EVOLUTION OF
INTERMEDIATING ACTIVITY BETWEEN
BUSINESS, UNIVERSITY AND GOVERNMENT

Case eBRC
SUMMARY
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The society is going through development process which has created many challenges to all the key sectors of society: business, university and government. Businesses have to find ways to compete in global markets, universities are pressured to produce relevant knowledge on currents trends and governments need to carry out policies that support the ongoing development process. In the age of networking, the way to meet these challenges is by cooperating. This has created a need for dedicated intermediating actors, who facilitate interaction between the three sectors.

The purpose of this research was to increase our understanding of intermediating activity between business, university and government. The idea for this thesis stemmed from the involvement of the researcher in the case phenomenon and thus from an adoption of a strong presunderstanding. The research was conducted as an inductive action research to correspond to this background. The preunderstanding was supported by theoretical analysis and the created framework was then applied to a case organization thus producing a concluding proposition.

The Business-University-Government context is seen to be built from the main sectors of the society, both public and private, and in addition, separating the universities from the public sector. The intermediating activity is performed in organizations that operate between research institutions and businesses and that have been created through public financing to act as links between the different parties and facilitate the innovation process. The intermediating per se and the roles that it possesses are seen to be dynamic and dependent on the context.

The service management system model was chosen to support and lead the empirical part of the research. The analysis of the case organization shows that operating in a new and ill-defined area and pursuing ambitious goals offers many challenges to an organization. To enable change and to act as a pioneer in an established institute, resources and time are needed in order to create a coherent service management system. For the case organization, the question is how to utilize and learn from the experience and develop intermediating activity that best suits for the Business-University-Government context. The research can be considered as descriptive and understanding but the theoretical framework it has provided, could be utilized in similar kind of researches.
INDEX

1. Introduction.................................................................................................................6
   1.1 Business in the knowledge society.................................................................7
   1.2 Universities and their new challenges.............................................................8
   1.3 Government initiatives and programs.............................................................9
   1.4 Intermediating activity ..................................................................................10

2. Research strategy ......................................................................................................11
   2.1 Research problem and goals..........................................................................11
   2.2 Assumptions and limitations .........................................................................13
   2.3 Central concepts............................................................................................13
   2.4 Research methodology .................................................................................14
   2.5 Structure of the thesis ....................................................................................16

3. Theoretical framework .............................................................................................18
   3.1 The Business-University-Government context .............................................18
      3.1.1 Definitions...............................................................................................18
      3.1.2 Background ............................................................................................20
      3.1.3 Business-University ..............................................................................21
      3.1.4 Business-University-Government .........................................................23
   3.2 Intermediating ..................................................................................................26
      3.2.1 Definitions...............................................................................................27
      3.2.1 Intermediating in the network context .................................................28
      3.2.2 Intermediator roles in the network context ..........................................29
      3.2.3 Intermediating in the innovation environment ..................................31
      3.2.4 Intermediator roles in the innovation environment ..................................32
      3.2.3 Different types of intermediators .........................................................34
   3.3 Service management system .........................................................................36
      3.3.1 The market segment ..............................................................................38
      3.3.2 The service concept ..............................................................................39
      3.3.3 The service delivery system ...................................................................41
      3.3.4 The culture and philosophy ....................................................................42
   3.4 Guiding theoretical framework ......................................................................43

4. Case eBRC .................................................................................................................45
   4.1 Nature of data ..................................................................................................45
      4.1.1 Acquiring the data ..................................................................................45
      4.1.2 Analysis of the data ...............................................................................46
      4.1.3 Validity and reliability ............................................................................46
   4.2 Development phases .......................................................................................48
      4.2.1 Start-up phase .........................................................................................48
         4.2.1.1 Market segment ................................................................................48
         4.2.1.2 Service concept ..............................................................................50
         4.2.1.3 Service delivery system .................................................................51
         4.2.1.4 Culture and philosophy ..................................................................53
         4.2.1.5 Image .............................................................................................54
      4.2.2 Growth phase .........................................................................................55
         4.2.2.1 Market segment ..............................................................................55
LIST OF TABLES AND FIGURES

Tables

Table 1. Roles and weight points of intermediators in innovation environments …… 33
Table 2. Terms relating to intermediary organizations in university–industry partnerships …………………………………………………………………... 35

Figures

Figure 1. Key areas of industrial renewal and welfare promotion .................. 8
Figure 2. Structure of the thesis ................................................................. 17
Figure 3. Finnish science and technology system ......................................... 19
Figure 4. Relationships between business, university and government sectors …… 20
Figure 5. eBRC’s B.U.G. context ............................................................... 25
Figure 6. The service management system ................................................... 37
Figure 7. Guiding theoretical framework .................................................... 44
Figure 8. eBRC’s network .......................................................................... 49
Figure 9. eBRC’s service process ................................................................. 50
Figure 10. eBRC’s first organizational structure .......................................... 53
Figure 11. eBRC’s project financing ............................................................. 56
Figure 12. eBRC’s organization after weight point division ......................... 60
Figure 13. eBRC’s current service management system in the Business-University-Government context ................................................................. 79
Figure 14. eBRC as a business or government based organization............... 80
Figure 15. Concluding proposition .............................................................. 81
1. INTRODUCTION

The society is going through a development process that can be described by revolution of information technology and rise and extension of the network economy¹. This is a major transformation process from an industrial society to a knowledge society of a kind to industrialization and it can be referred to it as ‘electronization’ or ‘knowledgization’². This development process has created many challenges to all the key sectors of society: business, university and government. Businesses have to find ways to compete in global markets, universities are pressured to produce relevant knowledge on current trends and governments need to carry out policies that support the ongoing development process. In the age of networking and enhancing methods of doing that, the way to meet these challenges is by cooperating.

