which could lead to raised sales)" (Smolianov & Shilbury, 2005, p. 239). Such a case of an event sponsorship which could be implemented by the university were the Gay Games 2010 held in Cologne, as they were partially held within the area of the GSU. Crompton (2004) already argued that in terms of marketing communication or any other promotion vehicle, sponsorship has taken the top spot in terms of investment within the last decade. Therefore, universities need to acknowledge the importance of sponsorship as a marketing tool. A definition of event marketing was given by Graham, Neirotti, and Goldblatt (2001): "Traditionally, event marketing refers to the actual marketing of event by event organisers. For sport events, this type of event marketing involves marketing to: (1) athletes to secure their participation in the event, (2) the media to cover the event, (3) the general public to attend the event and/or follow the event via print and electronic media, (4) corporations to sponsor and support the event, (5) government officials to provide public support, and (6) private vendors to provide efficient and reasonable services" (Graham et al., 2001, p. 151). Sponsoring of events can also be used as an opportunity for communication among organisations, for example, through naming rights at (e.g. scientific) congresses (Özatürk, 2011).

Event organisers need to be supported by sponsors so that the event organisers are able to realise the event. On the other hand, sponsors attempt to gain the utmost public awareness from their event engagement. According to Crompton (2004), sponsorship is based on the exchange theory, which has two main precepts: (i) two or more parties exchange resources and (ii) the resources offered by each party must have the same value for the involved parties. Sport organisations and business organisations both have multiple resources, which they can utilise to facilitate an exchange. For example, sport events and sport organisations can offer media exposure to business organisations, which can then be used to increase brand awareness, image, and the product sales of the organisation's product or service. In return, companies can offer support to sport events through investments of money or in - kind (Crompton, 2004).

9.1.4.1 Firms connected to the universities

Positive experiences of firms after being connected to universities might not only create additional revenue streams for the universities but also enable possible future collaborations. The engagement to sponsorships could lead to a positive awareness within financial institutions and community leaders who often judge policies that have a certain impact on a firm's business environment. This would imply that the firm can generate abnormal returns out of a sponsorship (Reiser, Breuer, & Wicker, 2011; Cornwell, Pruitt, & Clark, 2005). Because of the enormous importance of sports in the current society, sport sponsorship announcements are of high interest for many companies. This could lead to the possibility of selling naming rights to sport facilities on the campus.

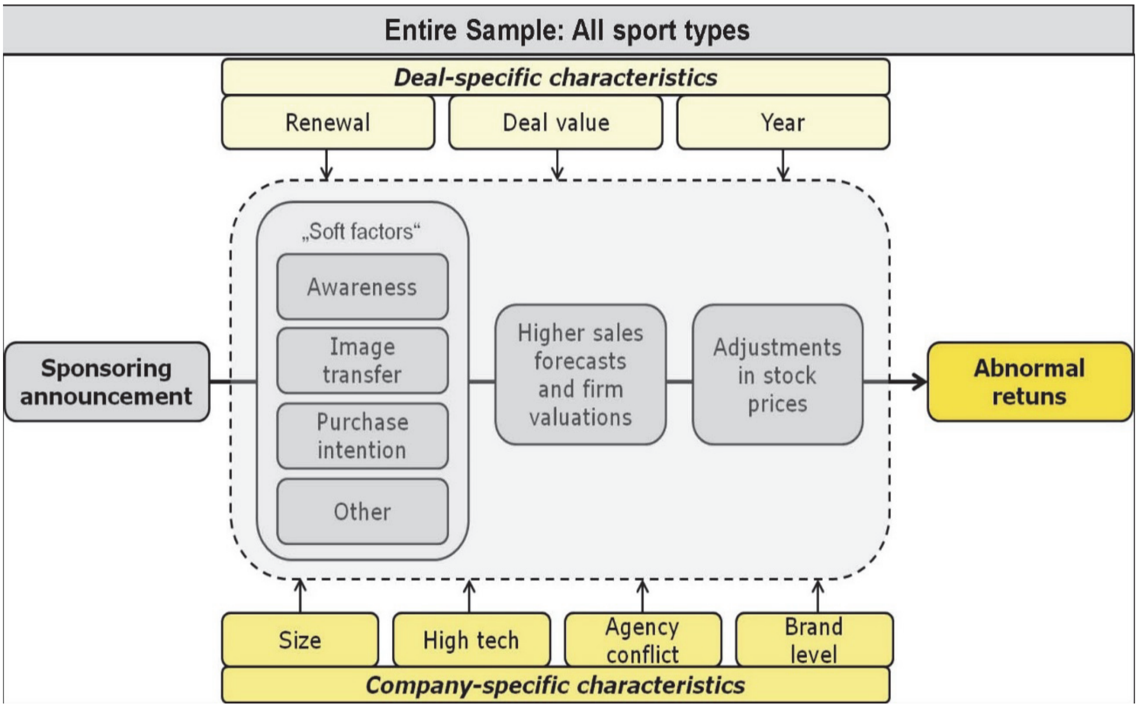


FIGURE 36 Do sport sponsorship announcements impact the firm value of sponsoring firms? Adapted from Reiser, Breuer, & Wicker (2011)

However, such an orientation of selling naming rights of the facilities of the university in general, not only the sport facilities, does not have much history within the countries of this research and numerous prejudices exist. The biggest concern the universities have is the one of becoming a ‘slave’ of the sponsor and not being able to take any decisions anymore based on own-judgement, but on the orders given by the donor. However, every offer should be carefully analysed and not rejected immediately, as this might close the door too fast against a potential money source. Jauch and Müller (2013) stated that the universities should be free of any influence from the economy and maintain their academic freedom. According to Itkonen, Ilmanen and Matilainen (2009), less than one-third of the companies in Finland attempted to assess whether or not the terms of the sponsoring contract have been fulfilled. Thus, it remains debateable whether sponsoring of the universities in particular is a good idea. The sport faculties of this research are some sort of an organisation and albeit different from a normal sport organisation, it is still necessary for these faculties to have valuable marketing concepts for themselves.

10 DISCUSSION OF POSSIBLE FUTURE RESEARCH ISSUES

There are some possible research issues which were not be addressed during this study. Firstly, it would be interesting to see how the situation develops in all of the three selected universities over the years. Will there be any changes in the direction of becoming more business-orientated, and more entrepreneurial and stakeholder friendly? How does the current economic crisis affect the development of the universities in Central and Northern Europe, as within the countries of Germany, Sweden, and Finland, the crisis was not as strong as that in Southern Europe; in fact it would be safe to say that it hardly even occurred in these countries? Another aspects would be the factor of national and international competition as well as potential future analysis of a linkage between sport sciences and public administration. If a country out of these three would decide to allow, for example, private marketing or sponsoring of the universities, how would that affect the other universities in Europe, if we focus on the elite universities? Amongst the best universities in Europe, there has always been a tough competition to obtain the best students and researchers. If one country would allow the aforementioned options as an additional revenue stream, how would the other countries react? Further, potential law changes can change the results of such an analysis. In the end of 2017, in Finland, the government attempted to implement a new law for universities and polytechnics and although the explicit content is not known yet, this can influence future strategic planning.

With regard to the facilities, not only sport but also in general, it would be interesting to see if the financial situation would force the real estate managers to shut down some of them as the financial situation becomes too tense. In additional, what would happen if the current model of ownership of the facilities changes? How would the universities fare if the hirer becomes a complete private organisation with no right to interfere by the state and the universities? Other interesting aspects would include any mergers or forced shutdowns or several smaller universities, which would surely affect the bigger ones in terms of market share and the fight for available resources, implying money and qualified personnel.

As a recapitulation, all universities and faculties have problems and lacks regarding money, business ideas, marketability, an orientation towards stakeholder management and entrepreneurship, a connection to business partners and a better resource management. In addition, the huge competition with the private sector in combination with domestic migration (particularly in Sweden and Finland) makes it very difficult to attract highly qualified personnel. The differences between each interview were quite small though. As described within the methodology, the interviews were designed to be conducted every six months in order to determine whether there were any diversities between summer and winter and if it takes a longer or shorter time for changes to be implemented and recognisable. Subsequently, in all three analysed case-studies of the universities it takes time for such changes to occur and influence the entire business system. Therefore, any of these changes are more evident in a macro- rather than in a micro-cycle.

Ultimately, this research was a very challenging one, giving countless hours of dealing with unexpected situations and several very surprising findings. It would definitely be interesting to select some of the mentioned questions above for a post-doctoral study.

11 SUMMARY

11.1 General idea

The research idea was to find out whether universities can use their sport facilities as a potential asset for business intentions; these may serve a *'vehicle'* to generate needed monies. However, it was the aim to show that sport facilities may serve as such, but not to underpin such a theoretical approach neither as the best nor as the ultimate solution. The selection of JYU, GSU and UU was based on geographical circumstances, the role of the universities within their communities, previous research in this scientific field as well as the local, regional and national business potential within the respective cities, regions and countries.

11.2 Literature and theoretical framework

The background and fundament of this study can be found in business administration, marketing strategies, stakeholder management, and entrepreneurial market approach which then were tried to be meshed with theories in sport facility management, sport planning and resource management. The major ideas for marketing theories, stakeholder management and entrepreneurship used in here are based on studies of Yläranta (2006), Mukkala (et al. 2006; 2010, 2011) and Sarasvathy (2008). Valuable usage of sport facility management, sport planning and resource management were taken from studies such as Suomi (1998, 2001, 2012, 2015), Arthur (2004) and Chadwick (2004). The idea of using KIO and KIBS as an approach within universities as a centre of 'knowledge production' and to utilise the available resources has to take into account that these are concentrated there for a reason as Andersson, Gråsjö and Karlsson (2009) argued: "Griliches' (1979) 'knowledge production function approach' did not acknowledge that knowledgeable persons and knowledge production activities are spread out in geography and at the same time to a high degree concentrated to agglomerations” (Andersson, Gråsjö & Karlsson 2009, 91. Therefore, performance-based strategies need to include a stronger focus on stakeholders as Salerno (2007) found out.

11.3 Methodology

The research was conducted based on semi-structured interviews that were then analysed using a narrative approach (Viehöver 2001). Whilst the narrative approach allowed the interviewees an enhanced freedom of telling their perceived reality, it was still attempted to use a loose guideline of questions within the idea of semi-structured interviews to achieve answers to the asked questions. The 24 interviews were made between 2010 – 2012 in an biannual rhythm as it was attempted to analyse potential micro- and macro cycles within the business structure of the universities regarding their sport facilities (e.g. summer and winter time). The interviewees were selected carefully based on their expertise within the three selected universities, making it a comparative cross-cultural case study.

11.4 Results, discussion, other research aspects and future outlook

This chapter summarises the findings of the analysis, the discussion of the research questions as well as outlooks for the universities, but also potential future research issues to be attempted based on detected limitations of this study. In addition to the theories used in the theoretical framework results of cross-sectoral studies were used to draw additional conclusions and potential solutions of shown traits.

11.4.1 Business and innovation capabilities

The analysis and the discussion of the data have shown that the potential idea of the selected universities being more business orientated through their sport facilities might be not easy to be excelled in the future. The general idea of using the theories of KIO, KIBS and effectuation to foster such an approach is doable, but in several areas it can require structural changes on how the universities will approach their stakeholders and learn to act as entrepreneurs in general, and subsequently while trying to use sport facilities as a main driver. What does this mean for the universities? Based on the KIO-theory of Yläranta (2006) these universities rely on their knowledge to make business. The possibility though of using the university as a spring board for enhanced entrepreneurship was validated by Daghbashyan and Hårsman (2013), who used the earlier idea of being an inner entrepreneur based on studies by Koiranen and Peltonen (1995). Being an entrepreneur also means to be aware of the increased global possibilities. Itkonen (1999) argued that globalisation means a greater mobility for people than ever before. That also increases the available markets for JYU, UU and GSU and it is important to be flexible and react to any changes within the business sector you are active in. It also affects sport as Buckley (2010) claimed: "Sport is clearly part of the globalisation process" (Buckley 2010, 23). Modak (2010) added that the starting globalisation of sport can be seen as a positive force for all. This is supported by an earlier study of Weiermair and Mueller (2005) who researched the role of sport as a potential economic force. According to them sport and sport events can have influences on product and service sector, can raise recognition, add to the identification of international contacts, net benefit for the economic merit effects, have image effects on marketing and may also have a positive impact on productivity growth (Weiermair & Mueller 2005).

According to Franco and Pessoa (2014) university sports can serve successfully for collaborative entrepreneurship. Still, the idea to use sport for business ideas has not been followed that much in the past as Szymanski (2010) criticized. The sport in Europe has mainly been grounded on "higher ideals" rather than on business interests such as in the USA. A lack of history and experience in using sport as a major business role might have also hindered the universities in being more involved with the economy regarding the sport sector and the leagues, organisations, clubs and other role players in the past, which could have helped them to use sport as a major force for business orientation (Szymanski 2010). Morris, Kuratko and Cornwall (2013) criticised the lack of looking beyond the campus by the universities in terms of business interests.

The findings of Schwarz, Hall and Shibly (2015) that successful strategic management for sport facilities includes aspects of strategic human resource management to be able to produce integrative effects which then foster the preferred outcomes for the usage and management of the sport facility including eventual profits were proven in the analysis. The gained knowledge of the universities which these organisations have to try to increase for profitability requires that the managers of these sport facilities do utilise the available resources in the best way possible. This may need an additional hiring of experts by the universities, specific individuals, to gain competence and strategic market advantage over other scientific institutions as their competitors. Especially universities located as regional, but not national centres such as JYU and UU need to acknowledge the importance of renewing the expertise of the personnel through professional development, but also bringing in *"fresh"* outside knowledge and skills as some tasks might not be solved adequately by the existing personnel, also in terms of structural planning for infrastructure such as sport facilities. Otherwise, a drawback in competition might be inevitable.

The core of knowledge as described in KIO and KIBS is necessary to manage a sport facility as a business tool, but not sufficient as a lone aspect. The knowledge acquired in these process as described in the theoretical framework, the analysis and the discussion have to be transformed into useable outputs by the universities. The available resources of monies, time, human and social capital and finally, infrastructure are necessary to be bundled with the structural capital the universities do possess. Before making business plans JYU, UU and GSU have to be aware that structural capital means the available information and knowledge of HEI's can move through the entire organisation vertically and horizontally and has to be available for the stakeholders and customers the universities and their sport facilities have. This type of knowledge management as Yläranta (2006), Mukkala et al (2006) and Mukkala (2010, 2011) described is essential for any success of KIO and KIBS. The sport facility managers, in this study the facility managers of the universities need to focus on marketing concepts designed by the experts of the universities which concentrate on research, teaching, socialisation and services to the local community as well the major stakeholders.

In case of reconstructing the available sport facilities of the universities to make these adequate to be a business tool the aspects necessary to be taken into account for the results of this research are based on a study of Ammon, Southall and Nagel (2010) who argued that the experts necessary to plan such a change need a high quality in:

- Accounting,
- Legal aspects, underwriting/debt financing,
- Architecture
- Government affairs, and
- Zoning requirements.

Additionally, the universities of this study need explore and exploit their innovative capabilities. This means to use the available and existing knowledge, personnel and services to improve their efficiency in stakeholder management, strategic management and sport facility management. Some innovations might change the environment and culture of the institution, causing eventual stress. Innovative capability can also be shortened by a lack of money (which has been stated by the interviewees to often be a problem) and time which both can limit the ability to reach certain strategic goals set by the universities within their future planning. Hence innovation processes might also be necessary in the university's organisation itself, which is, according to Damanpour and Evan (1984) defined as the "implementation of an idea - whether pertaining to a device, systems, process, policy, program, or service - that is new to the organization at the time of adoption" (Damanpour and Evan, 1984, p. 393). Ratten and Ferreira (2017) added a study of Li and Atuahene-Gima (2001) to argue that in such cases the selected organisations (JYU, UU and GSU) have to include a strong focus on the decisions of how to allocate the available resources, which then again for this particular research might lead to innovation and thus, could lead to a stronger business orientation in general and through sport facilities in particular by developing new products (mainly through research) and markets.

The risk factor in here for the universities is explained by taken two principles of Sarasvathy's theory of effectuation into account, namely the *patchwork* *quilt* and the *affordable loss*. As seen in the analysis (chapters 7.2.1 and 7.2.2) there is a necessity to act and to create something new through existing business strategies and to work closely with your stakeholders. If the risk and the level of uncertainty get too high, the second principle starts to act and the universities might act only based on what these institutions are willing to lose. This also affects consumers and users of their sport facilities as eventual innovations might interfere with their interests and additional cost might be involved. The universities' deciding boards may need to study on how innovations in sport are more accessible in certain environments rather than in others and how this can help their abilities in marketing and for investing in their sport facilities. Some organisations (e.g. regulated by law) and some environments (e.g. location) can be more proficient in problem-solving strategies based on their skills in how to process knowledge (Vanhaverbeke & Cloodt, 2014).

11.4.2 Potentials in sport and facilities

Based on studies of Klein and Kurscheidt (2008) there is a conjunction between the marketing potentials of sport-related organisations inside a region and its socio-economic situation. If such a regions has recently experienced an economic depression the environment to invest in sport structures (especially elite sports is rather negative. The cities as well as the regional governments often lack monies to renovate the sport facilities (which mostly includes the sport facilities of universities) and local and regional firms in such areas do not invest much into such facilities due to dropping sales or even the risk of bankruptcy. However, even in regions with detriments in oppostion to capital regions such as in Umeå and Jyväskylä vs. Stockholm and Helsinki efficient sport facility management can make up for several occasions like serving the needs of university stakeholders.

According to Wefers (2007) it is essential for universities to invest in the academic structures in order to be able to compete with other scientific institutions for international research projects, scientific experts and elite students. Strategically, market-orientated aims for companies as well as for universities interested in a market-orientated approach are necessary to be made for the long-term. Such plans decide the behaviour of the organisation and the selection and handling of the markets. The strategy has to be divided into tactical and operational marketing planning. The strategy determines what has to be done to reach the selected aims and the operational tactic has set how it is going to be done and which marketing instruments are the most viable ones. Regarding marketing of universities such as JYU, UU and GSU the key markets are teaching, research, further education, and transfers and consulting. In return the universities receive monetary allowances such as subsidies from the state, third-party funds, tuition fees and remuneration.

Although universities do usually not aim for variables such as selling, sales volume and profit, it is possible to name – analogue to the operations side of companies – *quasi-economic* aims as depicted below based on the study of Jesse (2007):

Quasi-economic aims		*Psychographic aims*	
Companies	**Universities**	**Companies**	**Universities**
Increase of selling and sales volume	Increase of student numbers	Increase of awareness level	Increase of awareness level
Enforcement of market entry and increase of market shares	Improved consumption of the students' demands potential	Positive change and enhancement of product images and the company itself	Positive change and enhancement of the university image and its accomplishments
Increase of market penetration and improvement of consumption of market potential	Increase of demand for research and transfer services	Increase of preferences for products	Increase of preferences for accomplishments
Global and differentiated market objectives	Global and differentiated market objectives	Enhancement of purchase intention	Increase of leaning towards enrolment and research projects

FIGURE 37 Aims of universities and companies. Adapted from Jesse (2007)

Based on a study of Maassen (2000) universities are one of the indicators and also the reason for economic development in all countries. This is based on how universities are interpreted by the public as well as by the government. Firstly, a university is seen as a social institution, but secondly, also as a part of the industry, the local, regional and national economy. Based on these two assumptions it is the question whether the universities should develop evolutionally or revolutionary in terms of their economic approach? If universities are seen as an industry it can be assumed through challenges based on the nature of a livid market the management of universities should improve by time, programmes might get changed, the organizational structure gets modified, the facility management might operate in more flexible ways etc. Therefore, if economic challenges are taken as a catalyst for universities, the more the universities will improve their actual performance.

The current economic situation at universities including JYU, UU and GSU has four potential imbalances which might affect the performance. Firstly, there are more students than ever before which again requires more resources, human resources as well as the facilities and monies. Secondly, the labour market has changed and the annual output of students might not suit the changed environments. Thirdly, old and new stakeholders of the universities demand more flexibility by the university which affects the universities' ability to act as a knowledge intensive institution as analysed in this study through KIO and KIBS. Fourthly, the development of knowledge has increased much faster than resources (from the state and others) could have been generated. If the universities do not react to these four aspects a successful business orientation is highly unlikely and the universities will become marginalised.

Thus, it is essential as Maassen (2000) argued to separate between the primary source of money coming from the state and third-party funds. If the state does not pay anymore 100 percent of the expenses of the university, the universities will integrate other revenue streams into the entire budget. This may lead to the controversy that the state does not want to finance the universities anymore by 100 percent if parts of that money are used for market activities. The universities on the other hand expect less intervention by the state if less state money is involved and stakeholders and third-party funds have an increased share of influence:

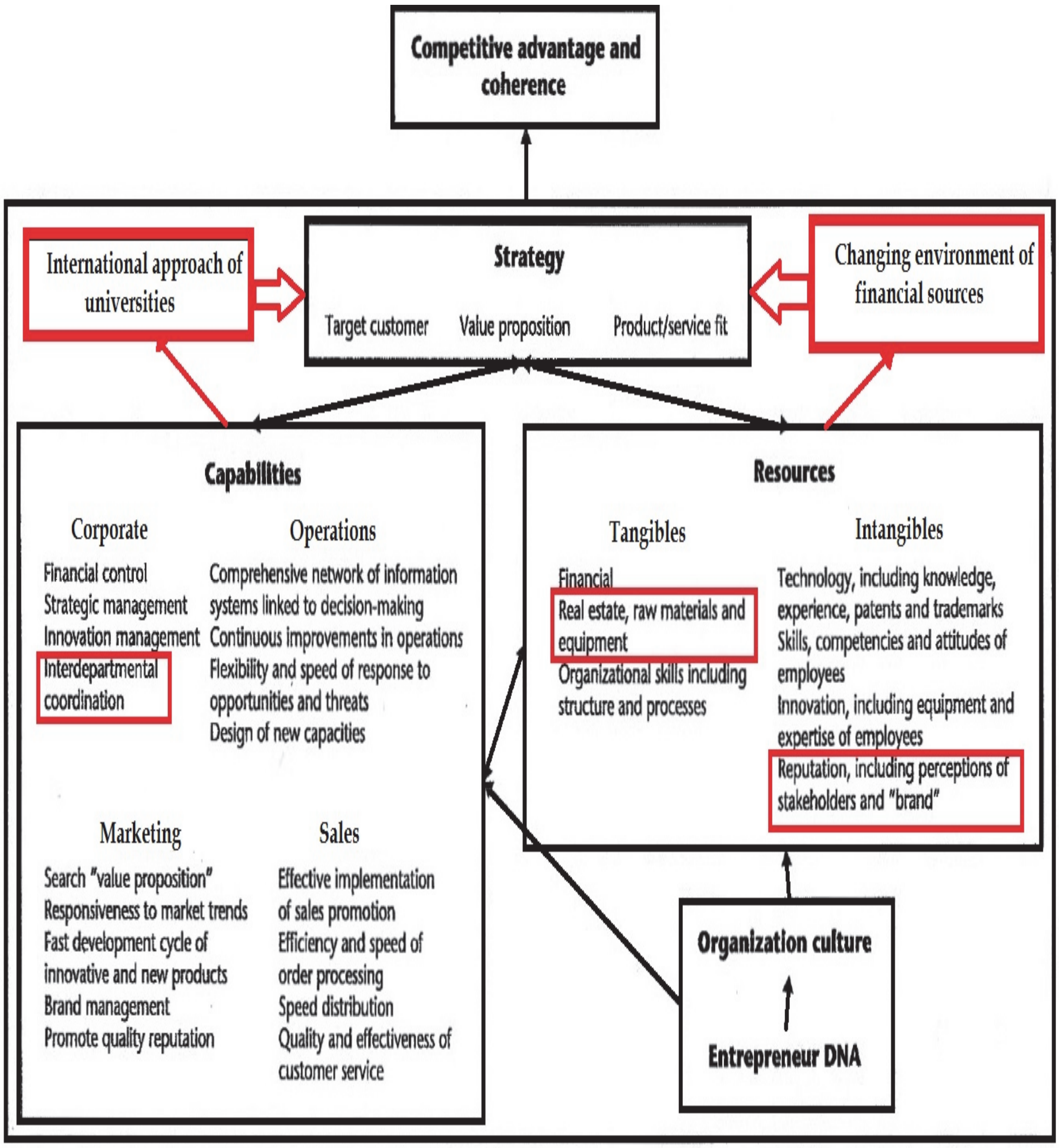


FIGURE 38 Adaptive model for competitive advantage of universities. Adapted and modified from Ratten and Ferreira (2017)

According to Neuerburg (2010) sport facility management needs to be sustainable. Many factors have to be acknowledged such as design, demand, target groups, construction and the government as such. Breuer and Schlesinger (2005) added that sport facilities have three major functions:

- Stable source for sport organisations and their needs and services (organisational sport facility management)
- Provide basic needs for the physical exercise of the public (public sport facility management)
- Used as a yield-orientated investment (yield-orientated sport facility management)

It can be concluded that the universities need to be aware that any potential business orientation through their sport facilities might cause a shift in the importance of each of these three functions, causing stakeholders, the public and other eventually involved parties to rethink their ties to the universities. This is extremely important if a yield-oriented approach is used as such a sport facility management follows strictly the rules of the market. Success and growth are the essential factors in here and for universities this is highly dependent on their ability to use these sport facilities for money generated through research. This approach also increases the risk of unusual high costs in service quality as shown in the analysis of the interviews as the maintenance services as well as orders regarding infrastructure are often outsourced. Therefore, JYU, UU and GSU need to concentrate stronger on 1) sport facility development planning, 2) finding strategies to improve the consulting and operating processes of managing their sport facilities and finally, to ensure the economic sustainability (Breuer & Schlesinger 2005; Simula & Levula 2017). As Wetterich, Eckl and Schabert (2009) stated the sustainability of sport facilities and the connected governance needs a holistic reflection to ensure their future.

11.4.3 Structural changes and outlook

Based on Jesse (2007) universities can be seen as highly complex and differentiated organisations which consist on loosely connected subsystems. Therefore, it is difficult to control and organise the various stakeholder groups of the university as such and to integrate them completely into the system. Adopting this theory into the conclusion of this dissertation the implementation of market orientation as a potential business approach needs to acknowledge eventual organisational obstacles. Kieser (2000) argued 18 years ago that universities as non-profit organisation are able to raise their quality in exchange for any potential profit as they do not need to make profit due to the money coming from the state. However, the analysis of the situation at JYU, UU and GSU showed that the demand of money has risen significantly within the last decades, causing the universities to find other sources of money and thus, not necessarily being able anymore to rely only on the state as a source of income and being able to focus only on quality. To react accordingly to given circumstances in the market universities need freedom to decide how react, even more so if the field of interest is based on their own infrastructure such as the sport facilities. It can be argued that without too strong regulations by the state the universities can face the pressure of competition, especially from universities located in a different country.

According to Teichler (2000) the *"internationalisation"* of universities has become a trend which is irreversible. A university which does not want to take part actively will lose market and research opportunities. However, such an approach will occur only very slowly especially in Finland and Sweden as both countries do not have much history with universities acting as a market force. In Germany the history is different, but not by much. Wagner (2001) argued that a university being able to control itself without any influence from the state is able to increase efficiency and performance in competition and based on that theory, a university will be ranked higher the more competition it has to face. However, in a field which is rather new to serve as a business tool for universities such as sport facility management it can be assumed that such processes need more time to have significant impact on the universities' businesses.

Escher (2001) argued that universities have five different sectors in which they compete: 1) Research reputation, 2) quality of teaching and quality of university organisation, 3) ability to implement reforms, 4) quality of scientific and non-scientific personnel and 5) endowment of financial and tangible means. The research showed that the sport facilities of JYU, UU and GSU are connected to all of these five sectors and thus, it can be concluded that business orientation in this field can only be applied if the universities are able to maintain a high international ranking without losing ground in any of these five aspects. Schimank (2000) already found out prior to Escher that efficient research at universities, which, based on the results of this study can applied through sport facilities only by extended research capabilities, has five binding criteria: 1) quantitative research capacities, 2) scientific quality, 3) outside relevancy of the produced goods, 4) existence of a critical mass of unorthodox research and 5) autonomy to select research topics. However, the relevancy of each of these five factors is dependent on the interests of the university and the faculties, respectively the deciding boards. Additionally, as explained in the analysis in chapter 7.4.2 there is a the risk of becoming a *"slave"* for auxiliary persons and organisations willing to give monies, diminishing the options for selling the knowledge as well as for using potential goods such as the sport facilities as a business tool. Schimanek (2000) claimed that the heterogeneity of all these named criteria bundles one aspect, namely money, which as the analysis showed is something JYU, UU and GSU are constantly lacking.

The core for establishing a successful business-orientated approach for universities can be found in a competition for the available resources. Successful research, a high international reputation, quality of teaching as well as administration of the university can only take place if the necessary resources are available, which include personnel, time, monies and infrastructure such as facilities. Jesse (2007) argued already a decade ago that two different opportunities are available for structuring the future path of the universities which was also evident in this dissertation. The first option does not want universities to compete in the market to ensure that freedom and autonomy of research and teaching are not jeopardised by internal and external forces, a fear which was sometimes recognisable in the interviews. The second option would allow universities to compete freely in the market and not only to gain profits, but also to increase the ability for decision-making of decisive people in various sectors important for the universities such as business, social responsibilities for the community and the relationship to stakeholders, but even private life.

Such a development leads to a differentiation of the marketing and business approach of universities which can be found in its original theory executed by Meffert and Bruhn (1997), namely the separation into the sectors of *"broadening"* and *"deepening"*. *"Broadening"* describes the enhancement of a classical marketing approach by including non-profit organisations such as clubs, sport organisations, churches and also (so far) universities funded majorly by the state. *"Deepening"* on the other side features a deeper approach of the tasks and aims of marketing beyond the economic sense (e.g. ecological-orientated marketing which can be used for sustainable sport facilities). One definition which may be applied in the future business strategies for sport facility management at JYU, UU and GSU was done by Kotler and Fox (1995) who stated that „a societal marketing orientation holds that the main task of the institution is to determine the needs, wants, and interests of its consumers and to adapt the institution to deliver satisfactions that preserve or enhance the consumer's and society's well-being and long-term interests" (Kotler & Fox, 1995, S. 10). Any profit which is made by the organisation – in this case universities – needs to be put back into the organisation itself and to be reinvested. An idea of this approach was originally formulated by Raffée and Wiedmann (1995) and later used by Jesse (2007) and features profit-marketing of non-profit-organisations and is named *"public-profit-marketing"*. The organisation of choice is either state-owned or owned by the public which then uses marketing strategies to fulfil its tasks. Such a form of marketing can be labelled as *"university-adequate"* marketing.

Based on studies by Fritz (1996) it can be concluded that the three analysed universities need to investigate their individual markets and abilities to access the selected areas of business orientation, to create a specific profile and to communicate this outline to their stakeholders, the community and future potential partners.

YHTEENVETO - FINNISH SUMMARY

Väitöskirja sijoittuu liikunnan yhteiskuntatieteiden ja sport managementin tutkimusalueelle ja käsittelee resurssien allokointia tutkimuskohteissa, jotka olivat Jyväskylän yliopisto (JYU), Uumajan yliopisto (UU) Ruotsissa ja Saksan urheilukorkeakoulu (GSU) Kölnissä.

Tutkimuksessa selvitetään yliopistojen kiinteistöomistuksen muutosten vaikutusta yliopistojen tuloihin vuosina 2010 - 2012. Tutkimuksessa selvitetään, miten yliopistot pystyvät käyttämään hyväkseen liikunnan ja urheilun mahdollisuuksia tulonmuodostuksessa.

Koska markkinointi ja innovaatiot johtavat parhaimmillaan lisätulojen kertymiseen, yliopistojen on tunnettava, kuinka käytetään apuna markkinointia ja innovointia. Tämän tutkimuksen päätavoitteena on selvittää: Millaisia liiketoiminta-orientoitumia tapahtuu tulevina vuosina JYU:ssa, UU:ssa ja GSU:ssa. Lisäksi selvitetään miten taloudellinen analysointi parantaa resurssien käytön tehokkuutta vaikeissa taloudellisissa tilanteissa.

Ylärannan ja Mukkalan tutkimuksiin perustuen tässä käytetään kahta keskeistä teorioita: 1 KIO (Knowledge Intensive Organisation) tarkoitta tietointensiivisen organisaation mahdollisuuksien huomioonottamista yliopistojen kehittämisessä. 2 KIBS (Knowledge Intensive Business Services) tarkoittaa tietointensiivisten liiketoimintapalvelujen huomioon ottamista organisaatioiden ja siinä työskentelevien ihmisten kehittämisessä.

Tämän tutkimuksen keskeisimmät tutkimuskysymykset käsittelevät KIO:n ja KIBS:n potentiaalia yliopistojen talouden kehittämisessä. Tutkimuskysymyksillä haluttiin selvittää urheilun ja liikunnan mahdollisuuksien hyödyntämistä yliopistojen liiketoiminnan kehittämisessä. 1) Voiko KIO:n ja KIBS:n soveltaminen olla hyödyllistä yliopistojen menestymisen kannalta? 2) Voivatko KIO:n ja KIBS:n toteutusmallit toteutua yliopistojen tulevaisuuden strategisissa johtamismalleissa? 3) Ovatko yliopistot valmiita toimimaan liiketoiminnan osaajina? 4) Mikä erityinen rooli urheilutapahtumilla on yliopiston taloudessa? 5) Miten opiskelijoiden liikuntakulttuuri vaikuttaa kolmessa tutkimusmaassa yliopistojen toimintaan?

Tutkimusta varten tehtiin 24 laadullista puolistrukturoitua haastattelua vuosina 2010-2012. Saatuja tietoja tarkasteltiin kerronnallisen diskurssianalyysin avulla (Viehöver, 2001), jolloin haastateltavat saivat henkilökohtaisen analyysin. Haastatteluissa pyrittiin näkemään maailma haastateltavien näkökulmasta. Oli myös tärkeää ymmärtää, miten yksilöt rakentavat yhteiskunnallista todellisuutta suhteessa omiin etuihinsa (Sparkes, 2002).

Haastateltavat valittiin edustamaan eri yliopistoja, jolloin saatiin riittävästi erilaisia mielipiteitä. Haastateltavien yksilölliset taustat otettiin huomioon, jolloin ne kattoivat riittävän erilaiset teoreettiset ja käytännölliset näkökannat. Haastattelut testattiin ennen haastatteluja.

On erittäin tärkeää tiedostaa, että liiketaloudelliset ratkaisut eivät ole ainoaita ”oikeita” ratkaisuja yliopistoissa. Liiketoiminnallinen lähestymistapa yliopistojen liikuntatiloihin on hyvin uutta yliopistoissa, eikä niitä ole paljoa käytetty yliopistojen tulonlähteenä. Muita lähestymistapoja voivat olla esim. valtion vahvempi mukaantulo rahoitusjärjestelmiin tai erilaisiin omistusstrategioihin, kuten yhteisyrityksiin.

Tulokset osoittivat, että yliopistoilla on taloudellisia huolia jatkuvasti, suorastaan rahoitusongelmia ja strategisen johtamisen puutteita. Yliopistojen tutkimusstrategioiden tulisi suunnata toimintaa siten, että tutkimus- ja rahoitustoimet ovat riittäviä samanaikaisesti vahvistamaan sekä tutkimusstrategiaa että yliopiston taloutta seuraavien vuosikymmenten aikana. Muita potentiaalisia tulonlähteitä kuin liikuntapaikat ovat esimerkiksi lukukausimaksut, yhteistoimintasopimukset eri tahojen kanssa sekä, yliopistojen suuntautuminen yrittäjyyteen ja yhteisyritystrategioihin perustuvien yritys- yms. kampusten yhdistämiseen.

Tutkimuksen tulosten mukaan henkilöstön ja palveluiden käytön tehokkuutta on parannettava sidosryhmien hallinnassa, strategisessa johtamisessa ja liikuntapaikkojen hallinnassa. Tutkimuksessa nousi esille neljä keskeistä havaintoa: Ensinnäkin yliopistoissa on enemmän opiskelijoita kuin koskaan ennen, mikä vaatii enemmän monenlaisia resursseja kuten henkilöstöresursseja sekä tiloja ja taloudellisia panostuksia. Toiseksi työmarkkinat ovat muuttuneet ja opiskelijoiden saama opetus ei välttämättä ole suoraan soveltuva muuttuneille työmarkkinoille, jolloin pitää ottaa huomioon esim. täydennys- ja jatkokoulutus. Kolmanneksi yliopistojen vanhat ja uudet sidosryhmät vaativat enemmän joustavuutta yliopistolta, mikä vaikuttaa yliopistojen kykyyn toimia osaamisvaltaisina instituutioina, kuten tässä tutkimuksessa KIO:n ja KIBS:n avulla analysoitiin. Neljänneksi tietotaidon vaatimustaso on kehittynyt paljon nopeammin kuin resurssit. Jos yliopistot eivät reagoi riittävästi näihin neljään tekijään, menestyksellinen liiketoiminta on erittäin epätodennäköistä ja yliopistot jäävät kehityksestä jälkeen.

Avainsanat: Liikuntapaikkojen hallinta, HRM (human resource management), yrittäjyys, liikuntapaikkojen omistajuus, bruttokansantuote BKT, vertailevatutkimus,

REFERENCES

Acs, Z. J. (2009). Jaffe-Feldman-Varga: the search for knowledge spillovers. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 36 – 56. Cheltenham: Edward Elgar Publishing

Acs, Z. J., Armington, C. (2004) The impact of geographic differences in human capital on service firm formation rates. Journal of Urban Economics, 56, 244 – 278. In: Acs, Z., J.: Entrepreneurship and regional development, 209 – 246, 2010. Cheltenham: Edward Elgar Publishing

Acs, Z. J., Armington, C. (2004b). Employment growth and entrepreneurial activities in cities. Regional Studies, 38, 8, 911 – 927. In: Acs, Z., J.: Entrepreneurship and regional development, 299 – 315, 2010. Cheltenham: Edward Elgar Publishing

Acs, Z.,J., Braunerhjelm, P., Audretsch, D., B., Carlsson, B. (2009). The knowledge spillover theory of entrepreneurship. Small Business Economics, 32, 1, 15 – 30. In: Acs, Z., J.: Entrepreneurship and regional development, 137 – 154, 2010. Cheltenham: Edward Elgar Publishing

Acs, Z. J., Varga, A. (2005). Entrepreneurship, agglomeration and technological change. Small Business Economics, 24, 323 – 334. In: Acs, Z., J.: Entrepreneurship and regional development, 421 – 432, 2010. Cheltenham: Edward Elgar Publishing

Adams, G. R. & Schvaneveldt, J. D. (1991). Understanding research methods, 2nd Ed., New York & London: Longman

Adler, P. S. & Seok-Woo K. (2002). Social Capital: Prospects for a new concept. Academy of Management. 27, 1, 17 – 40.

Alvarez S. A. & Barney, J. B. (2002). Resource-based theory and the entrepreneurial firm. In: Hitt, M. A., Ireland, R. D. Camp, S. M. & Sexton D. L. (Eds.), Creating A New Mindset: Integrating Strategy and Entrepreneurship Perspectives, 89 – 105. New York: John Wiley.

Ammermueller A., Kuckulenz A. & Zwick T. (2009). Aggregate unemployment decreases individual returns to education. Economics of Education Review 28, 217 – 226.

Andersson A., Gråsjö, U., Karlsson, C. (2009). The role of higher education and university R&D for industrial R&D location. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 85 – 108. Cheltenham: Edward Elgar Publishing

Andreff, W. (2011). European versus American model of sports. In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.): Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 37 – 48. Schorndorf: Hofmann.

Anselin, L., Varga, A., Acs, Z. J. (1996). Local geographic spillovers between university research and high technology innovations. Journal of Urban

Economics, 42, 422 – 428. In: Acs, Z., J.: Entrepreneurship and regional development, 391 – 420, 2010. Cheltenham: Edward Elgar Publishing

Armstrong, M. (2006). A handbook of human resource management practice. 10th Ed. London: Kogan Page.

Arthur, D. (2004): Sport event and facility management. In: Beech, J. & Chadwick, S. (Eds.). The business of sport management, 323 – 349. Harlow: Prentice Hall Financial Times.

Atteslander, P. (2006). Methoden der empirischen Sozialforschung. 11th Ed. Berlin: Erich Schmidt Verlag.

Audretsch, D.B., Keilbach, M. (2004). Entrepreneurship capital and economic performance. Regional Studies, 38, 8, 949 – 959. In: Acs, Z., J.: Entrepreneurship and regional development, 126 – 136, 2010. Cheltenham: Edward Elgar Publishing

Audretsch, D. B., Lehmann, E. E. (2004). Does the knowledge spillover theory of entrepreneurship hold for regions? Research Policy, 34, 1191 – 1202. In: Acs, Z., J.: Entrepreneurship and regional development, 433 – 444, 2010. Cheltenham: Edward Elgar Publishing

Auvinen, A. M., Waddington, L., Moretti, M., Dondi, C., Fischer, T., Kretschmer, T., Jonsson, D., Larsson, S. O. & Wiik, S. (2010). Understanding the stakeholders – A key to the successful implementation of adult learning projects. E-Learning papers special edition 2010. Retrieved 28th November 2017 from: https://www.openeducationeuropa.eu/sites/default/files/old/media24383.pdf

Bahk, C. M. (2000). Sex differences in sport spectator involvement. Perceptual and motor skills. 91, 1, 79 – 83.