The development process needs to be supported by an infrastructure of relevant knowledge that ensures the emergence of innovations. The localization, exploitation and commercialization of these innovations have become important cornerstones of economic success. Organizations that operate between research institutions and businesses as intermediators are of growing importance to the innovation development. These organizations have been predominantly created through public financing to act as links between the different parties and facilitate the innovation process. ³ The characteristics and dynamics of these interface operators vary greatly and thus the mission for this research is to our understanding of intermediating activity between business, university and government.

This research is rooted in the researcher’s practical experience from an intermediary activity conducted between the business, university and government sectors. It is founded on her observations on the development of this trilateral interaction and on the challenges the intermediating organizations encounter while operating in these interface

¹ Castells & Himanen 2001, 47
² for example Tommila, Järvelin & Seppä 2004, 975
³ Valovirta & Niinikoski 2004, 2
areas. The research is also inspired by the professional interest to refine and develop the intermediating activity in the business-university-government context.

1.1 Business in the knowledge society

During the last decades, the businesses and markets have clearly been the driving forces of development that steer the directions the societies head to. The development of the knowledge society creates challenges of globalization, information and knowledge management and growing competition to name a few, to businesses in all fields. As dynamic market operators, the businesses have to find the right information at the right time in order to survive and succeed. Often their resources for research and development projects are quite limited and using consultancy might be too expensive. Businesses have to find new ways to conduct research to maintain their business competence.

The Finnish National Technology Agency, Tekes, highlights the issues that are important in this networked economy in its technology strategy. The following figure 1 represents the key areas of this strategy.

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4 Tekes Technology strategy 2002, 3
Figure 1 provides one perspective on the topics and fields of research that are important in today’s economy. The aspects that Tekes includes under the concept of business competence represent the key issues that explain the existence of intermediary organizations whose focus is linked to the key areas presented in the strategy of Tekes: building value creating networks and cluster cooperation, creating ways to commercialize new ideas especially in the university environment and continue the analysis of the digital economy.

**1.2 Universities and their new challenges**

Universities are old and powerful institutions and their traditions are just as strong. The universities have, however, been somewhat isolated from the outside world serving the purposes of science and academia. Along with the development of the knowledge

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5 Tekes Technology strategy 2002, 9
society, the importance of universities as knowledge producers has grown to a new level and the potential of academic research has been noticed. In Finland, this discussion has gone further under the scope of the so called third mission of the universities, the classic missions being education and research. The third mission of universities is rather ambiguous a concept as it can be defined in different ways according to the perspective. Nieminen sees the third mission as an approach emphasizing the societal relevance of education and research. Another approach is related to social impact, which usually is tied to time, place and the analyzed context. All in all, he considers the third mission as an important factor that has an affect on the legitimacy that universities hold. A notable perspective is also the fact that the third mission is strongly related to the commercialization of new knowledge and research.

The university is traditionally a rather rigid institution and thus new measures are needed if results are truly wanted. Universities have founded, in cooperation with other private and public actors, many different intermediating organizations that focus on supporting the information transfer, commercialization and creating of innovative research based business. In Tampere, Finland, these organizations include for example Technology Centre Hermia and Professia Oy

### 1.3 Government initiatives and programs

The possibilities for a fruitful cooperation seem obvious because businesses are looking for valid and reliable information and knowledge and the universities have the pressure to interact with the society. There are, however, many obstacles stemming from historical, cultural and many other differences that prevent the business-university-cooperation from working smoothly. At this stage the government sector has, therefore, increased activities to facilitate cooperation both on regional, national and international level.

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6 Nieminen 2004, 16
7 Kutinlahti & Kankaala 2004, 87–91
8 Valovirta & Niinikoski 2004, 2
Many actions have been taken to increase cooperating and especially the initiatives of the European Union are unique in their efforts to bring sectors of business, university and government together. Since the Lisbon initiative in 2000 and starting of the eEurope-program in 2001, EU has had an ambitious objective to bring Europe to the era referred to as “Knowledge Society” as number one in the world. eEurope is a political initiative to ensure that EU fully benefits for generations to come from the changes knowledge society is bringing. The action plan for eEurope defines the methods to achieve the several goals the mission consists of:

- Bringing every citizen, home and school, every business and administration, into the digital age and online.
- Creating a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas.
- Ensuring the whole process is socially inclusive, builds consumer trust and strengthens social cohesion. 9

On a national level the Finnish government started its Information Society program in 2003 to boost competitiveness and productivity, to promote social and regional equality and to improve citizens' well-being and quality of life through effective utilization of information and communications technologies10. Regionally a significant initiative was taken when parallel to the eEurope-program, an independent knowledge society program called eTampere was started. This five-year program aims to enhance the humanly sustainable information society development by creating new knowledge, new business, and new public online services thus making Tampere a global leader in the research, development and application of issues related to the knowledge society 11.