Baker, H. K. (2011). Art of corporate reconstructing: creating shareholder value through mergers and acquisitions. Hoboken, NJ: Wiley.

Bale, J., Dejonghe, T. (2008). Editorial. Sports geography: an overview. Belgeo, 2, 157 – 166.

Barney, J.B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 1, 99 – 120.

Barney, J. B. (1997). Gaining and sustaining competitive advantage. Reading: Addison-Wesley.

Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. Academy of Management Research. 26, 1, 41 – 56.

Barro, R.J. & Sala-i-Martin, X. (1999). Economic growth. Cambridge (Mass.): MIT Press.

Bash, L., Greenwald, S., Goodman, M. (2007). The globalisation of higher education: Models, systems and cultures. In: Good, D., Greenwald, S., Cox, R., Goldman, M.: University collaboration for innovation. Lessons from the Cambridge – MIT Institute. Rotterdam: Sense publishers.

Baurmann, J. G. (2013). Alles nur kalte Luft? Die Zeit Online. Retrieved 13th September 2013 from: http://www.zeit.de/2013/38/facebook-rechenzentrum-schweden-lulea

Bennett, R. (2003). Corporate hospitality: executive indulgence or vital corporate communications weapon? Corporate communications: An international journal. 8, 4, 229 – 240.

Bergin, J. (2005). Microeconomic theory: a concise course. New York: Oxford University Press.

Best, R.J. (2009). Market-based management: strategies for growing customer value and profitability. 5th ed. Upper Saddle River, NJ: Pearson Education.

Bezold, T. (2008). How to use naming rights in the business of sport. In: Chadwick, S. & Arthur, D. (Eds.): International cases in the business of sport, 317 – 332. Oxford: Butterworth-Heinemann.

Bisi, P. (2001). Kasvukeskuksissa myös liikuntarakentaminen lisääntyy – Sports facilities are built in fast growing population centre. Liikunta & Tiede 38, 5, 17. Helsinki: Liikuntatieteellinen Seura.

Black, D., Kolesnikova, N. & Taylor, L. (2009). Earning functions when wages and prices vary by location. Journal of Labour Economics, 27, 21 – 47.

Blom, K. A. & Lindroth, J (1995). Idrottens historia – Från antika arenor till modern massrörelse. Malmö: SISU Idrottsböcker

Bohlen, F. (1979). Die XI. Olympischen Spiele in Berlin 1936 – Instrument der innen- und außenpolitischen Propaganda und Systemsicherung des faschistischen Regimes. Köln: Pahl-Rugenstein Verlag.

Borjas, G. J. (2001). Economics of Migration. International Encyclopaedia of the Social & Behavioral Sciences, 9803 – 9809.

Bos, W. & Koller, H. – C. (2002). Triangulation – Methodische Überlegungen zur Kombination qualitativer und quantitativer Methoden am Beispiel einer empirischen Studie aus der Hochschuldidaktik. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 271 – 285. Weinheim: Beltz Verlag.

Breuer, C. (2014). Information about sport facility management at the GSU. Personal meeting on 1st August 2014.

Breuer, C. & Feiler, S. (2013a). Finanzielle Situation und ökonomische Bedeutung des Vereinssports. In: Breuer, C. (Ed.): Sportentwicklungsbericht 2011/2012 – Analyse zur Situation der Sportvereine in Deutschland, 48 – 71. Köln: Sportverlag Strauß.

Breuer, C. & Feiler, S. (2013b). Sportvereine in Nordrhein-Westfalen. In: Breuer, C. (Ed.): Sportentwicklungsbericht 2011/2012 – Analyse zur Situation der Sportvereine in Deutschland, 597 – 632. Köln: Sportverlag Strauß.

Breuer, C., & Schlesinger, T. (2005). Sportstättenmanagement. In. Breuer, C. & Thiel, A. (Eds.), Handbuch Sportmanagement (180 – 194). Schorndorf: Hofmann.

Brezis, E.S. (2012). Why are US universities at the top of international rankings? In: Bienkowski, W., Brada, J.C., Stanley, G.: The University in the age of globalisation. Rankings, resources and reforms, 155 – 176. Houndmills: Palgrave Macmillan.

Brinck, C. (2013). Es ist eine tiefe Enttäuschung. Die Zeit Online. Retrieved at 24th March 2013 from: http://www.zeit.de/2013/12/Studiengebuehren-Abschaffung-Bilanz.
Bruun, N. (2000). The Finnish system of industrial relations and labour law. In: Neal, A.C.: European social policy and the Nordic countries, 77 – 109. Aldershot: Dartmouth Publishing Company Limited.
Bryson, J. M. (1988). Strategic planning for public and non-profit organisations – a guide to strengthening and sustaining organisational achievement. San Francisco: Jossey-Bass Inc.
Bublitz, H. (2001). Differenz und Integration – Zur diskursanalytischen Rekonstruktion der Regelstrukturen sozialer Wirklichkeit. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 225 – 260. Opladen: Leske & Budrich.
Buckley, K. (2010). Watching globally – playing locally. The global battle for sports consumers and is local effect. In: Ho, R. & Ren, H. (Eds.): Globalisation, sport management and traditions, 23 – 27. Maidenhead: Meyer & Meyer Sports UK.
Bundesagentur für Arbeit (2015). Arbeitslosenstatistik Köln. Retrieved 2nd April 2015 from: https://statistik.arbeitsagentur.de/Navigation/Statistik/Statistik-nach-Regionen/BA-Gebietsstruktur/Nordrhein-Westfalen/Koeln-Nav.html.
Bundesinstitut für Sportwissenschaft (2000). Leitfaden für die Sportstättenentwicklungsplanung. Schorndorf: Verlag Karl Hofmann.
Böckerman, P. & Maliranta, M. (2007). The micro-level dynamics of regional productivity growth: The source of divergence in Finland. Regional Science and Urban Economics, 37, 2, 165 - 182.
Caudwell, J. (1999). Women's football in the United Kingdom: Theorizing gender and unpacking the butch lesbian image. Journal of sport and social issues, 23, 390 -402.
Chadwick, S (2004). The future of sport businesses. In: Beech, J., Chadwick, S. (Eds.) The business of sport management (19, 452 – 485). Harlow: Prentice Hall Financial Times
Chandler, G., DeTienne, D., McKelvie, A. & Mumford, T. (2011). Causation and effectuation processes. A validation study. Journal of Business Venturing. 26, 3, 375 – 390
Chantelat, P., Leroux, N. & Camy, J. (1998). Sport economy and management of sport organisations: retrospectives and perspectives. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 74 – 87. International council of sport science and physical education. Schorndorf: Hofmann.
Chaston, I. (2000). Entrepreneurial marketing – Competing by challenging convention. Houndmills: Macmillan Press Ltd.
Chelladurai, P. (1999). Human resource management in sport and recreation. Champaign (Il.): Human Kinetics Publishers, Inc.

Chesbrough, H. (2010). Business model innovation: Opportunities and Barriers. Long Range Planning, 43, 2 – 3, 354 – 363.

Cianfrone, B. A. & Zhang, J. J. (2006). Differential effects of television commercials, athlete endorsements, and venue signage during a televised action sports Event. Journal of Sport Management. 20, 322 – 344.

Cobb, C. G. (2011). Making sense of agile project management: Balancing control and agility. Hoboken, NJ: Wiley.

Coff, R.W. & Laverty, K.J. (2001). Real options on knowledge assets: Panacea or pandora's box? Business horizons. 44, 6, 73 – 79.

Cornwell, T. B., Pruitt, S. W. & Clark, J. M. (2005). The Relationship Between Major-League Sports' Official Sponsorship Announcements and the Stock Prices of Sponsoring Firms. Academy of Marketing Science Journal. 33, 401 – 412.

Cox, T. H. & Blake, S. (1991): Managing cultural diversity: implications for organizational competitiveness. Academy of Management Executive. 5, 3, 45 – 56.

Crompton, J. L. (2004). Conceptualization and alternate operationalisations of the measurement of sponsorship effectiveness in sport. Leisure Studies. 23, 3, 267 – 281.

Culkin, D. F & Kirsch, S. L. (1986). Managing human resources in recreation, parks and leisure services. New York: Macmillan Publishing Company

Cummings, T. G. & Worley, C. G. (2008). Organisation, development and change. Minneapolis: West Publishing Company.

Cuthbertson, K. & Nitzsche, D. (2004). Quantitative financial economics: stocks, bonds and foreign exchange. 2nd ed. Hoboken, N.J: Wiley

Cuypers, I.R.P. & Martin, X. (2006). What makes and what does not make a real option? A study of international joint ventures. Academy of Management, Best Conference Paper, 1 - 6.

Daghbashyan, Z. & Hårsman, B. (2014). University choice and entrepreneurship. Small Business Economics, 42, 729 – 746.

Dahllöf, U. (1996a). Background and selection of cases for analysis. In: Dahllöf, U. & Selander, S. (Eds.) Expanding Colleges and New Universities - Selected Case Studies from Non-metropolitan areas in Australia, Scotland and Scandinavia, 13 – 28. Papers from an international development seminar held at Östersund/Trillevalleen Sweden, 15th – 19th March 1995, arranged by Mid-Sweden University College. Uppsala: Uppsala Studies in Education 66.

Dahllöf, U. (1996b). Conditional conclusions in a Scandinavina comparative perspective. In: Dahllöf, U. & Selander, S. (Eds.) Expanding Colleges and New Universities - Selected Case Studies from Non-metropolitan areas in Australia, Scotland and Scandinavia, 197 – 218. Papers from an international development seminar held at Östersund/Trillevalleen Sweden, 15th – 19th March 1995, arranged by Mid-Sweden University College. Uppsala: Uppsala Studies in Education 66

Damanpour, F., & Evan, W. M. (1984). Organizational Innovation and Performance: The Problem of "Organizational Lag". Administrative Science Quarterly 29,3,392

Daumann, F. & Römmelt, B. (2013). Qualitätsmanagement im Bundessportfachverband. Schriftenreihe des Bundesinstituts für Sportwissenschaft. Bonn: Bundesinstitut für Sportwissenschaft.

De Boer, H., Stensaker, B. (2007). An internal representative system: the democratic vision. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 98-117. Springer: Dordrecht.

De Mel, S. (2005). Resource-based view: The success factors of English premiership football clubs. In: Papanikos, G. T. (Ed.), International research on sports economics and production: an introduction, 21 – 33. Athens: Athens International Institute for Education and Research.

Dew, N., Read, S., Sarasvathy, S. & Wiltbank, R. (2008). Outlines of a behavioural theory of the entrepreneurial firm. Journal of Economic Behavior & Organization. 66, 37 – 59.

Dew, N. & Sarasvathy, S. D. (2010). What effectuation is not. Further development of an alternative to rational choice. Working paper, presented at the Academy of Management Conference, Denver. Retrieved at 30th September 2011 from: http://effectuation.org/sites/default/files/research_papers/not-effectuation.pdf

Dietl, H. M. (2011). Besonderheiten des Sports – Was rechtfertigt eine "eigene Ökonomik"? In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.): Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 17 – 35. Schorndorf: Hofmann.

Doh, J. P. & Quigley, N. R. (2014). Responsible leadership and stakeholder management: influence pathways and organisational outcomes. The Academy of Management Perspectives, 28, 3, 255 – 274.

Drury, C. (2004). Management and cost accounting. 6th ed. London: Thompson Learning.

Ecarius, J. (1997). Qualitative Methoden on der historischen Sozialisationsforschung. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 309 – 322. München: Juventa Verlag.

Ekonomifakta (2017). Arbetslöshet i Umeå. Retrieved on 20th July from: https://www.ekonomifakta.se/Fakta/regional-statistik/Alla-lan/Vasterbottens-lan/Umea/?var=17255&gclid=EAIaIQobChMI8pHriJ6x1gIVR5SyCh2PzARiEAAYASAAEgLzTvD_BwE

Emrich, E., Pierdzioch, C. & Flatau, J. (2011). Common Agency und diskretionäre Handlungsspielräume im Umgang mit öffentlichen Finanzmitteln im bundesdeutschen Spitzensport – eine empirische Analyse. In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.):

Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 177 – 195. Schorndorf: Hofmann.

Engler, S. (1997). Zur Kombination von qualitativen und quantitativen Methoden. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 118 – 130. München: Juventa Verlag.

Escher, H. (2000). Im Prüfblick der Öffentlichkeit Marketing-Management der Universitäten durch systemische Institutionenkommunikation. In: Hanft, A. (Ed.). Hochschulen managen? Zur Reformierbarkeit der Hochschulen nach Managementprinzipien, 235-257. Neuwied: Luchterhand.

Eurostrategies. (2011) Study on the funding of grassroots sports in the EU. With a focus on the internal market aspects concerning legislative frameworks and systems of financing. Final report Volume II – Country Reports. Retrieved 2nd October 2012 from: http://ec.europa.eu/sport/library/documents/f-studies/study-funding-grassroots-sports-finalreport-vol2.pdf.

Fahlén, J. (2014). Information on sport facility management at UU. Personal meeting on 26th September 2014.

Fahy, J., Farrelly, F. & Quester, P. (2004). Competitive advantage through sponsorship - A conceptual model and research prepositions. European Journal of Marketing, 38, 8, 1013 - 1030.

Farmer, P. J., Mulrooney, A. L. & Ammon jr. R. (1996). Sport Facility Planning and Management. Morgantown (WV): Fitness Information Technology, Inc.

Fels, G. (1996). Grußwort: Wirtschaftsfaktor Sport. In: Anders, G. (Ed.): Wirtschaftsfaktor Sport, 11 – 14. Köln: Bundesinstitut für Sportwissenschaft.

Fenker, M. (2004). Organisational change, representations and facilities. In: Alexander, K., Atkin, B., Bröchner J. & Haugen, T.I. (2004). Facilities management – Innovation and Performance. Milton Park: Spon Press.

Ferkins, L. & Shilbury, D. (2015). The stakeholder dilemma in sport governance: toward the notion of "stakeowner". Journal of Sport Management, 29, 93 – 108.

Finlex (2002). Finnish law 973/2002. Retrieved 26th November 2015 from: http://www.finlex.fi/fi/laki/alkup/2002/20020973

Finlex (2010). Finnish law 1062/2010. Retrieved 26th November 2015 from: http://www.finlex.fi/fi/laki/alkup/2010/20101062

Finnish Government (2009). Valtioneuvosto päätti kolmen yliopistokiinteistöyhtiön perustamisesta ja yhtiöihin siirtyvistä kiinteistöistä. Retrieved February 24th, 2010, from Valtioneuvosto: http://www.vn.fi/ajankohtaista/tiedotteet/tiedote/fi.jsp?oid=258382

Finnish Government (2010). Finnish law 558/2009. Retrieved 26th November 2015 from: http://www.minedu.fi/OPM/Koulutus/yliopistokoulutus/lait_ja_saeaedoekset/?lang=fi

Finnish Government (2015). Newsletter 586/2015. Retrieved 26th November 2015 from: http://valtioneuvosto.fi/artikkeli/-/asset_publisher/valtioneuvoston-yleisistunto-5-11-2015?_101_INSTANCE_3wyslLo1Z0ni_groupId=10616

Fischel, B. (2005). E-Sportbusiness: Online-Marketing und –Management für Sportvereine. Published Dissertation. Heidelberg: www.e-sportbusiness.de

Forsman, B., Söderlind, I., Lindgren, L., & Rönnlund, A. (2001). Hundra år av idrottshistoria. Umeå: Nyheternas Tryckeri.

Fort, R.D. (2006). Sports economics. 2nd Ed. Upper Saddle River: Prentice Hall.

Franco, M. & Pessoa, N. (2014). University sports partnerships as collaborative entrepreneurship: an explorative case study. Administration & Society, 46, 8, 885 – 907.

Franzoni, C. & Lissoni, F. (2009). Academic entrepreneurs: critical issues and lessons for Europe. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 163 – 190. Cheltenham: Edward Elgar Publishing

Fricka, B. & Simmons, R. (2008). The Impact of Managerial Quality on Organizational Performance: Evidence from German Soccer. Managerial and Decision Economics. 29, 593 – 600.

Friebertshäuser, B. (1997). Interviewtechniken – ein Überblick. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 371 – 394. München: Juventa Verlag.

Friedman, M. T. & Mason, D. S. (2004). A stakeholder approach to understanding economic development decision making: public subsidies for professional sport facilities. Economic Development Quarterly, 18, 3, 236 – 254.

Friedrichs, J. (1990). Methoden empirischer Sozialforschung. 14th ed. Opladen: Westdeutscher Verlag.

Fry, A. (2008). For sale or to let - A critical look at the value of naming rights. Sport Business International. 141, 18 – 21.

Gebert, D. (1995). Interventionen in Organisationen. In: Schuler, H. (Ed.). Organisationspsychologie. Bern: Huber.

Gebert, A. (2013). Landtag beschließt Ende der Studiengebühren in Bayern. Die Zeit Online. Retrieved at 24th April 2013 from: http://www.zeit.de/studium/hochschule/2013-04/studiengebuehren-bayern-abschaffung

German Government (2014). Hochschulpakt 2020. Retrieved 26th November 2015 from https://www.bmbf.de/de/hochschulpakt-2020-506.html

Geissler, M., Jahn, S. & Haefner, P. (2010). The entrepreneurial climate at universities: the impact of organisational factors. In: Smallbone, D, Leitão, J., Raposo, M. & Welter, F.: The theory and practice of entrepreneurship – frontiers in European entrepreneurship research. Cheltenham: Edward Elgar Publishing.

Gholamzadeh Fasandoz, H. (2016). A decade with sport as an industry in Finland – exploring the economic significance, contributions and developments of the sport sector as an industry in Finland. Published dissertation. Jyväskylä: University of Jyväskylä.

Gløersen, E., Dubois, A., Copus, A. & Schürmann, C. (2006). Northern Periphal, Sparsely Populated Regions in the European Union and in Norway. In: Nordregio Report. 2006 – 2. Stockholm: Nordregio.

Gnan, L., Hinna, A., Monteduro, F. & Scarozza, D. (2013). Corporate governance and management practices: stakeholder involvement, quality and sustainability tools adoption – Local evidences in public utilities. Journal of Management and Governance, 17, 4, 907 – 934.

Goldstein, H. A. (2009). What we know and what we don't know about the regional impact of universities. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 11 – 35. Cheltenham: Edward Elgar Publishing

Gordon, K. O. (2013). Emotion and memory in nostalgia sport tourism: examining the attraction to postmodern ballparks through an interdisciplinary lens. Journal of Sport & Tourism, 18, 3, 217 – 239.

Gornitzka, Å. (2007). The Lisbon process: A supranational policy perspective. In: Olsen, J.P. & Maassen, P.: University Dynamics and European Integration, 119-131. Springer: Dordrecht.

Gornitzka, Å. & Maassen, P. (2007). An instrument for national political agendas: the hierarchical vision. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 81-98. Springer: Dordrecht.

Gornitzka, Å., Maassen, P., Olsen, J.P. & Stensaker, B. (2007). "Europe of knowledge": Searching for a new pact. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 119-131. Springer: Dordrecht.

Government Offices of Sweden (2008). Various information. Retrieved 30th August 2010 from: http://www.sweden.gov.se

Graham, S., Neirotti, L.D. & Goldblatt, J.J. (2001). Ultimate Guide to Sports Marketing (2nd Ed.). Blacklick: McGraw-Hill Professional Book Group.

Gratton, C. & Jones, I. (2004). Research methods for sport studies. London: Routledge.

Greis, B. (2014). Implementing a green corporate culture in sport facility governance. Published Master's Thesis. Cologne. German Sport University.

Haapanen, M. (2010). Migration, skills, education and risk attitudes. Lecture in Spatial Labour Markets held on 30th November 2010. Jyväskylä: The University of Jyväskylä.

Haimann, R. (2013). Die Mehrkosten des langen deutschen Winters 2013. Die Welt Online. Retrieved at 6th April 2013 from: http://www.welt.de/finanzen/article115062184/Die-Mehrkosten-des-langen-deutschen-Winters-2013.html.

Hallmann, K. & Petry, K. (2013). Germany. In: Hallmann, K. & Petry, K. (Eds.): Comparative sport development, 75 – 86. New York: Springer.
Hallmann, K. & Petry, K. (2013). Conclusion. In: Hallmann, K. & Petry, K. (Eds.): Comparative sport development, 343 – 355. New York: Springer.
Hampton, J. J. (2011). Handbook of financial risk management. Saranac Lake: Amacom Books.
Harman, G. (1996). Sweden under scrutiny. In: Dahllöf, U. & Selander, S. (Eds.) Expanding Colleges and New Universities - Selected Case Studies from Non-metropolitan areas in Australia, Scotland and Scandinavia 29 – 50. Papers from an international development seminar held at Östersund/Trillevalleen Sweden, 15th – 19th March 1995, arranged by Mid-Sweden University College. Uppsala: Uppsala Studies in Education 66
Harris, R. (2008). Models of regional growth: Past, present and future. SERC discussion Paper 2. Glasgow: University of Glasgow.
Hartikainen, A., Anttila, T., Oinas, T. & Nätti, J. (2010). Is Finland different? Quality of work among Finnish and European employees. Research on Finnish Society, 3, 29 – 41.
Hedberg, C. (2004). The Finland-Swedish Wheel of Migration. Identity, Networks and Integration 1976 – 2000. Geografiska Regionsstudier Nr. 61. Published Dissertation. Uppsala: Uppsala Universitet.
Heikkala, J. & Koski, P. (1999). Reaching out for new frontiers - The Finnish physical culture in transition in the 1990's. Jyväskylä: University of Jyväsklyä
Heinemann, K. (1998). Sport clubs management. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 64 – 73. International council of sport science and physical education. Schorndorf: Hofmann.
Heinilä, K. (1989). The Sports Club as a Social Organization in Finland. International Revue for Sociology of Sport. 24, 3, 225 – 248.
Heinzel, F. (1997). Wiederholte Gesprächsinteraktion und tiefenhermeneutische Analyse. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 468 – 480. München: Juventa Verlag.
Herrmann, W. (2013). Es ist eine tiefe Enttäuschung. Die Zeit Online. Retrieved 24th March 2013 from: http://www.zeit.de/2013/12/Studiengebuehren-Abschaffung-Bilanz
Hillmann, A. J. & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What is the bottom line? Strategic Management Journal. 22, 2, 125 – 139.
Hjort, S. (2005). Rural migration in Sweden: a new green wave or a blue ripple? Licentiate thesis. Department of Social and Economic Geography. Umeå: Umeå University.
Hoffmann-Riem, W. (Ed.) & Binnewies, H. (1988). Neue Medienstrukturen - Neue Sportberichterstattung? Baden-Baden: Nomos-Verlag-Gesellschaft.

Holmlund, N. (2014). IKSUS väg till störst i Europa. Totalt o Umeå 17th – 23rd September. Umeå: Totalt o Umeå Newspaper.
Horne, J. (2006). Sport in consumer culture. New York: Palgrave Macmillan.
Hoskisson, R. W. & Busenitz, L. W. (2002). Market uncertainty and learning distance in corporate entrepreneurship entry mode choice. In: Hitt, M. A., Ireland, R. D. Camp, S. M. & Sexton D. L. (Eds.). Creating a new Mindset: Integrating Strategy and Entrepreneurship Perspectives, 151 – 172. New York: John Wiley.
Houlihan, B. (1997). Sport, Policy and Politics - a comparative analysis. London: Routledge.
Houlihan, B. & Green, M. (2008). Comparative elite sport development: systems, structures and public policy. Oxford: Butterworth-Heinemann.
Howard, D. R. & Crompton, J. L. (2014). Financing sport. Morgantown: Fitness Information Technology.
Howitt, M. & McManus, J. (2012). Stakeholder management: an instrument for decision making. Management services, autumn, 29 – 34.
Hoye, R., Smith, A., Westerbeek, H., Stewart, B. & Nicholson, M. (2006). Sport management: principles and applications. Amsterdam: Butterworth-Heinemann.
HRK (2013). Hochschulfinanzierung. Retrieved 26th November 2015 from: https://www.hrk.de/themen/hochschulsystem/hochschulfinanzierung/
Hughson, J., Inglis, D. & Free, M. (2005). The uses of sport: A critical study. London: Routledge.
Hukka, J.J., Juuti, P.S., Katko, T.S., Mohamed, A., Nyanchaga, E.N., Seppälä, O.T. (2005). Science for water services and related institutions. In: Hietanen, O. (Ed.): University partnerships for international development. Finnish development knowledge, 33- 91. Turku: Finland Futures Research Centre, Turku School of Economics and Business Administration.
Humphreys, B. R. (2006). The relationship between big-time college football. International Journal of Sport Finance. 1, 119 – 128.
IHK Köln (2017). Economic performance in the Cologne region until 2012 and 2017. Retrieved 20th July from http://www.cci-cologne.de/upload/WEB_1406_IHK_Wirtschaftsregion_Koeln_2017_EN_Doppelseiten_9162.pdf
IKSU (2013). Årsredovisning 2012. Retrieved at 20th October 2014 from: http://www.iksu.se/wp-content/uploads/2013/01/IKSU-2013-lowres_P1.pdf
IKSU (2014). Årsredovisning 2013. Retrieved at 20th October 2014 from: http://www.mynewsdesk.com/material/document/34117/download?resource_type=resource_document
IKSU (2015). Årsredovisning 2013. Retrieved at 15th March 2016 from: http://www.mynewsdesk.com/material/document/34117/download?resource_type=resource_document
Ilmanen, K. (1996). Kunnat liikkeellä – Studies in sport, physical education and health. Jyväskylä: The University of Jyväskylä.

Ilmanen, K. (2015). Liikuntapalvelujen muutos 1800-luvun lopulta 2000-luvulle. In: Itkonen, H., Laine, A. (Eds.). Liikunta yhteiskunnallisena ilmiönä, 19 – 38. Jyväskylä: Jyväskylän yliopisto – Liikuntakasvatuksen laitos.
Ireland, R. D., Hitt, M. A. & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. Journal of Management. 29, 963 – 989.
Ireland, R. & Webb, J. (2007). Strategic entrepreneurship: Creating competitive advantage through streams of innovation. Business Horizons. 50, 49 – 59.
Itkonen, H. (1999). Conditioning Tolerance? A Study of Tolerance in the Culture of Sport. University of Joensuu: Publications of Karelian Institute.
Itkonen, H., Ilmanen, K. & Matilainen, P. (2009). Sponsorship in the Finnish sport culture. European Journal for Sport and Society. 6, 1, 7 – 18.
Jablecka, J. (2012). Diversification, rankings and their conditions. General problems and the polish example. In: Bienkowski, W., Brada, J.C., Stanley, G.: The University in the age of globalisation. Rankings, resources and reforms, 26 – 61. Houndmills: Palgrave Macmillan.
Jackson, R. (Ed.) (2001). The Sport Administration Manual. Revised by the IOC, Lausanne, Switzerland. The University of Calgary: Hurford Enterprises Ltd.
Jaeger, D. A., Bonin, H., Dohmen, T., Falk, A., Huffmann, D. & Sunde, U. (2010). Direct evidence on risk attitudes and migration. Review of Economics and Statistics. 92, 3, 684 – 689.
Jauch, U. P. & Müller, M. (2013). Zürcher Appell: Professoren protestieren gegen Sponsoring von Unis. Die Zeit Online. Retrieved at 28th February 2013 from: http://www.zeit.de/2013/10/CH-Appell
Jarvie, G. (2003). Internationalism and sport in the making of nations. Global studies in culture and power. 10, 537 – 551.
Jesse, B. (2007). Hochschulen im Wettbewerb - Imageanalyse als Voraussetzung für Kooperationen mit Wirtschaftsunternehmen am Beispiel der Universität Deutsche Sporthochschule Köln. Published Dissertation. Cologne: German Sport University.
Jokio, S. (2014). Information about sport facility management at JYU. Personal meeting on 30th June 2014.
Jäger, S. (2001). Theoretische und methodische Aspekte einer kritischen Diskurs- und Dispositivanalyse. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 81 – 112. Opladen: Leske & Budrich.
Jörissen, B. & Widmann, G. (2015). Information about sport facility management at GSU. Personal meeting on 21st December 2015
Kalaja, S. (2016). Information about the Olympic Sports Centre KIHU. Personal meeting on 3rd February 2016.
Kangasharju, A. & Pekkala, S. (2004). Increasing regional disparities in the 1990s: The Finnish experience. Regional Studies. 38, 3, 255 - 267.

Kantanen , H. (2007). Stakeholder dialogue and regional engagement in the context of higher education. Published dissertation. Jyväskylä: University of Jyväskylä-

Karhunen, H. (2010). Regional growth - Some models, problems and applications. Lecture in Spatial Labour Markets held on 9th November 2010. Jyväskylä: The University of Jyväskylä.

Karimäki, A. (2006). Kuntaremontti haastaa liikuntapalvelut. Liikunta & Tiede 43. 1, 18 – 20.

Karimäki, A. (2016). Information about the Hippos Master Plan. Personal meeting on 29th February 2016.

Karjalainen, A. (2016). Information about Viveca Concept. Personal meeting on 1st March 2016.

Karp, S. (2014). Information about sport facility management at UU. Personal meeting on 26th September 2014.

Kaube, J. (2014). Keine Rede von den Studenten. Frankfurter Allgemeine Zeitung Online. Retrieved at 19th October 2014 from: http://www.faz.net/aktuell/feuilleton/universitaeten-keine-rede-von-den-studenten-13215306.html.

Keats, D.M. (2000). Interviewing – a practical guide for students and professionals. Buckingham: Open University Press.

Kelle, H. (1997). Die Komplexität sozialer und kultureller Wirklichkeit als Problem qualitativer Forschung. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 192 – 208. München: Juventa Verlag.

Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (2001). Zur Aktualität sozialwissenschaftlicher Diskursanalyse – eine Einführung. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 7 – 28. Opladen: Leske & Budrich.

Keller, R. (2001). Wissenssoziologische Diskursanalyse. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 114 – 141. Opladen: Leske & Budrich.

Kieser, A. (2000). Alternative Organisationsmodelle autonomer Universitäten. Gutachten im Auftrag der Österreichischen Rektorenkonferenz. In: Titscher, S. (Ed..) Universitäten im Wettbewerb. Zur Neustrukturierung österreichischer Universitäten. München: Hampp

King, N. (1994). Qualitative methods in organizational research: A practical guide. In: Cassel, C. & Symon G. (Eds.) Qualitative Methods in Organization Research: A Practical Guide. London: Sage.

Kirchhof, F. (1988). Sport als Mittel der Förderung kommunaler Wirtschaftsstruktur. In: Burmeister, J. (Ed.): Sport im kommunalen Wirkungskreis, 3 – 20. Heidelberg: C. F. Müller.

Kivisto, P. (1998). Key ideas in sociology. Thousand Oaks, CA: Pine Forge Press

Klein, M. L. (1996) Der Einfluss von Sportgroßveranstaltungen auf die Entwicklung des Freizeit- und Konsumverhaltens sowie das

Wirtschaftsleben einer Kommune oder Region. In: Anders, G. (Ed.): Wirtschaftsfaktor Sport, 55 – 60. Köln: Bundesinstitut für Sportwissenschaft.

Klein, M.L., Kurscheidt, M. (Eds.) (2008). Neue Perspektiven ökonomischer Sportforschung. Schorndorf: Hofmann

Knoblauch, H. (2001). Diskurs, Kommunikation und Wissenssoziologie. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 207 – 223. Opladen: Leske & Budrich.

Koiranen, M., Peltonen, M. (1995). Yryttäjyyskasvatus: ajatuksia yrittäjyyteen oppimisesta. Valkeakoski: Konetuumat

Kontinen, T. (2011). Internationalization Pathways of Family SME's. Published dissertation. Jyväskylä: University of Jyväskylä.

Koponen, H. & Laine, H. (2013). Finland: Jyväskylä and Saarijärvi-Viitasaari – Central Finland. In: OECD, Rural – urban partnerships: an integrated approach to economic development; Part II – Rural – urban partnership in practise, 11 case studies, 185 – 200. OECD Publishing. Retrieved at 12th July 2014 from: http://dx.doi.org/10.1787/9789264204812-en.

Koschatzky, K., Hemer, J. (2009). Firm formation and economic development: What drives academic spin-offs to success or failure? In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 191 – 218. Cheltenham: Edward Elgar Publishing

Koski, P. (1990). Supply of activities in Finnish sport clubs. In Telama, R. et al. (Ed.) Physical Education and Life-long Physical Activity. AIESEP World Convention, June 17th – 22nd, 1989, at the University of Jyväskylä. Jyväskylä: The Foundation for Promotion of Physical Culture and Health.

Kotler, P. (2003). Marketing Management. 11th Edition. Upper Saddle River: Prentice Hall.

Kotler, P., Armstrong, G. (2004). Principles of Marketing. 10th Edition. Upper Saddle River: Prentice Hall.

Kotler, P. & Fox, K. F. A. (1995). Strategic Marketing for Educational Institutions. 2nd. Ed. Englewood Cliffs: Prentice Hall

Kotthaus, D. (2009). Local facility and human resource management in sports - A comparative case study of the situation in Jyväskylä/Finland and Umeå/Sweden. Published Master's Thesis. Jyväskylä: University of Jyväskylä.

Kraimer, K. (1997). Narratives als Erkenntnisquelle. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 459 – 467. München: Juventa Verlag.

Krugman, P. (2008). The increasing returns revolution in trade and geography. Prize Lecture held on December 8th at Princeton University. Retrieved at January 11th 2011 from: http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2008/krugman_lecture.pdf.

KTI (2010): Benchmarking university property management in the Nordic countries. Update of the pilot study made in 2008. Finland: KTI Finland.

Kuckartz, U. (1997). Qualitative Daten computergestützt auswerten: Methoden, Techniken, Software. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 584 – 594. München: Juventa Verlag.

Kunttu, K. & Pesonen, T. (2012). Student health survey 2012: A national survey among Finnish university students. Helsinki: Ylioppilaiden terveydenhoitosäätiö. Retrieved at 20th July 2014 from: http://www.yths.fi/filebank/2263-KOTT2012_in_English.pdf.

Kuratko, D. F. & Audretsch, D. B. (2009). Strategic entrepreneurship: Exploring different perspectives of an emerging concept. Entrepreneurship Theory and Practice. 33, 1, 1 – 17.

Kurowski, L. & Sussman, D. (2011). Investment project design: a guide to financial and economic analysis with constraints. Hoboken, NJ: Wiley.

König, E. & Bentler, A. (1997). Arbeitsschritte im qualitativen Forschungsprozess – ein Leitfaden. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 88 – 96. München: Juventa Verlag.

König, W. (1999). Perspektiven des Sports in Europa. In: Jütting, D.H. (Ed.): Sportvereine zwischen Staat und Markt, 12 – 20. Münster: Waxmann.

König, E. (2002). Qualitative Forschung im Bereich subjektiver Theorien. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 55 – 70. Weinheim: Beltz Verlag.

Lagae, W. (2006). Marketingcommunicatie in de sport. Amsterdam: Pearon Education Benelux.

Laine, A. (2015). Liikunta- ja urheilualan yrityskenttä. In: Itkonen, H., Laine, A. (Eds.). Liikunta yhteiskunnallisena ilmiönä, 77 – 98. Jyväskylä: Jyväskylän yliopisto – Liikuntakasvatuksen laitos.

Lamnek, S. (2005). Qualitative Sozialforschung. Basel: Beltz Verlag.

Lamnek, S. (2002). Qualitative Interviews. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 157 – 194. Weinheim: Beltz Verlag.

LaRocca, S. & Guikema, S. (2011). A survey of network theoretic approaches for risk analysis of complex infrastructure systems. In: Ayyub, B. M. (Ed.): Vulnerability, Uncertainty, and Risk: Analysis, Modeling, and Management, 155 – 162. Reston: ASCE.

Lawler, E. E., Worley, C. G. & Creelman, D. (2011). Management reset: organising for sustainable effectiveness. Hoboken, NJ: Jossey-Bass.

Lee, R.M. (2004). Asking sensitive questions on surveys. In: Bulmer, M.: Questionnaires. Vol. 3, 69 – 94. London: Sage.

Lee, Y. J. & Ku, Y. W. (2007). East Asian welfare regimes: Testing the hypothesis of the developmental welfare state. Social Policy & Administration. 41, 2, 197 – 212.

Leja, K. (2012). Looking for a model of the contemporary university. In: Bienkowski, W., Brada, J.C., Stanley, G.: The University in the age of

globalisation. Rankings, resources and reforms, 202 – 223. Houndmills: Palgrave Macmillan.
Lengyel, I. (2009). Knowledge-based local economic development for enhancing competitiveness in lagging areas of Europe: the case of the University of Szeged. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 321 – 349. Cheltenham: Edward Elgar Publishing
Lenk, H. & Maring, M. (1997). Welt ist real, aber Welterfassung interpretativ. Zur Reichweite der interpretatorischen Erkenntnis. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 209 – 220. München: Juventa Verlag.
Maassen P. (2000). Die dynamische Universität: Endziel oder Zwischenschritt? In: Joerden, J. C., Schwarz, A., Wagener, H.J. (Eds.). Universitäten im 21. Jahrhundert. Berlin: Springer
Macionis, J. & Plummer, K. (1997). Sociology: A global introduction. Englewood Cliffs, NJ: Prentice Hall.
Maier, W. & Fröhlich, W. (1992). Personalmanagement für Klein- und Mittelbetriebe – Praxiswissen in Schaubildern und Checklisten. Heidelberg: I. H. Sauer-Verlag GmbH.
Malecki, E., J. (1994). Entrepreneurship in regional and local development. International Regional Science Review, 16 (1&2), 119 – 153. In: Acs, Z., J.: Entrepreneurship and regional development, 32 – 66, 2010. Cheltenham: Edward Elgar Publishing
Marikova-Leeds, E., Leeds, M. A. & Pistolet, I. (2007). A stadium by any other name - The value of naming rights. Journal of Sport Economics. 8, 6, 581 – 595.
Martin, D.M. (2006). Corporate governance: practical guidance on accountability requirements. London: Thorogood.
Mattson, K. & Karlsson, T. (2001). DS 2001:54. Idrotten i Sverige och EU – En raport från EU-idrottsarbetsgruppen. Retrieved June 12th 2010 from: http://www.regeringen.se/content/1/c4/18/38/002fe72a.pdf
Maus, M. (1996). Unternehmensphilosophie und Sportsponsoring. In: Anders, G. (Ed.): Wirtschaftsfaktor Sport, 29 – 34. Köln: Bundesinstitut für Sportwissenschaft.
Mayer, H. O. (2006). Interview und schriftliche Befragung – Entwicklung, Durchführung und Auswertung. 3rd Ed. München: R. Oldenbourg Verlag.
McCullagh, K. (2008). Visions of the Future - Facilities shaping the global sports environment. Sport Business International. 141, 48 - 51.
McGrath, R. G. (1999). Falling Forward: Real Options Reasoning and Entrepreneurial Failure. The Academy of Management Review. 24, 1, 13 – 30.
Meenaghan, T. (2001). Sponsorship and Advertising: A Comparison of Consumer Perceptions. Psychology & Marketing. 18, 2, 191 – 215.
Meffert, H. & Bruhn, M. (1997). Dienstleistungsmarketing. Grundlagen – Konzepte – Methoden. Wiesbaden: Gabler

Meixell, M. J. & Luoma, P. (2015). Stakeholder pressure in sustainable supply chain management. International Journal of Physical Distribution & Logistics Management, 45, 1/2, 69 – 89.

Merkens, H. (1997). Stichproben bei qualitativen Studien. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 97 – 106. München: Juventa Verlag.

Merten, K. & Teipen, P. (1991). Empirische Kommunikationsforschung Darstellung, Kritik, Evaluation. München: Verlag Ölschläger.

Metz, U. (2007). Kommunale Sportverwaltung in Deutschland: Datenpräsenz und Modalitäten für die Sportstättenentwicklungsplanung, Entwicklungstendenzen und aktuelle Veränderungsprozesse. Published Dissertation University of Karlsruhe. Karlsruhe: Universitätsverlag Karlsruhe.

Meuser, M. & Nagel, U. (1997). Das ExpertInneninterview – wissenssoziologische Voraussetzungen und methodische Durchführung. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 481 – 491. München: Juventa Verlag.

Miller, K. D. & Folta, T. B. (2002). Real options in equity partnerships. Strategic Management Journal. 23, 1, 77 – 88.

Miloch, K. S. & Lambrecht, K. W. (2006). Consumer Awareness of Sponsorship at Grassroots Sport Events. Sport Marketing Quarterly. 15, 147 – 154.

Mintzberg, H. (1978). Patterns in strategy formation. Management Science. 24, 9, 934 – 948.

Mitchell, A. K., Agle, B. R., Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. The Academy of Management Review, 22, 4, 853 – 886.

Modak, P. (2010). Sports in the era of globalisation. In: Ho, R. & Ren, H. (Eds.): Globalisation, sport management and traditions, 28 – 31. Maidenhead: Meyer & Meyer Sports UK.