1.4 Intermediating activity

Given the changes in all the three key sectors, new forms of catalyzing are needed to face the new challenges. Intermediating is an old concept but when analyzed in the

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9 eEurope-initiative 2000, 2
10 Information society program 2003, 1
Business-University-Government context, it provides new perspectives on how cooperation can be achieved with the help of focus-oriented dynamic actors. Pioneering eEurope, the above mentioned eTampere-program is again divided into six different subprograms from which one is the case object in this research. e-Business Research Center (acronym eBRC) is an organization to produce high level academic research on the current e-business related phenomena by commencing, coordinating and managing research projects that combine interests of researchers, businesses and research financers. eBRC is aimed at turning e-business related research and development ideas into new knowledge. eBRC seeks to do this by matching the interests of the right stakeholders - domestic and international – into value-creating project partnerships. It operates in the interface of the above mentioned three sectors and is thus a new sort of an intermediator.

2. RESEARCH STRATEGY

The starting point for this thesis was the personal participation of the researcher in the research phenomenon as a practitioner. During the, so far, three-year-engagement in the case organization, the practitioner became also a researcher. From the research point of view this was an opportunity to personally observe and take part in the development process of the intermediating activity. Gummesson defines such accumulation of knowledge, insights and experiences as the foundation of preunderstanding. The acquired preunderstanding serves as the basis for an inductive research effort and led to choosing the research strategy explained in this chapter.

2.1 Research problem and goals

The purpose of this research is to explore intermediating activity between business, university and government sectors. The research is conducted by personally

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12 Gummesson 2000, 57
participating in the object phenomenon and by theoretically exploring the trilateral environment and the intermediating concept to formulate a guiding theoretical framework. The framework will be used in empirically examining the development process of the case organization. The goal is to build a proposition of the intermediating activity between business, university and government. To achieve the goals the following questions will be answered.

The main research question for this research is:

How has intermediating activity evolved between business, university and government?

To answer this question the following sub questions are addressed:

- How to define the Business-University-Government context?
- What intermediating activities and roles can be identified?
- What is being intermediated, how and to whom?

The analysis of the three sectors as a whole is basically a new phenomenon which in this sense has not been studied much. Intermediating is a more common concept but from the business point of view the research background is also rather limited. The first two sub questions will be answered in the theoretical part where these two issues will be examined in detail.

To help in analyzing these fairly unexplored issues a well-known and established model is used. Service management system model was chosen to help in examining and interpreting the development of the case organization eBRC as an intermediating actor and an organization in the Business-University-Government context. This model provides a useful tool in analyzing many of the important aspects and it will be introduced also in the theoretical part. The model will be presented in the end of the theoretical part and then the empirical part will answer the third sub question by describing the intermediating organization, its services and also the development process. Through this development process the empirical findings will then be mirrored against the theoretical background and thus answering the main research problem.
2.2 Assumptions and limitations

The Business-University-Government context is to date, theoretically undefined in the marketing literature. In this research, an effort is made towards conceptualization related to the intermediating phenomenon. There are many trends inside the three sectors that could be under research but this research will only examine the backgrounds and trends that have caused the creation of the trilateral interaction and the intermediating activity.

Intermediating is also a broad concept and in this thesis it will be discussed in a specific context. The intermediating activity explored is an academic knowledge creating service and thus a part of the Business-University-Government context. Theoretical basis is mainly drawn from this context but some examples are taken from other environments these kinds of intermediaries operate in. The choosing of the service management system as a tool will help to define the characteristics that are examined in this research.

This theme is strongly related to innovations and their creation processes. The purpose of the case organization is to enhance and facilitate the creation of ideas and new innovations related to e-business. However, innovation issues are only examined in the context of innovation environments and the role the case organization has in them.

2.3 Central concepts

Business-University-Government

The Business-University-Government context refers to the triadic interaction between business, university and government sectors. Business and government sectors are the key players in the society and now that the importance of knowledge creation is increasing, the university is separated from the government sector to highlight its importance as a knowledge producer. This context will be combined with the concept of innovation environments but as the case organization does not see itself as belonging to it purely the term “Business-University-Government” will mainly be used to describe the context of this research.
**Intermediating activity**

The dictionary definition of intermediating will be used as a starting point: “being or occurring at the middle place, stage, or degree or between extremes”. The use of the concept in this research is based on grammatical rules. The activity as a whole is “intermediating”, whereas the term “intermediator” is used to describe the actor engaging this activity and to clarify its role and position in relation to other actors. “Intermediary” and “intermediary organization” are terms used when specifically describing the different organizational forms through which the activity is conducted. However, the difference of the actor and organization terms is not seen as relevant, so the terms can be understood as synonyms.

**Service management system**

A system of five different components: 1) market segment, 2) service concept, 3) service delivery system, 4) image and 5) culture and philosophy. This model is developed by Richard Normann and it describes the business idea of a service-oriented organization. In this thesis, the model will serve as a tool to analyze the case organization.

**2.4 Research methodology**

This study is based on action research or, more accurately, retrospective action research. To achieve the goals of such research the researcher must possess extensive knowledge of the research phenomenon and cooperate closely with the people involved. As the researcher has been involved in the research phenomenon herself since 2002, a preunderstanding of the phenomenon has developed unintentionally. With this as the basis, a literature review will be made and a framework built to analyze the development process. In the empirical part the preunderstanding of the case organization will be supplemented with secondary material and an additional survey and finally the findings will be mirrored against the theoretical background.

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13 Merriam & Webster’s web dictionary <www.britannica.com>
Action research tries to create an interaction between practical action and scientific research and also simultaneously have an influence on the development of science and social change. Describing features also include democratic and participating action. Action research has mainly been used in the pedagogics but its importance has also been growing in business disciplines. In marketing, action research combines the three methods of project action research, action learning and case research. These methods cover a group’s (or a person’s) past actions that can have an affect on our present understanding and knowledge and that can also affect future actions. For this research, action research provides an applicable basis as the purpose is to reflect eBRC’s past and current actions through in-depth analysis to developing future perspectives. The use of a single case organization is also characteristic for action research.

Due to the nature of the study, a qualitative approach was chosen in conducting the research. The goal of qualitative research is understanding the phenomenon and creating theories. The researcher tries to get inside the phenomenon in question and is not satisfied with an external and distant examination. The active role of the researcher is also essential in action research. This creates an issue with the subjectivity of the research, but the use of secondary material and survey results will give support to the information gathered by observing the operation. Thus some triangulation is also achieved. In addition, it must be remembered that in relation to academic research, action research per se is defined as experiential, attached to the moment and thus useful. The approach to the research object will be inductive as new knowledge will be created from the practical phenomenon. The theoretical framework will serve as a basis and a tool for the empirical analysis and after the case is examined, a new framework will also be constructed.

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14 Carr & Kemmis 1983, 151–153
15 Gummesson 2000, 318
16 Gummesson 2000, 126
17 Hirsjärvi & Hurme 2000, 25-26
18 Kuula 1999, 10
19 Kuula 1999, 173
20 Eskola & Suoranta 1998, 80-84
The theoretical framework will be built through a literature review by examining relevant publications. The material will include a wide spectrum of books, journal articles and reports from a long period of time, e.g. the books on business idea –theory date back to the 1970’s while the most recent information on intermediating has been published this year. This combination will give an interesting view on how a new phenomenon can be studied with old and established theories. The case analysis is largely based on information and experiences gathered through unstructured observation in numerous meetings, strategy discussions, seminars and other events. These personal experiences are supported by secondary material eBRC has provided for the research including semi-year reports to the eTampere-program, several strategic memos, minutes, web materials and other documents.

2.5 Structure of the thesis

This thesis will explore an emerging phenomenon and thus the introduction part of the study will cover the reasons and motives behind it quite thoroughly. After introducing the background, the methodological issues will be explained and followed by a theoretical framework. This guiding framework is then applied to the case organization in the empirical part of the research. The empirical part will provide another framework, a concluding proposition, of the phenomenon based on the case organization. Finally, the results and conclusions will follow. This thesis is empirically-oriented in nature and thus the examination of the case organization will cover a fairly substantial part of the entire study. The theoretical examination will be limited and used merely to gain support to the preunderstanding and tools to explore the object phenomenon. The structure of the thesis is also described in the following figure 2.
Figure 2. Structure of the thesis
3. THEORETICAL FRAMEWORK

Chapter 1 provides a multifaceted look at the trends and directions that are behind the phenomenon at hand. In chapter 3, the building of the theoretical framework will start by tying these pieces together and introducing the context of the study in detail. The theory will be examined from the larger perspective to the smaller one and the second part will discuss the concept of intermediating from different angles. The last part of the theory framework will present the theory behind the tool that is used to analyze the case organization.

3.1 The Business-University-Government context

Conceptually, the Business-University-Government context can be traced back to how the case organization eBRC depicts its environment. In short the Business-University-Government context relates to the ever closer interaction and partnering across the borders of the society. The phenomenon as such is rather new and it has emerged along with the transition from industrial society to knowledge society. In this thesis, the context will be theoretically examined through the development process that is said to be bringing the sectors together. However, the definitions of each of these three sectors will be outlined first.

3.1.1 Definitions

Generally the boundaries of public and private define the areas of business and government sectors. The university sector is considered as a part of the public sector. In this context, however, the university sector is approached as a separate sector, which creates a need to define especially the line between government and university in more detail.

The Science and Technology Policy Council of Finland has defined in its science and technology system that universities are operators who produce new knowledge along
with polytechnics and other research institutes. This system is illustrated in figure 3. To separate universities from other knowledge producing operators one can highlight the importance of academic orientation. Some researchers refer to the trilateral interaction as academic-industry-government.