Moeck, T. (2011). Ein Stadion steht leer – Gutachten: Verwaltungsstruktur der Sportstätten nicht optimal. Kölner Stadtanzeiger 8th and 9th January 2011.

Mohr, J. J. & Sarin, S. (2008). Drucker's insights on market orientation and innovation: implications for emerging areas in high-technology marketing. Academy of Marketing Science. Retrieved 7th July 2013 from: http://www.business.umt.edu/Portals/0/Libraries/jakki_mohr/mohr_and_sarin_jams.pdf.

Montgomery, C. (1992). Resources: The essence of Corporate Advantage. Harvard Business School. Case N1-792-064. Retrieved 10th November 2010 from: http://www.ecofine.com/strategy/RBV%20of%20the%20firm.htm.

Morris, M. H., Kuratko, D. F. & Cornwall, J. R. (2013). Entrepreneurship programmes and the modern university. In: Davidsson, P. (Reviewer): Book and Resource Reviews, 139 – 142. Academy of Management Learning and Education.

Mosakowski, E. (2002). Overcoming resource disadvantage in entrepreneurial firms: When less is more. In: Hitt, M. A., Ireland, R. D. Camp, S. M. & Sexton D. L. (Eds.). Creating a New Mindset: Integrating Strategy and Entrepreneurship Perspectives, 106 – 126. New York: John Wiley.
Mukkala, K. (2011). Essays on regional development and labour mobility in a knowledge-based economy. Published Dissertation. Jyväskylä: University of Jyväskylä.
Mukkala, K. (2010). Development towards a knowledge-based economy. Lecture in Spatial Labour Markets held on 2nd December. Jyväskylä: The University of Jyväskylä.
Mukkala, K., Ritsilä, J. & Suosara, E. (2006). OECD/IMHE - Supporting the contribution of higher education institutions to regional development – Self-evaluation report of the Jyväskylä region in Finland. Publications of the Ministry of Education, Finland, 2006:26. Retrieved 10th July 2010 from: http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2006/liitteet/opm_0_opm26.pdf?lang=fi.
Mörä-Leino, A. (2013). Information about students' sport culture at JYU. Personal meeting on 3rd May 2013.
Nauman, W.L. (2000). Social research methods – Qualitative and quantitative approaches. 4th Edition. Needham Heights: Allyn & Bacon
Neal, L. (2007). The economics of Europe and the European Union. Cambridge: University Press.
Neave, G., Maassen, P. (2007). The Bologna process: an intergovernmental policy perspective. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 119-131. Springer: Dordrecht.
Neck, H. M. & Greene, P. G. (2010). Entrepreneurship education: Known worlds and new frontiers. Journal of Small Business Management, 49, 1, 55 – 70.
Neuerburg, H.J. (2010). Nachhaltiges Sportstättenmanagement - Dokumentation des 17. Symposiums zur Nachhaltigen Entwicklung des Sports vom 10. - 11. Dezember 2009 in Bodenheim, Rhein. Frankfurt am Main: Deutscher Olympischer Sportbund
Nielsen, N. K. (2005). Body, sport and society in Norden. Essays in cultural history. Aarhus: Aarhus University press
Nieminen, M. (2006). Interview power – Työhaastattelut englanniksi. Helsinki: Werner Söderström Osakeyhtiö.
Nieminen, M. & Kaukonen, E. (2001) Universities and R&D networking in a knowledge-based economy: a glance at Finnish developments. Sitra reports series, 11. Retrieved July 17th from: http://www.sitra.fi/julkaisut/raportti11.pdf
Nilsson, Å. (2004). Efterkrigstidens invandrig och utvandring. English summary. Statistika centralbyrån, Demographic Reports. 2004:5, 114 – 119. Stockholm: Statistika centralbyrån.
Noelle-Neumann, E., Schulz, W. & Wilke, J. (Eds.) (2003). Fischer Lexikon Publizistik/Massenkommunikation. 2nd Ed. Frankfurt an Main: Fischer Taschenbuch Verlag.

Norberg, J.R. (2002). Idrottsrörelsen och staten. In Lindroth, J. & Norberg, J. R. (Eds.). Ett idrottssekel – Riksidrottsförbundet 1903 – 2003. Stockholm: Informationsförlag.

Northouse, P. G. (2009). Introduction to Leadership. Thousand Oaks: Sage

Nummela, N., Saarenketo, S., Paavilainen-Mäntymäki, E., Puumalainen, K. (2010). Knowledge and experience in the internationalization of knowledge-intensive firms. In: Smallbone, D.; Leitao, J.; Raposo, M.; Welter, F. (Ed.). The theory and practice of entrepreneurship (101−121).. Cheltenham: Edward Elgar Publishing.

Nybom, T. (2007). A rule-governed community of scholars: the Humboldt vision in the history of the European university. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 55-79. Springer: Dordrecht.

OECD (2013). Part I – Rural-urban partnerships: A tool for economic development. In: OECD, Rural – urban partnerships: an integrated approach to economic development, 15 – 152. OECD Publishing. Retrieved at 12th July 2014 from: http://dx.doi.org/10.1787/9789264204812-en.

Oja, P. (1998) Tarpeet tietoon – tieto käyttöön – A Finnish project on how to gather information on the users of sports facilities, on sports investments and sport outside sport clubs. Liikunta & Tiede 35, 2, 50 – 52.

Old, J. (2004). Sport event and facility management. In Beech, J., Chadwick, S. (Eds.) The business of sport management, 69 – 92. Harlow: Prentice Hall Financial Times.

Olsen, J.P. (2007). The institutional dynamics of the European University. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 25-53. Springer: Dordrecht.

Olsen, J.P., Maassen, P. (2007). European Debates on the Knowledge Institution: The Modernisation of the University at the European Level. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 3-22. Springer: Dordrecht.

Olson, E. L. & Thjømøe, H. M. (2009) Sponsorship effect metric: assessing the financial value of sponsoring by comparisons to television advertising. Journal of the Academy of Marketing Science. 37, 504 – 515.

Opetusministeriö (1998). Liikuntalaki. Retrieved 12th June 2012, from: http://www.finlex.fi/fi/laki/alkup/1998/19981054.

Oswald, H. (1997). Was heißt qualitativ forschen? Eine Einführung in Zugänge und Verfahren. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 71 – 87. München: Juventa Verlag.

Otterup, T. (2004). Sweden as a multilingual and multicultural nation. Effects on school and education. In: Luchtenberg, S. (Ed.): Migration, Education and Change, 167 – 185. Milton Park: Routledge.

Palme, J., Bergmark, Å., Näsman, E., Fritzell, J., Sommestad, L., Lundberg, O. & Szebehely, M. (2000). SOU 2000:83 - A Balance sheet for welfare of the

1990s. Retrieved 8th August 2011 from: http://www.regeringen.se/content/1/c4/28/27/2c8c4ae9.pdf.

Paltridge, B. (2012). Discourse analysis – An Introduction. 2nd ed. London: Bloomsbury Publishing Plc.

Papadimitriou, D. & Apostolopoulou, A. (2009). Olympic Sponsorship Activation and the Creation of Competitive Advantage. Journal of Promotion Management. 15, 90 – 117.

Papier, H. J. (1988). Planungsrecht für Sportanlagen. In: Burmeister, J. (Ed.): Sport im kommunalen Wirkungskreis, 21 – 36. Heidelberg: C. F. Müller.

Parker, C. (2004). Strategy and environmental analysis in sport. In: Beech, J. & Chadwick, S. (Eds.). The business of sport management. 9, 213 – 239. Harlow: Prentice Hall Financial Times.

Parkkari, J. et al. (2006). Salibandyn kasvukipuna yleisyvät vammat. Liikunta & Tiede 43, 2, 22 – 25.

Patry, J. – L. & Dick, A. (2002). Qualitative Feldforschung. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 71 – 98. Weinheim: Beltz Verlag.

Pau, B. (2003). From knowledge to innovation: Remodelling creative and knowledge diffusion processes. In. Breton, G., Lambert, M. (Eds.). Universities and globalisation. Private linkages, public trust. Paris: United Nations Educational.

Pawlowski, T. & Breuer, C. (2014). Sport und öffentliche Finanzen. Wiesbaden: Springer Gabler.

Pawlowski, T. & Breuer, C. (2012). Die finanzpolitische Bedeutung des Sports in Deutschland. Wiesbaden: Springer Gabler.

Perry, J., Chandler, G. & Markova, G. (2012). Entrepreneurial effectuation. A review and suggestions for future research. Entrepreneurship Theory and Practice. 36, 837 – 861.

Petry, K., Steinbach, D. & Burk, V. (2008). Germany. In: Houlihan, B. & Green, M. (Eds.): Comparative elite sport development: systems, structures and public policy, 115 – 146. Oxford: Butterworth-Heinemann.

Pieskä, S. (2012). Enhancing innovation capability and business opportunities – cases of SME-orientated applied research. Published dissertation. Jyväskylä: University of Jyväskylä.

Pons, F. Laroche, M. Nyeck, S. & Perreault, S. (2001). Role of sporting events as ethnoculture's emblems: Impact of acculturation and ethnic identity on consumers' orientation toward sporting events. Sport Marketing Quarterly. 10, 4, 231 – 240.

Power, D. & Lundmark, M. (2004). Working through knowledge pools: Labour market dynamics, the transference of knowledge and ideas, and industrial clusters. Urban Studies, 41, 1025 – 1044.

Preuß, R. & Osel, J. (2014). Vorstoß zu neuen Studiengebühren: Akademiker sollen furs Studium zahlen. Süddeutsche Zeitung Online. Retrieved at 16th October 2014 from: http://www.sueddeutsche.de/bildung/vorstoss-zu-neuen-studiengebuehren-akademiker-sollen-fuers-studium-zahlen-1.2176671.

Priem, R. L. & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? Academy of Management Review. 26, 1, 22 - 40.

Pürer, H. (1998). Einführung in die Publizistikwissenschaft. 6th ed. Konstanz: UVK-Medien.

Rafossa, K. & Troelsen, J. (2010). Sports facilities for all? The financing, distribution and use of sports facilities in Scandinavian countries. Sport in Society. 13, 4, 643 – 656.

Ratten, V. & Ferreira, J. M (eds.) (2017). Sport entrepreneurship and innovation. London: Routledge.

Read, S., Dew, N., Sarasvathy, S. D, Song, M. & Wiltbank, R. (2009). Marketing Under Uncertainty: The Logic of an Effectual Approach. Journal of Marketing, 73, 3, 1 – 18.

Reade, I., Rodgers, W. & Hall, N. (2008). Knowledge Transfer: How do High Performance Coaches Access the Knowledge of Sport Scientists? International Journal of Sports Science & Coaching. 3, 3, 319 – 334.

Redlein, A. (2004). Facility management: business process integration. Hamburg: Diplomica Verlag.

Redmond, G. (Ed.) (1986). Sport and Politics – The 1984 Olympic Scientific Congress proceedings. Vol. 7. Champaign (Ill.): Human Kinetics Publishers, Inc.

Regional Government of NRW (2014). Hochschulgesetz NRW. Retrieved 26th November 2015 from: www.wissenschaft.nrw.de/mediathek/broschueren/3511/download/

Reichertz, J. (2002). Die objektive Hermeneutik – Darstellung und Kritik. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 123 – 156. Weinheim: Beltz Verlag.

Reiser, M., Breuer, C. & Wicker, P. (2011). Do sport sponsorship announcements impact the firm value of sponsoring firms? German Sport University Cologne, Germany. Paper presented at the 13th IASE & 3rd ESEA Conference on Sport Economics Prague, Czech Republic on Wednesday, May 18th.

Remans, A. & Delforge, M (1997). Sport Structures in Europe – Situation in the countries of the Committee for the Development of Sport of the Council of Europe. 4th revised edition. Brussels: The Clearing House

Renard, N. & Sitz, L. (2011). Maximising sponsorship opportunities: a brand model approach. Journal of Product & Brand Management. 20, 2, 121 - 129.

Reynolds, P., Storey, D. J. & Westhead, P. (1994) Cross-national comparisons of the variation in new firm formation rates. Regional Studies, 28, 4, 443 – 456. In: Acs, Z., J.: Entrepreneurship and regional development, 170 – 183, 2010. Cheltenham: Edward Elgar Publishing

Robertson, R. (1992). Globalization. London: Sage

Rocha, H. O. (2004). Entrepreneurship and development: The role of clusters. Small Business Economics 23, 363 – 400. In: Acs, Z., J.: Entrepreneurship and regional development, 514 – 551, 2010. Cheltenham: Edward Elgar Publishing

Roche, M. (2014). Deutsche und amerikanische Unis: Wenn Studenten sich beschweren. Frankfurter Allgemeine Zeitung Online. Retrieved at 23rd October 2014 from: http://www.faz.net/aktuell/beruf-chance/campus/unterschiede-universitaeten-deutschland-amerika-13192928.html.

Rothberg, H. N. & Ericksson, G. S. (2005). From knowledge to intelligence – creating competitive advantage in the next economy. Oxford: Elsevier

Rämä, M. (2013). Studying principals' resource allocation and affecting resource factors for physical education in Finland. Published Master's Thesis. Jyväskylä: University of Jyväskylä.

Salerno, C. (2007). A service enterprise: the market vision. In: Olsen, J.P., Maassen, P.: University Dynamics and European Integration, 119-131. Springer: Dordrecht

Salmikangas, A. K. (2015). Liikkumisen monet ympäristöt. In: Itkonen, H., Laine, A. (Eds.). Liikunta yhteiskunnallisena ilmiönä, 101 – 116. Jyväskylä: Jyväskylän yliopisto – Liikuntakasvatuksen laitos.

Santomier, J. (2008). New media, branding and global sports sponsorship. International Journal of Sports Marketing & Sponsorship. 10, 1, 15 – 28.

Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review. 26, 2, 243 – 263.

Sarasvathy, S. D. (2008). Effectuation: Elements of entrepreneurial expertise. Cheltenham: Edward Elgar Publishing

Sarasvathy, S. & Dew, N. (2008). Effectuation and Over-Trust: Debating Goel and Karri Entrepreneurship: Theory & Practice. 32, 4, 727 – 737.

Sarasvathy, S. (2008). The entrepreneurial method. Unleashing the potential of human nature. Retrieved 25th June 2014 from: http://www.esbri.se/oh_estrad/oh_estrad_060111.pdf

Scambler, G. (2005). Sport and society: History, power and culture. Maidenhead: Open University Press.

Schellhaaß, H. M. (2011). Ist die europäische Sportökonomie auf dem richtigen Weg? In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.): Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 49 – 72. Schorndorf: Hofmann.

Schimank, U. (2000). Welche Chancen und Risiken können unterschiedliche Modelle erweiterter Universitätsautonomie für die Forschung und Lehre der Universitäten bringen? In Titscher, S. (Ed.) Universitäten im Wettbewerb. Zur Neustrukturierung österreichischer Universitäten. München: Hampp.

Schleicher, A. (2013). Studiengebühren sind gerecht. Die Zeit Online. Retrieved at 29th June 2013 from: http://www.zeit.de/2013/26/studiengebuehren-andreas-schleicher

Schmidt, C. (1997). "Am Material": Auswertungstechniken für Leitfadeninterviews. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 544 – 568. München: Juventa Verlag.
Schründer-Lenzen, A. (1997). Triangulation und idealtypisches Verstehen in der (Re-) Konstruktion subjektiver Theorien. In: Friebertshäuser, B. & Prengel, A. (Eds.): Handbuch qualitative Forschungsmethoden in der Erziehungswissenschaft, 107 – 117. München: Juventa Verlag.
Schwandt, T. (1994). Constructivist, interpretivist approaches to human inquiry. In N. Denzin, N. and Lincoln, Y. (Eds.) Handbook of qualitative research. Newbury Park, CA: Sage.
Schwarz, G. (2000). Qualität statt Quantität: Motivforschung im 21. Jahrhundert. Opladen: Leske + Budrich.
Schwarz, E.C., Hall, S. & A., Shibli, S (2015). Sport facility operations management. 2nd ed. Abingdon: Routledge.
Scott, A.J. (2006). Entrepreneurship, innovation and industrial development: Geography and the creative field revisited. Small Business Economics, 26, 1 – 24. In: Acs, Z., J.: Entrepreneurship and regional development, 67 – 92, 2010. Cheltenham: Edward Elgar Publishing
Segal, S. (2011). Corporate value of enterprise risk management: the next step in business management. Hoboken, NJ: Wiley.
Selander, S. (1996). Medium-sized university colleges in Sweden - Reflections on the basis of four case studies. In: Dahllöf, U. & Selander, S. (Eds.) Expanding Colleges and New Universities - Selected Case Studies from Non-metropolitan areas in Australia, Scotland and Scandinavia, 155 – 174. Papers from an international development seminar held at Östersund/Trillevalleen Sweden, 15th – 19th March 1995, arranged by Mid-Sweden University College. Uppsala: Uppsala Studies in Education 66
Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review. 25, 1, 217 – 226.
Shank, M. D. & Beasley, F. M. (1998). Fan or Fanatic: Refining a Measure of Sports Involvement. Journal of Sport Behavior. 21, 435 – 443.
Sherman, H. D., Lamb, W. B. & Aspegren, K. (2009). The care and feeding of high-growth businesses in rural areas: the role of universities. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 350 – 367. Cheltenham: Edward Elgar Publishing
Shibin, A. V., Shibina, J. L. & Kuklin, A. A. (2011). Regional social and economic risks as conditions of formation of critical infrastructures. In: Ayyub, B. M. (Ed.). Vulnerability, Uncertainty, and Risk: Analysis, Modeling, and Management, 163 – 170. Reston: ASCE.
Shilbury, D. (1998). Strategic management and sport. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 22 – 33. International council of sport science and physical education. Schorndorf: Hofmann.

Sieweke, J. & Mohe, M. (2011). Alternative Perspektiven auf die Wirtschaft des Sports. In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.): Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 177 – 195. Schorndorf: Hofmann.

Silverman, D. (2001) Interpreting Qualitative Data. Methods for Analysis Talk, Text and Interaction. 2nd Ed. London: Sage.

Simula, M., Levula, E. (2017). Askelmerkit kohti ekologisesti kestävää liikuntakulttuuria. Seminaariraportti. Kohti ekologisesti kestävää liikuntakulttuuria (Kekli) -tutkimushanke, Jyväskylän yliopisto Ekokompassitapahtuma-hanke, Suomen Olympiakomitea. Jyväskylä: University of Jyväskylä.

Sjöholm, K. (1994). Säästöt romuttavat liikuntapaikat – Saving money destroys sports facilities. Liikunta & Tiede 31, 5-6, 30 – 33.

Slack, T. & Parent, M. (2006). Understanding sport organizations – the application of organization theory. 2nd edition. Champaign, Ill: Human Kinetics.

Slack, N., Chambers, S. & Johnson, R. (2007). Operations management. 5th edition. Harlow: Prentice Hall

Smolianov, P. & Shilbury, D. (2005). Examining integrated advertising and sponsorship in corporate marketing through televised sport. Sport Marketing Quarterly, 14, 239 – 250.

Snell-Dohrenwend, B. & Richardson, S. A. (2004). A use for leading questions in research interviewing. In: Bulmer, M.: Questionnaires, vol. 3, 17 – 22. London: Sage.

Sparkes, A. (2002). Telling tales in sport and physical activity. Champaign, IL: Human Kinetics.

Soderman, S. & Dolles, H. (2010). Sponsoring the Beijing Olympic Games: Patterns of sponsor advertising. Asia Pacific Journal of Marketing and Logistics. 22, 1, 8 – 24.

Soucie, D. (1998). Sport Management: a new discipline in the sport sciences. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 14 – 21. International council of sport science and physical education. Schorndorf: Hofmann.

Statistics Sweden (2005). Bostaden, storstaden och barnfamilien. English summary; Housing, metropolitan and families with children, 140 – 141. Demosgrafika rapporter, 2005:1. Retrieved 20th April 2012 from: http://www.scb.se/statistik/_publikationer/BE0701_1996I02_BR_BE51ST0501.pdf

Statistics Finland (2014). Appendix table 1. Employed persons aged 18 to 64 in 2012, unemployed persons in 2013 and risk of becoming unemployed (%) in 2013 by gender and age group. Retrieved 4ht July 2014 from: http://www.stat.fi/til/tyokay/2013/02/tyokay_2013_02_2014-06-05_tau_001_en.html.

Statistics Finland (2014). Appendix table 2. Risk of becoming unemployed for employed persons aged 18 to 64 (%) by gender, age group and region in

2013. Retrieved 4th July 2014 from: http://www.stat.fi/til/tyokay/2013/02/tyokay_2013_02_2014-06-05_tau_002_en.html.

Statistics Finland (2013). Appendix table 1. Population aged 15 or over by level of education and gender 2012. Retrieved 4th July 2014 from: http://www.stat.fi/til/vkour/2012/vkour_2012_2013-12-04_tau_001_en.html.