Figure 3. Finnish science and technology system

The Finnish science and technology system also clarifies the before mentioned public-private-sector connection and presents the key policy makers. To conclude on the definitions it can be stated that:

1. business sector includes organizations in the private sector
   - These include for-profit businesses, companies, firms and corporations as well as private non-profit organizations such as funds and foundations that finance research.

2. university sector consists of academic knowledge producing entities
   - This definition excludes e.g. polytechnics that do not conduct academic research as such.

3. government sector includes policy maker and financing organizations

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22 see e.g. Etzkowitz, Webster, Gebhardt & Terra 2000
- The government sector consists of ministries and other political entities and of the important financing organizations in Finland: Tekes, Academy of Finland and Sitra. In addition, the European Union is seen as a government sector actor in this context.

3.1.2 Background

Earlier the business and the government sectors were considered as the knowledge-producing and disseminating entities. Industrial policies focused upon the government-business relationship, either by improving the “business climate” with taxation or by influencing location decisions through subsidies. The benefits of such relationships were regarded as numerous including reduced uncertainty, managed dependence, exchange efficiency and social satisfaction from the association. The relationship between the university and government sectors was also very tight as universities basically are a part of the government sector. With experience from both the government and the university sectors, the former prime minister of Finland, Esko Aho, describes these relationships in his Business-University-Government figure.

Figure 4. Relationships between business, university and government sectors

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24 Etzkowitz, Webster, Gebhardt & Terra 2000, 315
25 Palmer 1996, 52
26 Aho 2003
In Aho’s figure the relationship between the university and business sectors is presented with a narrow arrow which reflects the distance these sectors have had. Now as the development process described in the introduction has increased the need for information, the role of the university has grown as businesses have sought for new ways of producing knowledge. The obstacles as well as benefits of these relationships will be discussed next.

### 3.1.3 Business-University

Business sector has had a leading role in the US economy throughout the industrial era and all the way to knowledge society. In Europe the business sector has had an important role as well, but it has been slightly disregarded especially in the eyes of the university sector. The universities have had a value adding role producing the needed new knowledge and especially in Europe the universities have stood on an ivory tower of sort and they have been seen as rather distant from the normal business life\(^ {27}\). Both sectors have created a lot of relevant knowledge on business issues but their relationship has not been a close one.

The topic of business-university interaction has gained a lot of research attention recently and the studies have mainly focused on the difficulties that these relationships have. Parellada and Sanroma discovered that universities are seen as overly theoretical, clumsy and with unresponsive managerial structures. This feedback was received from a study comparing universities with consulting firms, who were perceived as the opposite. Only positive attribute for universities was their inexpensiveness.\(^ {28}\) Valentin emphasized the limitations placed on research topics by industrialists, delays in publishing results, communications problems and cultural differences\(^ {29}\). Brennan and Tornbull have gathered together reasons which explain the barriers and obstacles that hinder effective cooperation between businesses and universities. They can be summarized as:

- Attitude differences towards the intrinsic worth of research

\(^{27}\) Etzkowitz, Webster, Gebhardt & Terra 2000, 321-324

\(^{28}\) Parellada & Sanroma 2000, 179

\(^{29}\) Valentin 2000, 168
• Preference differences towards the public dissemination of research findings
• Incompatibility of reward and promotions systems which causes difficulties in moving between academic and industrial communities
• Different aspirations and goals of the two communities
• Bureaucracy involved in managing joint initiatives (especially in the university)
• Attitude differences towards the exclusivity of research findings
• The need for a dedicated linkage manager exist, but neither party wants to resource such a position preferring to add it to the portfolio of an existing employee  

When analyzing these difficulties it seems almost impossible to understand how businesses and universities could ever interact in an effective way. The reasons go beyond practical issues to the very fundamentals the both sectors find valuable. Nonetheless, there are many positive reasons for these parties to interact. National Science Foundation in the USA has listed these reasons for both business and university sectors. The benefits for businesses include access to highly trained students and professors, access to leading-edge technologies, an enhancement to the company’s image, close proximity to economical resources and access to university labs and facilities. From the university’s point of view the main reason for interaction is the possibility to receive research funding. They also seek to obtain industrial expertise, exposure to practical problems and employment opportunities for university graduates. 

In addition to these rather traditional reasons for collaboration and interaction, the ongoing development process to a more competitive and global business environment has lead or even forced the two parties together as it has been realized that linking firms to non-business systems stimulates innovativeness more than remaining within the business system’s set of routines. This is especially when borders are crossed to science, which has created the term “science-industry”  

This intra- vs. interorganizational relationships combination was also the basis for Elmuti, Abele and Nicolosi to more concretely notice that intraorganizational research and development aspirations are

30 Brennan & Tornbull 2001, 599
31 Santoro 2000, 257
32 Kaufmann & Tödtling 2000, 791
overly expensive for businesses while interorganizational collaboration with universities reduces the costs needed to produce relevant new knowledge. From the university’s perspective this extra funding is warmly welcomed, which creates a positive win-win situation.33

To analyze the drive behind the cooperation in more detail Elmuti et al. have also gathered together reasons why businesses create strategic alliances with academic institutions:34

1. Rising global competitiveness
Rapid change in the nature of competition has created increasing demands on companies to develop new technologies.

2. Increasing need for innovation in products and processes
The new technologies don’t create themselves and neither are they all developed from the existing ones. Both intra- and interorganizational methods are used to create them, but as Kaufmann and Tödtling state, the non-business systems stimulate innovations more effectively.

3. Lower R&D expenditure
According to a study done by George, Zahra & Wood, companies with university linkages have lower research and development expenses per employee. In addition these businesses might develop the relationships even further to supplement their internal research resources. 35

4. Technological transfer opportunities
An especially important factor in the business-university –partnership is the technology transfer issue. Technology transfer programs attempt to integrate university-driven research into applied initiatives.

3.1.4 Business-University-Government

Elmuti et al. list the reasons behind the cooperation between business and university sectors. The development from this dyadic relationship into a triadic one also stems

33 Elmuti, Abele & Nicolosi 2005, 126-127
34 Elmuti, Abele & Nicolosi 2005, 118
35 George, Zahra & Wood 2002, 604-605
from the general need to increase the interaction between business and science. It is a reasonable target for policy makers to find ways in which these sectors would interact.\textsuperscript{36} Now as knowledge is becoming an increasingly important part of innovation, the role of the university as knowledge-producing and disseminating institution is becoming more and more important.\textsuperscript{37}

Etzkowitz and Leydesdorff have created a model called “Triple Helix” through which these changes can be interpreted\textsuperscript{38}. A triple helix of university-industry-government relations transcends previous models of institutional relationships in which either the polity or economy predominated and with the knowledge sector playing a subsidiary role. The triple helix model is an attempt to account for a new configuration of institutional forces emerging within innovation systems.\textsuperscript{39} The triple helix-model is somewhat narrow when analyzing the term “industry” that it uses to describe the business sector. The case organization eBRC uses the acronym B.U.G. (Business-University-Government) to describe the environment it operates in. According to eBRC’s view the process is seen to begin from the business sector. Business sector is the most dynamic and vibrant one where changes occur constantly. Business sector is the motivator, the change agent that generates new knowledge and new phenomena. The current changes in the economy, including globalization, technological development and increasing competition have, however, forced businesses to find new ways of analyzing and examining their environment to produce competitive advantage. This has brought up or at least highlighted the importance of universities as knowledge-producing entities and thus created connections between the sectors of business and university. The B.U -interaction has later extended into a B.U.G one as the government has taken part in the process. Government sector has with e.g. its financial support helped to generate border-crossing research and development programs both in national and international level. In addition, it has created standards and guidelines to steer the development and make it more efficient. This description is presented in figure 5.

\textsuperscript{36} Kaufmann & Tödtling 2000, 803
\textsuperscript{37} Etzkowitz, Webster, Gebhardt & Terra 2000, 315
\textsuperscript{38} Etzkowitz & Leydesdorff 1999, 111
\textsuperscript{39} Etzkowitz, Webster, Gebhardt & Terra 2000, 314
The described two models do not as such qualify, in a way, to support the analysis of the intermediating activity under exploration in this research. The triple helix-model has the industry-perspective and concentrates mainly on structural issues while the B.U.G. – idea lacks theoretical value. To support them the concept of innovation environment will be analyzed as it is basically formed from the same three sectors. The words innovation and idea come up in many occasions when describing the relations between these sectors and this concept translates well to what the case organization is aiming at: creating knowledge from ideas as well as innovations.

Generally innovations have been seen as being born through a linear development process where basic research and universities generate new ideas that are then transformed to profitable inventions and concepts. This innovation model dates back to the post Second World War times and has been considered too narrow and that it overemphasizes the role of research as the source of ideas and innovations. Increasingly, innovation is regarded as an evolutionary, non-linear, and interactive process between the firm and its environment. From the company’s point of view this means that innovation is stimulated and influenced by many actors and sources of information, both inside and outside the firm. These views and development processes have generated a concept of “innovations system” which was later seen as too narrow and was developed to “innovation environment” –concept.

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40 Kutinlahti & Kankaala 2004, 91-92
41 Malecki 1997
42 Kaufmann & Tödtling 2001, 792
The innovation environment is a very versatile concept as it varies from country to country. In Finland, the discussion on a national innovation system started during the 1990s. Then the Finnish Science and Technology Policy Council defined it as “a combination of factors influencing the development and utilization of new knowledge and know-how”.\(^\text{43}\) During the following years, the Finnish national innovation system has become a forerunner in an international perspective with its comprehensive approach, which looks at the producers and users of knowledge as an entity.\(^\text{44}\)

Forerunners at their own field, Castells and Himanen, describe the environment in the following way: Innovations are born in an environment that offers support and means to develop ideas into marketable concepts. This innovation environment is built through the interaction between businesses, state, universities, and individual innovators. The interaction is outlined by national policy making.\(^\text{45}\) This environment was actually already presented in chapter 3.1.1 in figure 1 when defining the three sectors, as the science and technology system corresponds to the innovation environment. The discussion on the innovation environments will continue in chapter 3.2 as the role of intermediating activity in the innovation environment is placed under examination.