Statistics Finland (2012). Appendix table 1. Population aged 15 or over by level of education and gender 2011. Retrieved 4th July 2014 from: http://www.stat.fi/til/vkour/2011/vkour_2011_2012-12-04_tau_001_en.html.

Statistics Finland (2011). Appendix table 1. Population aged 15 or over by level of education and gender 2010. Retrieved 4th July 2014 from: http://www.stat.fi/til/vkour/2010/vkour_2010_2011-12-02_tau_001_en.html.

Steiger, T. M. & Lippmann, E. (Eds.) (1999). Handbuch der angewandten Psychologie für Führungskräfte. Berlin: Springer.

Stopper, M., Gnädinger, J. & Kempf, H. (2011). Standortstrategien mit und für Sportgroßvernstaltungen – eine vergleichende Analyse von acht Ländern. In: Emrich, E., Pierdzioch, C., Büch, M. P. & Bischoff, F. (Eds.): Europäische Sportmodelle – Gemeinsamkeiten und Differenzen in international vergleichender Perspektive, 163 – 176. Schorndorf: Hofmann.

Stotlar, D. (1998). Marketing in the sport industry. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 88 – 98. International council of sport science and physical education. Schorndorf: Hofmann.

Stromsoy, C. (2011). Sport Central – The Journey: Context, Planning, Designing, Development. Oral presentation held at the German Sport University Cologne 14th January 2011. Cologne: German Sport University.

Suomi, K. (1998). Liikunnan yhteissuunnittelumetodi – Metodin toimivuuden arviointi Jyväskylän Huhtasuon lähiössä. Published Dissertation. Jyväskylä: University of Jyväskylä – Studies in Sport Physical Education and Health.

Suomi, K. & Vuolle, P. (2001). Liikuntarakentaminen: uusilla otteilla uusiin haasteisiin – Sport building in Finland: fresh means to meet new challenges. Liikunta & Tiede 38, 5. 18 – 21.

Suomi, K., Sjöholm, K., Matilainen, P., Glan, V., Nuutinen, L., Myllylä, S., Pavelka, B., Vettenranta, J., Vehkakoski, K. & Lee, A. (2012). Liikuntapaikkapalvelut ja väestön tasa-arvo. Seurantatutkimus liikuntapaikkapalveluiden muutoksista 1998 – 2009. Helsinki: Opetus- ja kulttuuriministeriön veikkausvoittovaroista kustantama julkaisu. Kopijyvä Oy.

Suomi, K. (2015). Valtion liikuntapolitiikan linjauksia 1980 – 2014. In: Itkonen, H., Laine, A. (Eds.). Liikunta yhteiskunnallisena ilmiönä, 59 – 76. Jyväskylä: Jyväskylän yliopisto – Liikuntakasvatuksen laitos.

Suomi, K. & Kotthaus, D. (2017). Aims and ideas for the development of neighbourhood sport facilities in Finland. In: Suomi, K. & Kotthaus, D. (eds.). Neighbourhood sport facility – IMPALA – Improving Physical Activity in Local Arenas, 54 – 74. EU-financed research and developing project 2015 – 2016 in Finland. Jyväskylä: LIKES Research Reports on Physical Activity and Health, 327

Svensrud, E. & Åsvoll, H. (2012). Innovation in large corporations. A development of the rudimentary theory of effectuation. Academy of Strategic Management Journal. 11, 1, 59 – 74.

Swedish Government (2000). Swedish Law 2000:605. Retrieved 26th November 2015 from: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-2000605-om-arsre_sfs-2000-605/

Swedish Government (2007). Swedish Law 2007:515. Retrieved 26th November 2015 from http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Myndighetsforordning-2007515_sfs-2007-515/

Swedish Government (2013). Education in Sweden. Retrieved 12th July 2014 from: https://sweden.se/society/education-in-sweden/

Swedish Government (2015). Higher education in Sweden. Retrieved 26th November 2015 from: https://sweden.se/society/higher-education-and-research/

Szymanski, S. (2010). The political economy of sport. In: Szymanski, S. (Ed.). The comparative economics of sport, 79 – 86. Houndmills: Palgrave Macmillan.

Taylor, T., Doherty, A. & McGraw, P. (2007). Managing people in sport organisations – A strategic human resource management perspective. Oxford: Elsevier.

Teichler, U. (2000). Internationalisierung als Aufgabe der Hochschulen in Europa? In: Joerden, J. C., Schwarz, A., Wagener, H.J. (Eds.), 169 – 183. Universitäten im 21. Jahrhundert. Berlin: Springer

Thibault, L. (1998). Strategic planning and partnerships in amateur sport organisations. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 34 – 43. International council of sport science and physical education. Schorndorf: Hofmann.

Thiel, R. (1996). Welche Faktoren beeinflussen Kosten und Gewinn bei Sportgroßveranstaltungen? In: Anders, G. (Ed.): Wirtschaftsfaktor Sport, 29 – 34. Köln: Bundesinstitut für Sportwissenschaft.

Thoma, J. E & Chalip, L. (1996). Sport governance in the global community. Morgantown (WV): Fitness Information Technology.

Thrane, C. (2001). Sport spectatorship in Scandinavia: A class phenomenon? International Review for the Sociology of Sport. June, 1, 36, 149 – 163.

Tokarski, W. & Steinbach, D. (2001). Spuren – Sportpolitik und Sportstrukturen in der Europäischen Union. Aachen: Meyer & Meyer.

Tokarski, W., Steinbach, D & Petry, K. (2004). Two Players, one goal? – Sport in der Europäischen Union. Oxford: Meyer & Meyer Sport, (UK) Ltd.

Tokila, A. (2010). Self-employment, subsidies and their evaluation. Lecture in Spatial Labour Markets held on 23rd November 2010. Jyväskylä: The University of Jyväskylä.

Torrealba, J. R. (2010). Comparative models for sport management. In: Ho, R. & Ren, H. (Eds.): Globalisation, sport management and traditions, 119 – 124. Maidenhead: Meyer & Meyer Sports UK.

Trippl, M. & Tödtling, F. (2008). From the Ivory Tower to the Marketplace: Knowledge Organisations in the Development of Biotechnology Clusters. Journal of Regional Analysis & Policy, 38, 2, 159 – 175.

Trout, J. (2006). Peter Drucker on Marketing. Retrieved June 8th 2013 from: http://www.forbes.com/2006/06/30/jack-trout-on marketingcx_jt_0703drucker.html

Török, A. (2009). On the economics of university ranking lists: intuitive remarks on intuitive comparisons. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 219 – 242. Cheltenham: Edward Elgar Publishing

Uhle, R. (2002). Qualitative Sozialforschung und Hermeneutik. In: König, E. & Zedler, P. (Eds.): Qualitative Forschung, 99 – 122. Weinheim: Beltz Verlag.

Umeå University (2012): Umeå University 2020 – Vision and objectives. Umeå: Umeå University.

Umeå University Rector's Office (2014). Effektivitetsfakta – Högskolans lokaler. Update of the pilot study from November 2013. Retrieved 1st October 2014 from: http://www.uka.se/arkiv/effektivitet/hogskolanslokaler.5.575a959a1419 25e81d1bad.html.

v. Bottenburg, M., Rijnen, B. & v. Sterkenburg, J. (2005). Sports participation in the European Union - Trends and differences. W. J. H. Mulier Institute: Arko Sports Media.

Vanhaverbeke, W., Cloodt, M (2014). Theories of the Firm and Open Innovation. In: Chesbrough, H., Vanhaverbeke,W. (Eds.). New frontiers in open innovation, 256 – 278. Oxford: Oxford University Press

Van Maanen, J. (1988). Tales of the field: On writing ethnography. Chicago: University of Chicago Press.

Varga, A., Parag. A. (2009). Academic knowledge transfers and the structure of international research networks. In: Varga, A. (Ed.). Universities, knowledge transfer and regional development – Geography, entrepreneurship and policy, 138 – 162. Cheltenham: Edward Elgar Publishing

Vehmas, H. & Ilmanen, K. (2013). Finland. In: Hallmann, K. & Petry, K. (Eds.): Comparative sport development, 47 – 60. New York: Springer.

Viehöver, W. (2001). Diskurse als Narrationen. In: Keller, R., Hirseland, A., Schneider, W. & Viehöver, W. (Eds.): Handbuch sozialwissenschaftliche Diskursanalyse, 177 – 206. Opladen: Leske & Budrich.

Viklund, O. (2014). Information about sport facility usage at IKSU. Personal meeting on 26th September 2014.
Vilhelmson, B. (2005). Urbanisation and everyday mobility. Long-term changes of travel in urban areas of Sweden. Cybergeo: Revue européenne de géographiie. 302, 1-12.
Vipunen – Opetushallinon tilastopalvelu (2012). Tutkinnon suorittaneiden sijoittuminen. Retrieved 11th November 2014 from: http://vipunen.fi/fi-fi/yliopisto/Sivut/Tutkinnon-suorittaneiden-sijoittuminen.aspx
Vitzthum, T. S. (2014). Deutschen Studenten werden die Freiheiten genommen. Die Welt Online. Retrieved 27th October 2014 from: http://www.welt.de/debatte/kommentare/article133673191/Deutschen-Studenten-werden-die-Freiheiten-genommen.html.
Välimaa, J. (2015). Why Finland and Norway still shun university tuition fees – even for international students. Retrieved 18th February 2015 from: http://theconversation.com/why-finland-and-norway-still-shun-university-tuition-fees-even-for-international-students-36922.
Völkerding, B. (2001). Die Sportberichterstattung deutschsprachiger Zeitungen im fremdsprachigen Ausland. Published Diploma Thesis. Cologne: German Sport University Cologne.
Wagner, E. (2001). Universitäten im Wettbewerb – Strategisches Management von Qualifizierungsdienstleistungen. Wiesbaden: Deutscher Universitätsverlag.
Wagnsson, S., Augustsson, C. & Patriksson, G. (2011). Youth sports participation in different sports. A matter of socioeconomic inequality? Conference paper 8th EASS conference Umeå, Sweden, 18th – 22nd May 2011. Umeå: Umeå University.
Weese, J. (1998). Leadership behaviour in sport organisations. In: Soucie, D. (Ed.): Research in sport management: Implications for sport administrators, 55 – 63. International council of sport science and physical education. Schorndorf: Hofmann.
Wefers, U. (2007). Hochschulmarketing in Deutschland – Chancen und Herausforderungen. Saarbrücken: Müller
Weiermair, K. & Mueller, S. (2005). Sport and sport events as driving forces for economic and tourism development. In: Papanikos, G. T. (Ed.), International research on sports economics and production: an introduction, 231 – 243. Athens: Athens International Institute for Education and Research.
Wennekers, S., Thurik, R. (1999). Linking entrepreneurship and economic growth. Small Business Economics, 13, 27 – 55. In: Acs, Z., J.: Entrepreneurship and regional development, 3 – 31, 2010. Cheltenham: Edward Elgar Publishing
Wernecken, J. (2000). Wir und die anderen… Nationale Stereotypen im Kontext des Mediensports. Dissertation Universität Münster. Berlin: Vistas
Wetterich, J., Eckl, S., Schabert, W. (2009). Grundlagen zur Weiterentwicklung von Sportanlagen. Köln: Sportverlag Strauß

Wieslander, H. & Dahllöf, U. (1996). Recent Development in Swedish Higher Education. In: Dahllöf, U. & Selander, S. (Eds.) Expanding Colleges and New Universities - Selected Case Studies from Non-metropolitan areas in Australia, Scotland and Scandinavia, 147 – 154. Papers from an international development seminar held at Östersund/Trillevalleen Sweden, 15th – 19th March 1995, arranged by Mid-Sweden University College. Uppsala: Uppsala Studies in Education 66

Williams, D. R. & Hammes, P. H. (2007). Real option logic for healthcare entrepreneurial growth and survival. Healthcare financial management. 61, 5, 76 – 79.

Williams, J. & Chinn, S. J. (2010). Meeting relationship-marketing goals through social media: a conceptual model for sport marketers. International Journal of Sport Communication. 3, 422 – 437.

Wiltbank, R., Dew, N., Read, S. & Sarasvathy, S. (2006). What to do next? The case for non-predictive strategy. Strategic Management Journal. 27, 10, 981 – 998.

Wright, M., Clarysse, B., Mustar, P. & Lockett, A. (2007). Academic Entrepreneurship in Europe. Edward Elgar Publishing: Cheltenham.

Wysocki, R. K. (2011a). Effective Project Management : Traditional, Agile, Extreme. 6th Ed. Hoboken, NJ: Wiley.

Wysocki, R. K. (2011b). Business analyst / Project manager. A new partnership for managing complexity and uncertainty. Hoboken, NJ: Wiley.

Wössner, H. (1996). Sportgroßveranstaltungen – Garanten für den Imagegewinn einer Stadt oder Region? Das Beispiel Stuttgart. In: Anders, G. (Ed.): Wirtschaftsfaktor Sport, 61 – 63. Köln: Bundesinstitut für Sportwissenschaft.

Yläranta, M. (2006). Between two worlds – stakeholder management in a knowledge intensive governmental organisation. Published dissertation. Turku: Turku University.

Yu, T. F. L. (1999). Entrepreneurial alertness and discovery. The Review of Austrian Economics. 14, 1, 47 – 63.

Żyśko, J. (2010). Comparison of the national sport management systems in contemporary European countries in relation to the transnational policy. In: Ho, R. & Ren, H. (Eds.): Globalisation, sport management and traditions, 49 – 56. Maidenhead: Meyer & Meyer Sports UK.

Özatürk, G. Ö. (2011). Wirkungen von Event-Sponsoring: Analyse anhand von drei Sportveranstaltungen und Implikationen für Marketingmaßnahmen von Unternehmen. Published Dissertation. University of Göttingen. Göttingen: Cuviller Verlag.

APPENDIXES

Appendix 1 The university data

1 The universities

1.1 Jyväskylä University

Number of faculties: 7
Number of students: 25,000 (in 2010)
Number of Workers: 2,500 (in 2010)
Volume of the campus area: 175,000 m^2
Share of owners: SYK (73%), Viveca + Technopolis (27%)

1.2 Umeå

1.2.1 University of Umeå

Volume of the campus area: 500,000 m^2
University of Umeå rented space: 253,663 m^2; Ranked seventh in Sweden overall

1.2.2 IKSU

Volume of the area: 21,000 m^2
IKSU sport: 18,000 members
In total (IKSU sport, IKSU spa, IKSU plus): 22,000 members

1.3 German Sport University

Volume of the university area: 187,000 m^2
Volume of the usage area: 61,640 m^2
Volume of the outside sport fields: 40,300 m^2
Students: 5,800

Appendix 2 Additional Figures

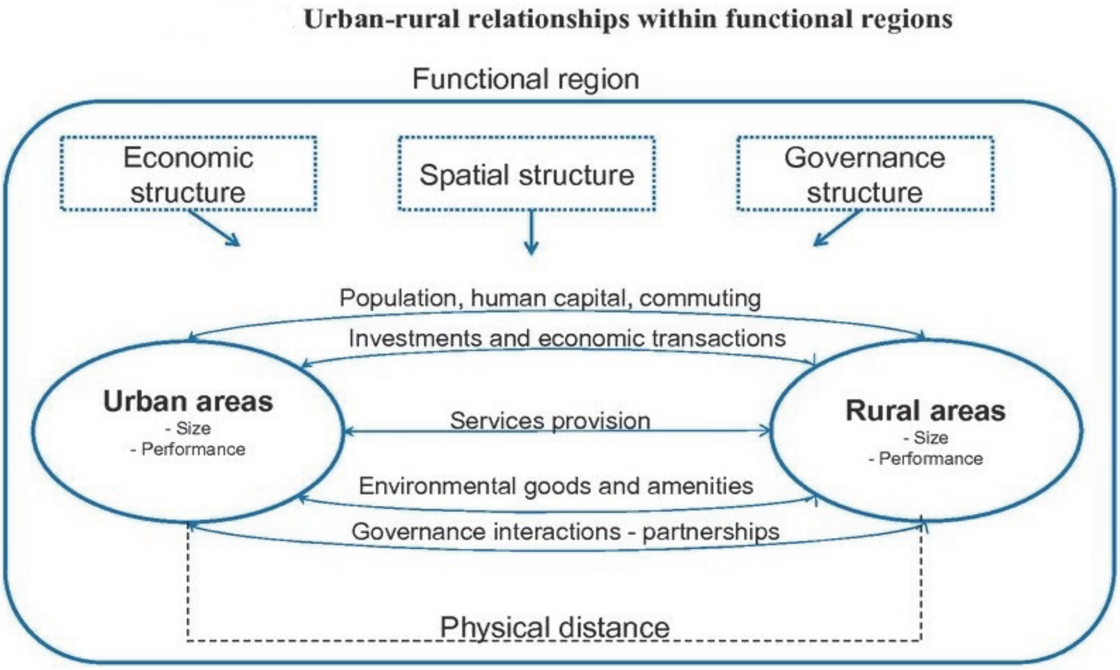


FIGURE 1 Urban-rural relationships with functional regions. Adapted from OECD (2013)

FIGURE 2 Central Finland development plan. Adapted from Keski-Suomen Liitto (2013)

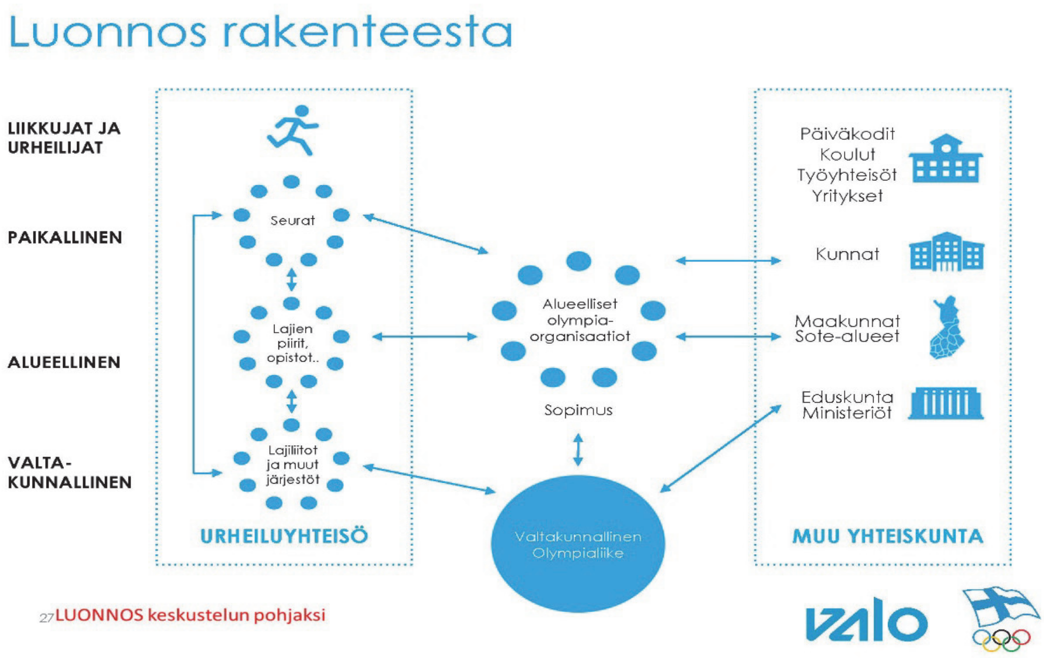


FIGURE 3 Framework of governmental and non-governmental structures of sport in Finland from 2017 onwards. Adapted from VALO (2016)