### 3.2 Intermediating

As Brennan and Turnbull stated in their list of obstacles for business-university partnership, “the need for a dedicated linkage manager exists, but neither party wants to resource such a position preferring to add it to the portfolio of an existing employee.” Valentin also suggested the use of intermediaries to strengthen and develop collaborative programs.\(^\text{46}\) It is evident that this kind of an actor is needed to bring the strong sectors together and coordinate the interaction but unfortunately taking the initiative has been rather poor. As the role of the government sector is changing, such multi-national institutions as the European Union, the World Bank, and the U.N. are also

\(^{43}\) Eriksson 2004, 20-21
\(^{45}\) Castells & Himanen, 2001, 47
\(^{46}\) Valentin 2000, 171
moving to embrace concepts of knowledge based economic development that bring the knowledge, productive and regulatory spheres of society into new configurations

These movements have been facilitating the creation of organizations like the case organization in question.

In this chapter the concept of intermediating will be discussed in detail and from different perspectives. The innovation environment –examination will contribute to most of the analysis but to gain a bigger perspective aspects from the network environment are going to be presented.

3.2.1 Definitions

To start with the definition, Merriam & Webster defines “intermediating” as “being or occurring at the middle place, stage, or degree or between extremes” 48. The use of the concept in this research is based on grammatical rules. The activity as a whole is “intermediating”, whereas the term “intermediator” is used to describe the actor engaging this activity and to clarify its role and position in relation to other actors. “Intermediary” and “intermediary organization” are terms used when specifically describing the different organizational forms through which the activity is conducted.

Intermediating is an activity that can be done in many different contexts e.g. social relationships, peace negotiations, stock exchange and housing. In business environment the concept of intermediating is addressed most extensively in the IMP (Industrial Marketing and Purchasing) group which studies buyer-seller relationships in industrial networks. They have created a frequently cited model for studying interactions between these parties and state that relationships in industrial networks are usually long-standing and complex. 49 This dyadic model has then been further developed into a triadic one, which takes into account the role of an intermediator. 50

48 Merriam & Webster’s web dictionary <www.britannica.com>
49 IMP-group <http://www.impgroup.org/history.php>
50 Havila 1996, 25
In addition to the interaction and network perspective on intermediators, the concept has also been discussed in the literature concerning innovation environments. Intermediators are generally seen as organizations that transmit information and technology among different actors. These include e.g. research- and innovation services by universities, regional technology- and innovation centers as well as national and multinational networks. 51 Intermediators and their roles are first analyzed in these separate perspectives and then intermediary characteristics are analyzed in general.

### 3.2.1 Intermediating in the network context

The traditional concept that comes to mind of an intermediary is the wholesaler or the retailer in a consumer context. In these situations the manufacturer and the end user hardly ever meet but the interaction is carried out through the intermediary. These channel “middlemen” may be retailers, wholesalers, distributors and other kinds of agents. They perform transactional, physical and facilitating activities to close the gap between the two extremes. 52 However, the concept of middlemen is becoming somewhat indistinct as it is being approached from different perspectives. The traditional marketing literature regards middlemen as important manufacturer’s counterparts and they are analyzed in relation to the actors they are connected to. Newer approaches take into consideration the business of the middlemen and the different roles they have in the process. There is also an extreme interpretation in which any business can be seen as a middleman business, since most companies are in-between other companies. 53

A more versatile way of analyzing intermediaries is the network and interaction approach by the IMP-group. As mentioned, Havila has brought the concept of “triad” into interaction and network thinking to describe the role of the intermediary. Intermediators are actors who are in contact with both the supplier and the customer and together they build a triad. An intermediary is seen as the “third party in common”. 54

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51 Valovirta & Niinikoski 2004, 5
52 Hardy & Magrath 1988, 2-4
53 Gadde & Snehota 2001, 1-8
54 Havila 1996, 25
According to Havila, there are two kinds of triadic relationships. Both are business-relationship triads involving a supplier, a customer and an intermediating actor. In a serial triad, the intermediator mediates most of the contacts between the two parties. This triad can also be seen as a series of two dyads: one joining the supplier and intermediator and one joining the intermediator and the customer. A unified triad is based on reciprocal relationships among each of the actors. Each actor has more or less frequent contacts with each other.55

Havila’s approach to triads is based on a relationship view whereas Tähtinen and Halinen-Kaila see business triads as nets of three independent companies connected to each other by direct exchange relationships for the purpose of doing business. Taking the whole network into the picture, these triad nets are then connected to other relationships and nets56. The triad thinking can also be extended into a focal network context where the intermediator can be a company that is connected to a focal company and its network partners or at least part of the network partners. Järvelin and Koskela give an example from a science park context where the network is built around the focal company with the science park as the intermediator. On the one hand, one can define a unitary triad between the focal company, the science park and university and then serial triads between the focal company, science park and potential customers or suppliers. On the other hand, the relationship between the focal company and the science park can be seen as a focal dyad and other relationships are born through their interaction.57 It is therefore important to analyze the roles of the different actors and especially the intermediator to identify the function that the intermediator has.