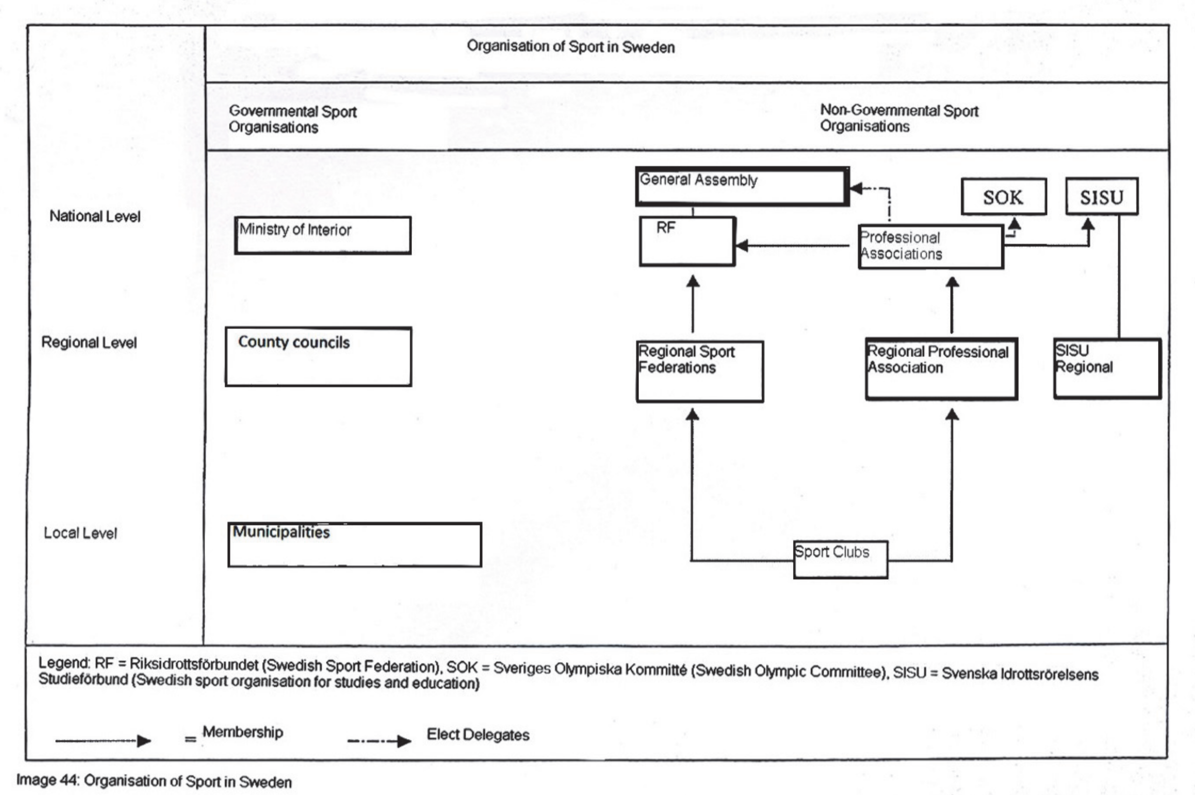


FIGURE 4 Organisation of Sport in Sweden. Adapted from Tokarski & Steinbach (2001)

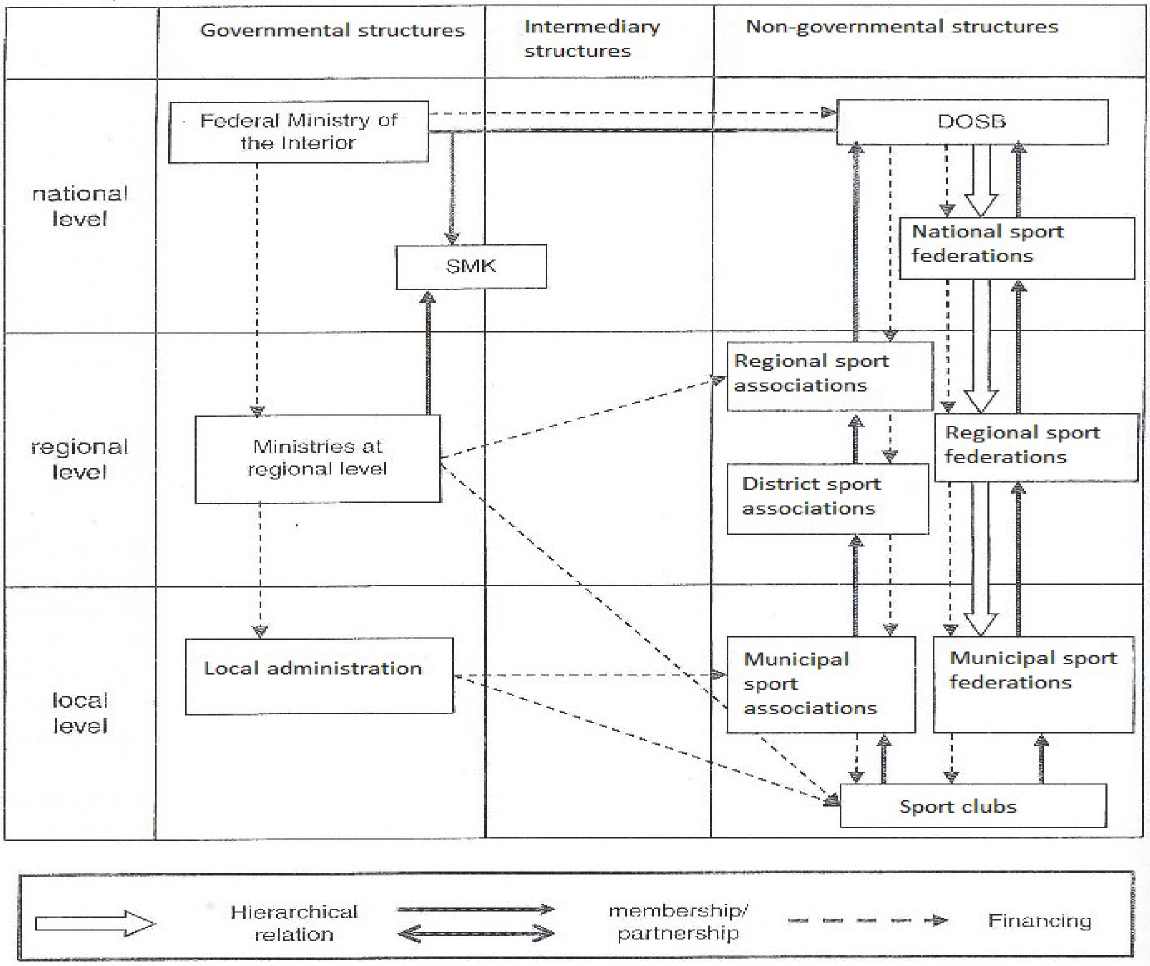


Fig. 7.1 The organization of sport in Germany. Note: *SMK* Konferenz der Sportminister/-innen der Länder (Meeting of Sport Ministers of all federal states), *DOSB* Deutscher Olympischer Sportbund (German Olympic Sports Confederation)

FIGURE 5 Organisation of sport in Germany. Adapted from Hallmann & Petry (2013)

University property management in the Nordic countries

	Denmark	Norway	Sweden	Finland		
University property management org.	UBST	Statsbygg	Akademiska Hus	Aalto University Properties	Helsinki University Properties	University Properties of Finland
Organisation form	Administrative body, state agency	Administrative body, government company	Limited company	Limited company – can be seen as a subsidiary to the university	Limited company – can be seen as a subsidiary to the university	Limited company
Finance	In the state budget - specific "government company" regulations	In the state budget	Outside the state budget, no capital contribution from the state	Outside the state budget	Outside the state budget	Outside the state budget
Ministry responsible	The Ministry of Science, Technology and Innovation	The Ministry of Government Administration and Reform	The Ministry of Enterprise, Energy and Communications	The Ministry of Enterprise, Energy and Communications	The Ministry of Enterprise, Energy and Communications	The Ministry of Enterprise, Energy and Communications

FIGURE 6 University property management in the Nordic countries. Adapted from KTI (2010)

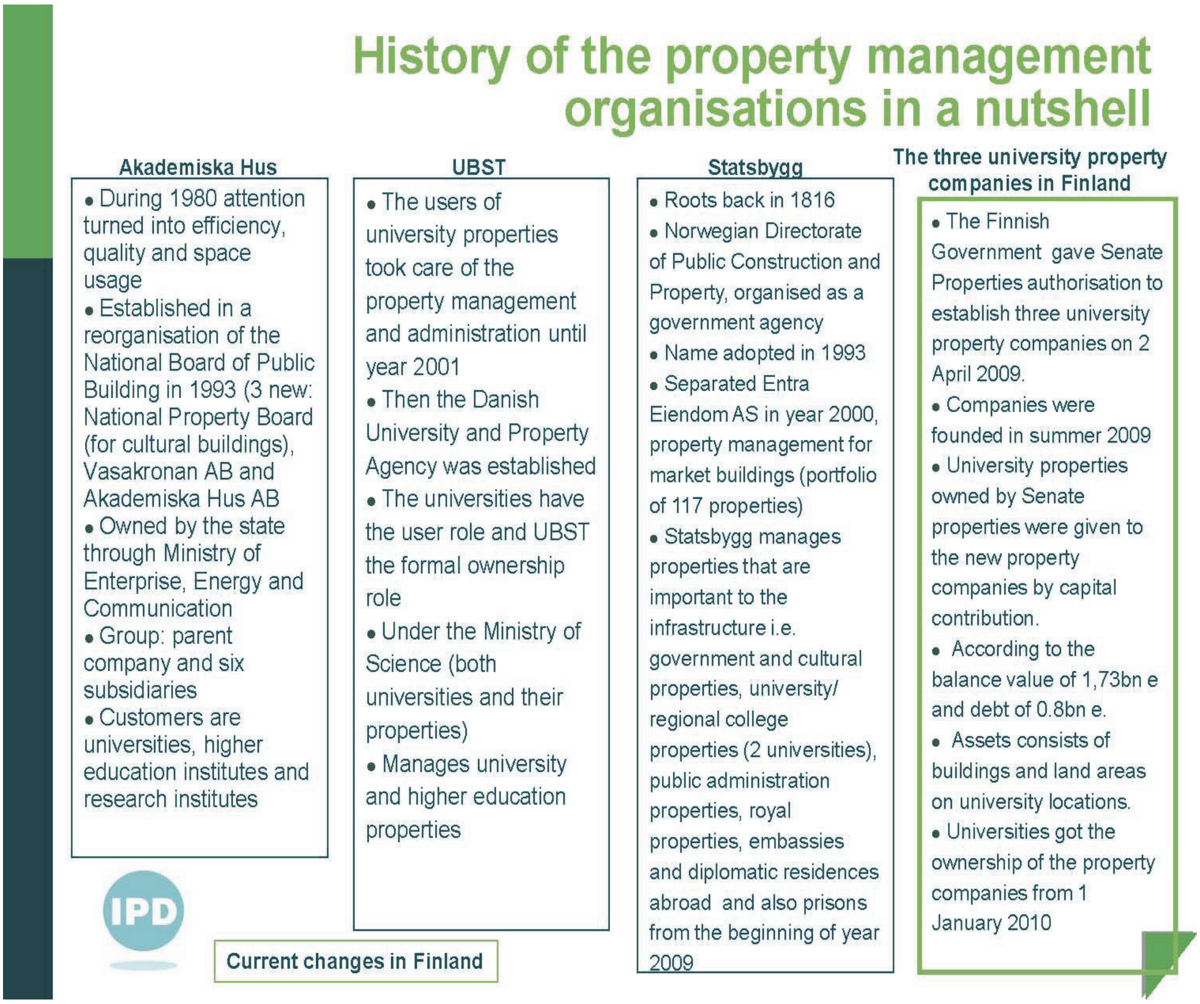


FIGURE 7 History of property management in Nordic countries. Adapted from KTI (2010)

Selected set of markers	Section 1: 'Determining the needs'	Section 2: 'Inventorying the resources'	Section 3: 'Matching the needs with the inventory'	Section 4: 'Planning for changes'
General information	JYU, UU, GSU, IKSU,	JYU, UU, GSU, IKSU	JYU, UU, GSU, IKSU	JYU, UU, GSU, IKSU
Human resources	Personnel, availability, specialists	Unemployment rate, salaries,	Salary diversification, availability,	Job interest, money, level of payment,
Facility management	Facilities, renovation, budgeting	Per capita figures, logistics, inventory, money	New buildings, rents, energy prices, overhead costs,	Renovation, rents, energy prices, budgeting plans
Strategic management	Organisation, leadership, planning	Planning, collaboration, foresight	Planning theories, academic interests, organizational structure	Planning, business ideas, willingness to cooperate
Stakeholder management	Business, stakeholders, company	Business history, experiences, collaborations	Awareness, urban structure, collaboration, companies	Business possibilities, Needed monies, structural changes
Entrepreneurship	Marketing, money, institution,	Economic geography, unemployment rate	Companies, infrastructure, level of marketing density	Students, institutional changes, sport structure, monies
Major constraints	Bureaucracy, time, money, personnel	Legislation, politics, money, time	Willingness, bureaucracy, sponsoring	Bureaucracy, time, money, interests, business
Students' sport culture	Usage, sport halls, trends, sport office	Training hours, money invested, per capita figures	Money available, usage of halls, hours per capita	Level of interest, training hours, usage rates

FIGURE 8 Selected set of markers

Clusters – Evolution of the concept

	1890s 1920s	1970s	1980s		1990s onwards				
	Genesis	Impasse	New Industrial Districts				Clusters		
Context	International Division of Labour based on Comparative Advantage	Mass production – Large firm's dominance	IT revolution Suspension of free convertibility Oil crisis				Fast-changing technology Deregulation Globalisation		
School of Thought	Marshallian (Marshall, 1930 (1890))	No interest in industrial districts given the dominance of vertical integrated	Italian School (Becattini, 1979, 1989, 1990)	Flexible Specialisation (Piore and Sabel, 1984; Sabel and Zeitlin, 1985)	Californian School (Scott, 1988; Storper and Scott, 1989)	Porterian (Porter, 1990, 1998)	New Economic Geography (Krugman, 1991)	Innovation approach to clusters (Innovative Milieu, Nordic School, Geography of innovation)	Cultural-institutional approach to clusters
Lens	Economics	firms drawing on internal economies of scale to produce standardised	Socio-economics	Institutional	Economic Geography Transaction cost economics	Business and Management	International Economics	Sociology Economic Geography Regional economics	Socio-economics New Institutionalism
Cluster concept	Industrial District	goods for predictable markets. However,	Industrial Districts	Industrial Districts	Flexible production complexes	Industrial Cluster (1990) Cluster (1998)	Industrial localisation	Innovative Milieu Learning regions	Local industrial systems
Stressed cluster dimension	Industrial	there are important antecedents for cluster approach	Industrial Territorial Socio-economic	Institutional	Industrial	Industrial (1990) Industrial and Territorial (1998)	Industrial	Territorial Inter-organisational Industrial	Inter-organisational Industrial Territorial
Main Thrust	External economies	such as growth poles (Perroux) and industry complexes	Socio-economic and historical roots	Flexible specialisation as alternative to mass production	Transaction costs	Competitiveness	External economies and increasing returns to scale	Environments for innovation knowledge spillovers	Inter-organisational networks
Cluster Environment	Inter-firm division of labour, local pool of specialised labour, subsidiary trades, and trust	(Czamanski and de Albas)	Local social, cultural political, and historical factors	Vertical disintegration Institutional factors	Vertical disintegration	Any of the elements of the diamond, including chance Porter, 1998: 237)	Economies of scale and increasing returns	Tacit and embedded knowledge, territorial speificities, and cumulative learning	Organisational and social proximity Embeddedness isomorphism
Impact of clusters	External economies (economies of specialisation, economies of labour supply, economies of information and communication, and knowledge spillovers), which in turn increases small firms' efficiency		Shared vision and organisation, which in turn contribute to both: firm efficiency and local socio-economic development	Economic growth and employment	Lower transaction costs	Firm productivity Regional/national competitiveness through improving productivity, fostering innovation, and facilitating commercialisation of innovation via start ups	Marshallian external economies International trade Uneven development (core-periphery argument)	Firm Innovation Knoweldge spillovers Learning regions	Firm legitimation Firm performance Regional development

FIGURE 9 Cluster evolution. Adapted from Rocha (2004)

Development phases and critical junctures

Growth phase	Research phase	Opportunity-framing phase	Pre-orientation phase	Re-orientation phase
Nature of phase	Creation of valuable items which can generate potential opportunities for commercialisation	Screening to evaluate the validity and performance and framing of the subject within a commercial opportunity through identification of potential markets.	Steps to decide what resources and capabilities to develop, what to acquire now and in future and timing	Continuous process of identifying, acquiring, and reconfiguring as nature of market needs became clearer in order for sustainable returns to be subsequently achieved
Factors initiating critical junctures	*Moving through opportunity recognition critical juncture between research phase and opportunity framing* Lack of prior knowledge about how markets and industry operate Inability to understand and focus upon how a discovery in this particular field can be applied to residual customer need Inability to research, define and articulate a clear route to market the innovation Lack of incentive to think commercially and behave entrepreneurially	*Moving through entrepreneurial critical juncture between opportunity-framing and pre-organisation* Reluctance or inability to act against convention Inability to accept risks and tolerate uncertainty Little prior business experience and responsibilities Inability to attract surrogate entrepreneurs and experienced managers Lack of self-awareness over personal limitations Inability to obtain and leverage social capital through social, academic, commercial and industrial networks	*Moving through credibility critical juncture between pre-organisation and re-orientation.* Inability to attract and secure initial seed finance from investors Unable to secure suitable facilities outside of the university department to locate the new venture Inability to secure quality human resources to form a well-balanced managerial and scientific team Inability to achieve proof of concept and evolve the subject to achieve market readiness Inability to generate or show a clear route to revenues and profitability in order to attr5act financial resources Lack of depth and breadth in the technology portfolio to provide sufficient long-term options for commercialisation Lack of receptivity for the product by supply chain distributors and customers in the market	*Moving through sustainability critical juncture between re-orientation and sustainability* Inability to manage growth through the identification, acquisition and integration of resources and capabilities Inability to attract and secure next round finance from existing and new investors Inability to employ resources and develop capabilities to acquire speed to market Inability to recognise opportunities and threats and make strategic decisions under persuasive uncertainty Inability to gin traction and build momentum in the market through generating sufficient sales (for instance research output) and capturing market share Inability to integrate knowledge and learning into the venture
Resulting critical junctures	Opportunity Recognition	Entrepreneurial commitment	Threshold of credibility	Threshold of sustainability

FIGURE 10 Development phases and critical junctures. Adapted from Wright et al. (2007)

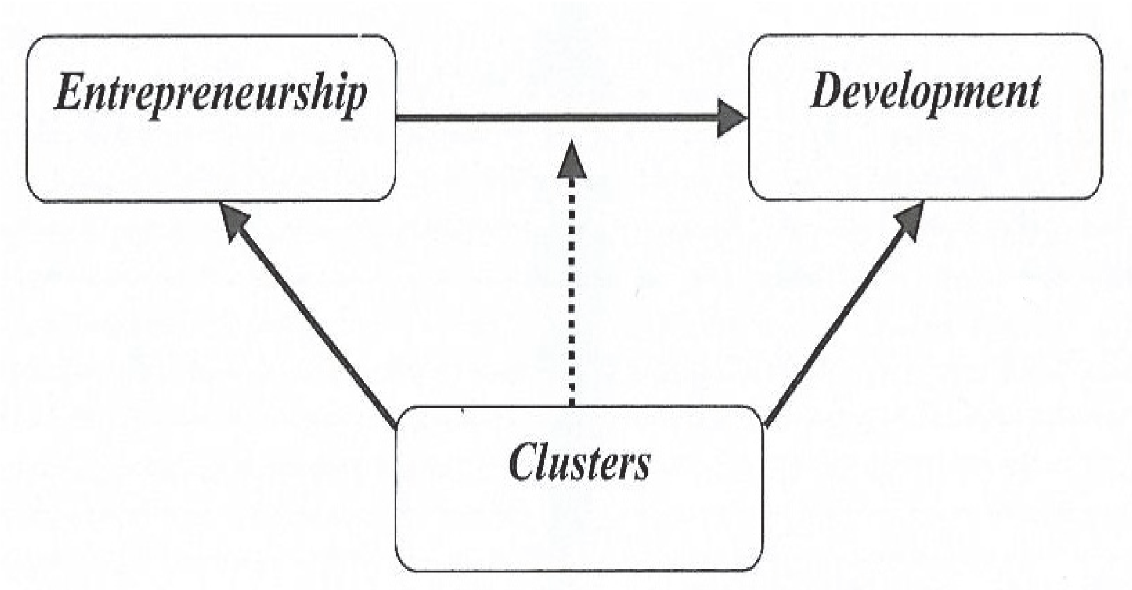


FIGURE 11 Research focus. Adapted from Rocha (2004)

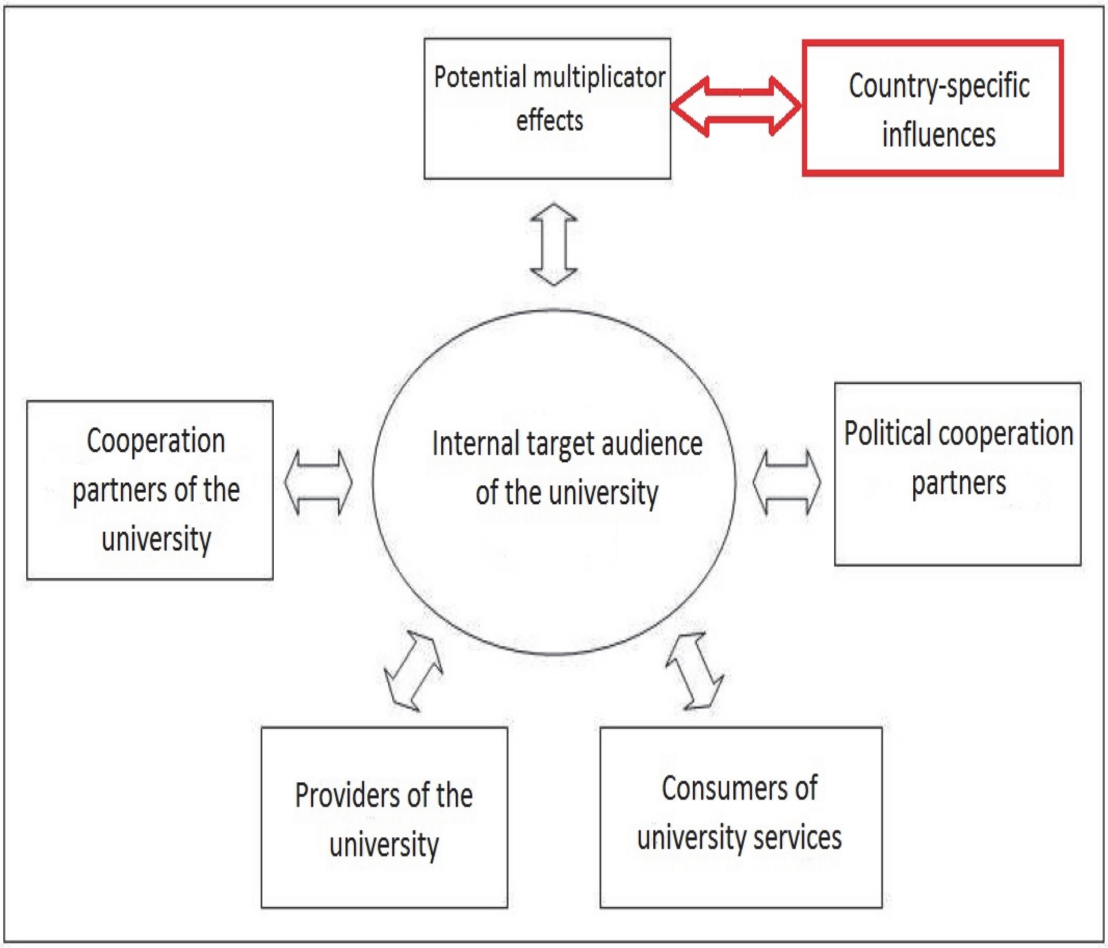


FIGURE 12 Target groups. Modified and adapted from Jesse (2007)

Appendix 3 Additional tables

TABLE 1 Developments in the aggregate number employment in sport manufacturing and service sectors in Finland, 2002–2011. Adapted from Gholamzadeh Fasandoz (2016)

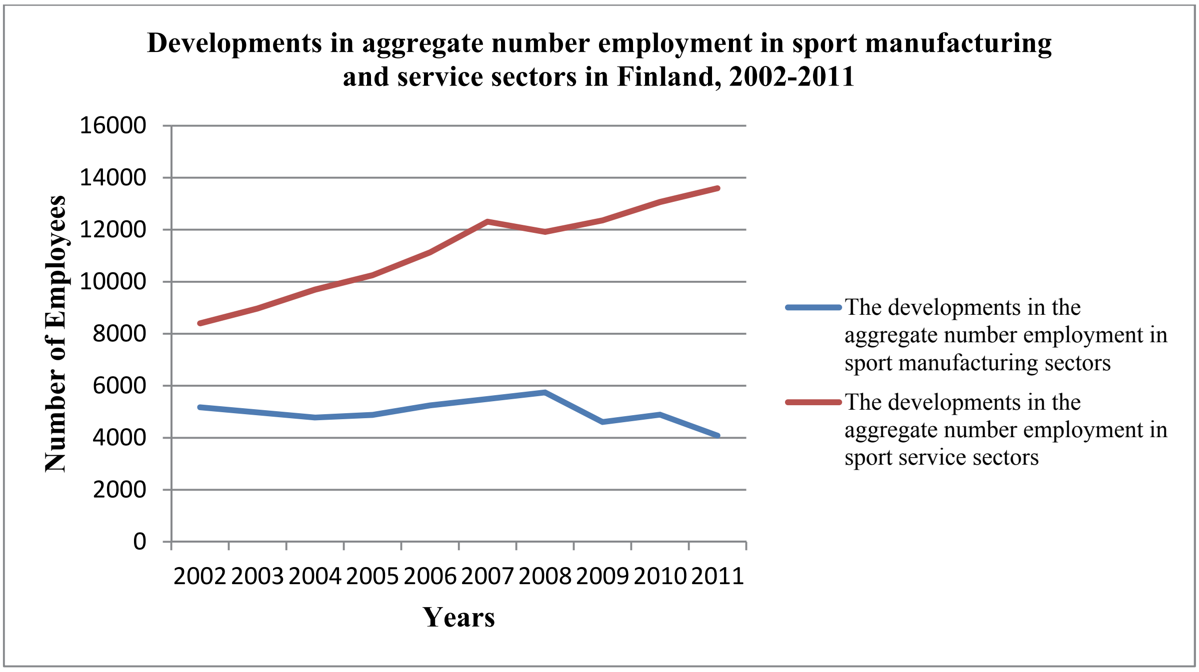


TABLE 2 Unemployment rate of Umeå, 2008–2016. Adapted from Ekonomifakta (2017)

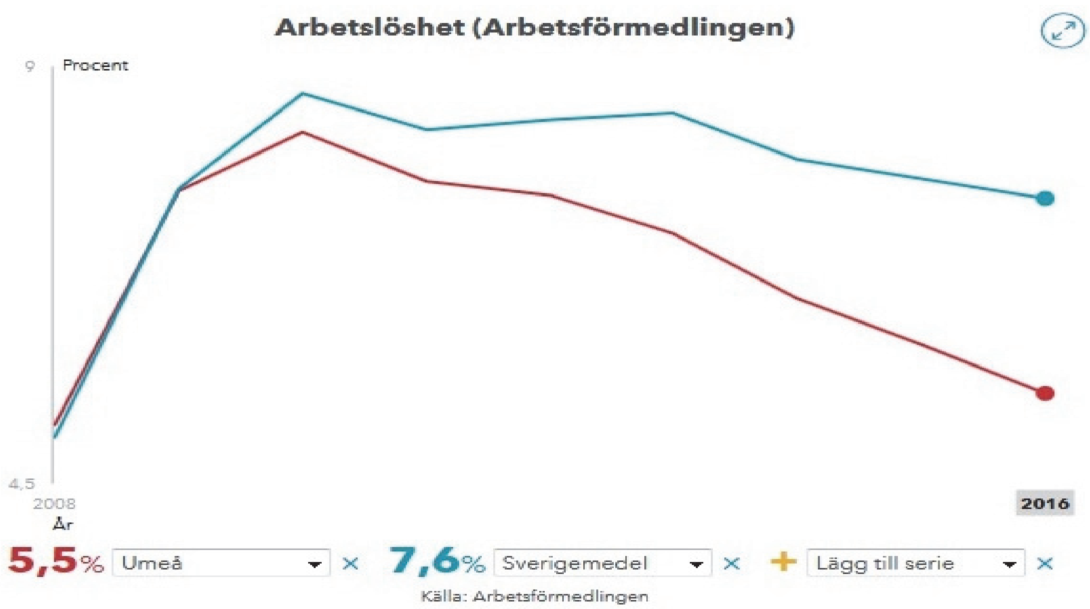


TABLE 3 Economic performance of the Cologne region from 2007–2012. Adapted from IHK Köln (2012)

ECONOMIC PERFORMANCE IN THE CCI COLOGNE REGION

Gross domestic product and gross value added (GVA) by economic sectors

Administrative district	Gross domestic product at market prices (in million euros) 2009	2008	Change in %	GVA according to economic sector 2008 (in million euros): Manu-facturing industry	Services sectors total	Trade, hospita-lity and transport	Financing, leasing, com-pany service providers	GDP per employed person (in euros)
Cologne	41,761	42,672	-2.1	6,052	31,207	7,259	14,156	62,433
Leverkusen	5,584	6,196	-9.9	2,133	2,846	798	1,131	69,125
Oberberg District	7,263	7,897	-8.0	2,441	4,006	745	1,870	55,750
Rhein-Erft District	12,144	12,670	-4.1	3,187	7,600	2,560	2,762	66,432
Rhein-Berg District	5,563	5,724	-2.8	960	3,974	812	1,700	51,812
CCI Cologne region	72,315	75,159	-3.8	14,773	49,633	12,174	21,620	61,801
NRW	522,920	546,988	-4.4	122,957	341,595	84,258	143,428	60,244
Germany	2,397,100	2,481,200	-3.4	566,520	1,556,780	373,650	666,690	59,524

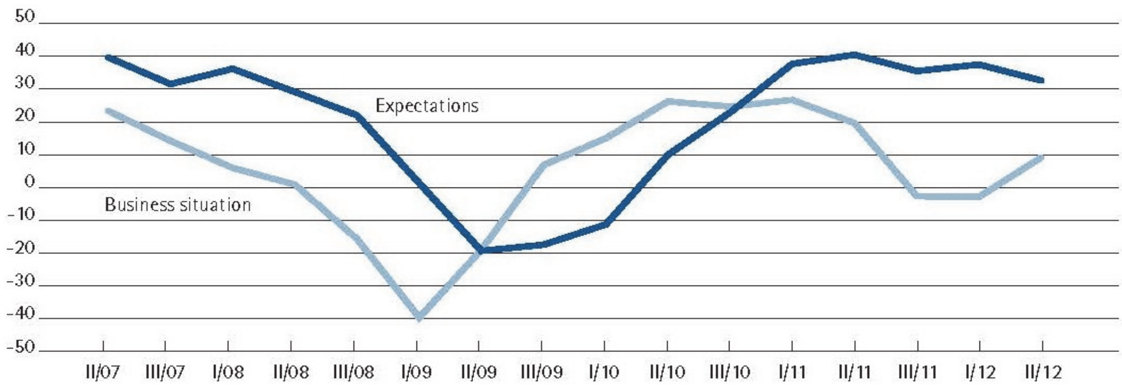
Source: Information und Technik NRW (IT.NRW). Status: August 2010.

Purchasing power according to GfK and POS sales

Administrative district	Purchasing power 2012 Million euros	Purchasing power 2012 Index (D=100)	POS sales 2012 Million euros	POS sales 2012 Index (D=100)
Cologne	22,220	110.2	6,903	136.6
Leverkusen	3,434	106.7	940	116.0
Oberberg District	5,470	97.3	1,266	89.9
Rhein-Erft District	10,114	108.9	1,952	83.8
Rhein-Berg District	6,702	120.9	1,395	100.4
NRW	359,267	100.6	93,046	103.9
Germany	1,636,200	100.0	410,100	100.0

Source: GfK Nürnberg. Status: 2011.
Purchasing power: Sum of all net incomes per region; POS sales (point of sale – formerly retail sales): Retail sales per region, refer to www.ihk-koeln.de, section: Standortpolitik/Zahlen, Daten und Statistiken.

BUSINESS SITUATION AND EXPECTATIONS, SPRING 2012



Source: CCI Cologne, business cycle survey for spring 2012. Cf. www.ihk-koeln.de under Standortpolitik/Konjunktur (regional economic policy/economy).

TABLE 4 Economic performance of the Cologne region from 2012–2017. Adapted from IHK Köln (2017)

ECONOMIC PERFORMANCE IN THE CCI COLOGNE REGION

Gross domestic product and gross value added (GVA) by economic sectors

Administrative district	Gross domestic product at market prices (in million euros)			GVA according to economic sector 2014 (in million euros)				
	2014	2013	Change in %	Manu-factoring industry	Services sectors total	Commerce, transport and warehousing, hotel and restaurant industry, information and commu-nication	Financing, insurance and corporate ser-vices, land and real estate	GDP per employed person (in euros)
Cologne	56,915	54,513	4.4	8,627	42,570	14,984	16,398	79,221
Leverkusen	7,213	6,785	6.3	2,818	3,669	1,205	1,441	86,106
Oberberg District	8,791	8,450	4.0	3,284	4,596	1,034	2,061	63,800
Rhein-Erft District	13,957	13,707	1.8	3,870	8,643	3,465	2,886	73,592
Rhein-Berg District	6,729	6,370	5.6	1,467	4,573	1,161	1,746	60,524
CCI Cologne region	**93,605**	**89,825**	**4.2**	**20,066**	**64,051**	**21,849**	**24,532**	**75,438**
NRW	632,848	611,126	3.6	157,848	409,377	122,401	157,020	69,402
Germany	2,915,650	2,820,820	3.4	795,531	1,809,656	534,641	689,628	68,277

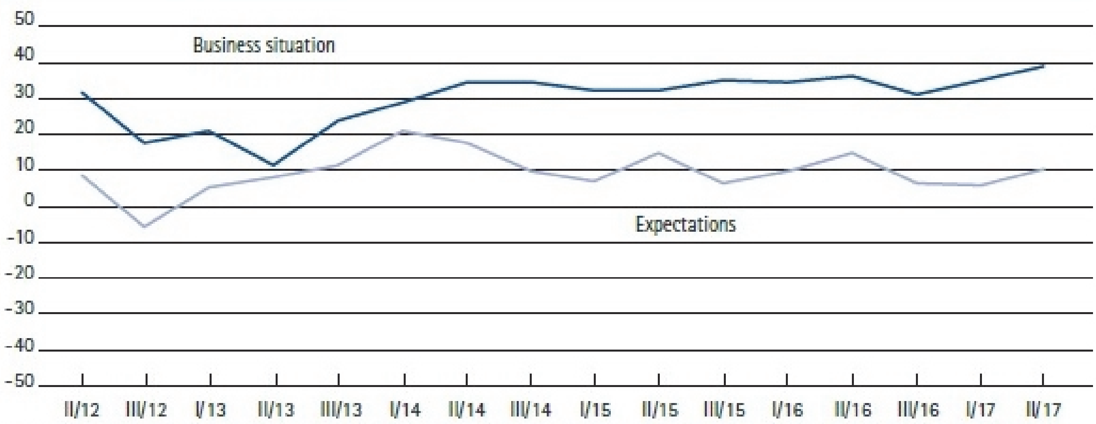
Source: Information und Technik NRW (IT.NRW). Status: August 2016.

Purchasing power and POS sales

Administrative district	Purchasing power 2017		POS sales 2017	
	Million euros	Index (D=100)	Million euros	Index (D=100)
Cologne	25,940.10	107.0	7,594.50	120.5
Leverkusen	3,768.50	101.5	1,051.81	109.0
Rhein-Erft District	11,187.13	105.4	2,566.97	93.1
Oberberg District	6,052.96	97.9	1,446.61	90.1
Rhein-Berg District	7,488.79	116.9	1,589.92	95.5
CCI Cologne region	**54,437.49**	**106.4**	**14,249.80**	**107.2**
NRW	403,191.01	99.5	106,035.86	100.8
Germany	1,863,800.00	100.0	484,307.43	100.0

Source: ©Michael Bauer Research GmbH, Nuremberg and CIMA Beratung + Management GmbH / BBE Handelsberatung GmbH, Munich, 2017
Purchasing power: Sum of all net incomes per region; POS sales (point of sale – formerly retail sales): Retail sales per region, refer to www.ihk-koeln.de/001241

BUSINESS SITUATION AND EXPECTATIONS, SPRING 2017



Source: CCI Cologne, business cycle survey for spring 2017. Cf. www.ihk-koeln.de under Standortpolitik/Konjunktur (regional economic policy/economy).

TABLE 5 Annual rent for JYU facilities, inflation-adjusted to 2016

2015	2014	2013	2012	2011	2010
€25,528,007	€25,895,947	€24,528,007	€22,966,575	€24,528,007	€24,874,130

TABLE 6 Annual rent for JYU sport facilities, inflation-adjusted to 2016

2015	2014	2013	2012	2011	2010
€107,033	€96,666	€88,317	€114,501	€93,681	€77,184

TABLE 7 Annual overall facility rent and maintenance costs for UU, inflation-adjusted to 2016 from SEK to €

2015	2014	2013	2012	2011	2010
€37,272,642	€34,895,438	€36,126,629	€36,916,663	€32,280,835	€22,393,630

TABLE 8 Annual rent and maintenance costs paid from UU to IKSU for using their facilities for UU, inflation-adjusted to 2016 from SEK to €

2015	2014	2013	2012	2011	2010
€484,131	€479,812	€472,721	€463,452	€453,920	€419,389,65

TABLE 9 Annual sport facility rent and leasing costs at the GSU, inflation-adjusted to 2016

2015	2014	2013	2012	2011	2010
€15,149,500	€11,512,819	€10,921,600	€11,482,636	€11,380,790	€9,788,800

TABLE 10 Annual sport facility maintenance and renovation costs at the GSU, inflation-adjusted to 2016

2015	2014	2013	2012	2011	2010
€5,159,767	€4,974,011	€4,128,812	€4,776,881	€4,735,053	€4,092,659

TABLE 11 Interview information

Interview number	Date of the interview	Name of the interviewee (anonymised)	Duration of the interview	Characters without space	Kilobyte (Media)	Kilobyte (Word)
1	31.5.2010	2	1:13:50 hours	38.022	17.660	119
2	2.6.2010	1	1:59:24 hours	74.010	28.553	187
3	7.6.2010	5 & 6	1:03:44 hours	44.813	15.246	135
4	8.6.2010	4	1:12:07 hours	47.150	17.251	119
5	29.6.2010	7	1:08:04 hours	38.375	16.283	96
6	5.7.2010	8 & 9	1:20:03 hours	73.545	19.154	147
7	26.11.2010	5	1:13:17 hours	53.842	17.529	146
8	26.11.2010	4	1:11:12 hours	45.927	17.032	131
9	9.12.2010	1	2:09:48 hours	73.994	31.042	80
10	20.12.2010	8 & 9	0:50:21 hours	46.761	12.049	105
11	20.12.2010	7	0::55:04 hours	33.316	13.174	95
12	8.2.2011	2	0:10:02 hours (phone)	5.798 (written answers)	Phone and written	38
13	19.7.2011	7	0:33:16 hours	20.985	7.960	73
14	19.7.2011	8 & 9	1:05:23 hours	58.120	15.642	134
15	24.8.2011	5	1:28:38 hours	61.732	21.199	161
16	24.8.2011	4	0:55:44 hours	34.548	13.340	101
17	8.9.2011	1	2:10:52 hours	71.523	31.312	78
18	16.9.2011	3	0:41:45 hours	23.542	9.991	37
19	5.1.2012	8 & 9	0:41:36 hours	37.157	9.955	34
20	19.1.2012	5	0:58:25 hours	41.950	13.976	123
21	19.1.2012	4	0:59:24 hours	34.851	14.207	103
22	27.1.2012	1	1:40:51 hours	55.907	24.122	150
23	8.3.2012	3	0:59:57 hours	33.848	14.342	50
24	11.5.2012	7	0:32:18 hours	19.828	7.733	71

TABLE 12 Selected data on higher education. Adapted from Brezis (2012)

Selected data on higher education

Country	Number of institutions in top 500 (1)	Number of institutions in top 200 (2)	Number of institutions in top 100 (3)	GDP per capita (in US $) (4)	Population (in millions) (5)	Number of students (in thousands) (6)	Students in private HE institutions (in %) (7)	Students per population (in %) (8)
				Europe				
Austria	7	1	0	34,700	8.2	229		2.8
Belgium	7	4	0	33,000	10.4	316		3.0
Czech	1	0	0	22,000	10.2	317	6.4	3.1
Denmark	4	3	1	37,100	5.5	201		3.7
Finland	5	1	1	33,500	5.2	174		3.3
France	23	7	4	31,120	63.7	2,287	12	3.6
Germany	41	14	6	31,190	82.4	1,974	3	2.4
Greece	2	0	0	24,000	10.7	353		3.3
Hungary	2	0	0	17,500	10.0	422		4.2
Ireland	3	0	0	44,500	4.1	192	7.5	4.7
Italy	20	4	0	30,200	58.1	1,820	6.3	3.1
Netherlands	12	9	2	32,100	16.6	194		1.2
Norway	4	1	1	46,300	4.6	211		4.6
Poland	2	0	0	14,400	38.5	1,917	29.5	5.0
Portugal	2	0	0	19,800	10.6	381	25.7	3.6
Russia	2	1	1	12,200	141.4	6,884	14.9	4.9
Slovenia	1	0	0	23,400	2.0	112	2	5.6
Spain	9	1	0	27,400	40.4	1,444	12	3.6
Sweden	11	4	4	32,200	9.0	357		3.9
Switzerland	8	6	3	34,000	7.5	160	1.6	2.1
UK	42	22	11	31,800	60.8	2,336		3.8