3.2.2 Intermediator roles in the network context

Apart from characterizing intermediaries, research has also been conducted on intermediators’ roles. Järvelin and Koskela state that in a triad net the actors may have different roles or functions, and at different times any of the triad members may play one of these different roles58. Tähtinen also claims that this is distinctive to the

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55 Havila 1996, 27-28
56 Tähtinen & Halinen-Kaila 1997, 2
57 Järvelin & Koskela 2005, 511
58 Järvelin & Koskela 2005, 512
dynamics of a triad net. One would imagine that the role of the intermediary was quite unambiguous: to mediate between the actors that it is connected to. However, as Havila’s abovementioned two types of triads show, there are many roles the intermediary can assume. The basis of the triadic approach stems from international business relationship and thus the value adding role of the intermediary is seen as a distance-reducing one. When discussing the roles the intermediary has one must mention the perspective of a boundless network. In the network literature networks are often seen as structures with no boundaries and thus every actor can be regarded as an intermediary.

When distinguishing the two different triads, Havila also clarifies the roles the intermediary may have in a business-relationship. If in a serial triad, the intermediary is more or less purely a mediator. There is no direct contact between the supplier and the customer and thus it coordinates all of the interaction through two dyadic relationships. In a unitary triad, however, the intermediary takes care of some of the contacts between the supplier and the customer but they are also in contact without the intervention of an intermediary. The role of the intermediating actor in unitary triads is unique and involves specific tasks. It can be defined in different ways depending on the type of business-relationship triad. The nature of the triad may change from a more serial triad to a more unitary triad or the other way around. These changes influence the situation of the intermediating actor and the relationship as such.

In addition to Havila’s views the mediator role has also been studied by Tähtinen and Mittilä. Tähtinen refers to the earlier work by Simmel, who distinguishes three different roles for the third party: mediator, tertius gaudens and oppressor. The mediator can keep the triad net together as it is involved in both sides of the relationship. The mediator aims at enhancing the relationship between the two by keeping them together

59 Tähtinen 2002, 2
60 Havila 1996, 5
61 Havila, 1996, 31
62 Havila, Johanson & Thilenius 2004, 182–183
63 Havila, 1996, 37
64 Havila, 1996, 42
65 Tähtinen 2002, 2
and is interested in finding solutions and creating situations, which benefit both parties.\textsuperscript{66} The other two roles, tertius gaudens and oppressor, differ from the mediator role as they are in the triad in order to satisfy their own interests. The tertius gaudens is ready to take advantage of every emerging opportunity e.g. forming a coalition with one of the actors while the triad is in a difficult situation. The tertius gaudens does not, however, take an active role, whereas the oppressor deliberately causes conflict in order to gain a dominating position.\textsuperscript{67} Mittilä has brought the term bistomer to describe a similar type of intermediator in business relationships\textsuperscript{68}.

Järvelin and Koskela have also discovered two additional intermediator roles in the network context. The initiator holds a large contact base and serves as a door opener bringing the parties together. Such an initiator may be a university. The role of the initiator is somewhat active, whereas the other actor, the invisible hand, is of a facilitating nature. It provides infrastructure and facilities in order to help others to build contacts and relationships. The researchers note that these two roles are essential in the beginning of the relationship while the above mentioned mediator, tertius gaudens, and oppressor roles can only exist in the ongoing relationships.\textsuperscript{69}

### 3.2.3 Intermediating in the innovation environment

As Kaufmann and Tödtling stated, innovations are stimulated and influenced by many actors and sources of information, both inside and outside the firm.\textsuperscript{70} Intermediating is thus an integral part of innovation environments. Pure innovativeness is not enough; networks are needed to both produce the innovative products/services efficiently and to transmit information between the actors more effectively. It has been noted that some of the actors are more engaged than others and these “hubs” have been identified as key elements to the whole environment.\textsuperscript{71} The concept of intermediating already emerged in the 1980’s when needs for strengthening technology transfer, commercialization and

\textsuperscript{66} Tähtinen 2002, 3; Järvelin & Koskela 2005, 512
\textsuperscript{67} Tähtinen 2002, 3
\textsuperscript{68} Mittilä 2000, 39
\textsuperscript{69} Järvelin & Koskela 2005, 513-517
\textsuperscript{70} Kaufmann & Tödtling 2001, 792
\textsuperscript{71} Stähle, Smedlund & Köppä 2004, 23
innovative business were discovered. Usually it is referred to when describing organizations and actors that act as intermediators between both business and research organizations and businesses.\textsuperscript{72}

In innovation environments intermediators can be defined in two ways: 1) the first more narrow definition describes intermediators as information transmitters, 2) the second one covers both the information transmitting related to the substance and the direct and indirect influence that the intermediators have on the structure and dynamics of their environment.\textsuperscript{73} However, the definition of intermediary can be regarded as dynamic and dependent on the context\textsuperscript{74}.

3.2.4 Intermediator roles in the innovation environment

In innovation environments the role of the intermediary is linked to the levels and components the innovation environments consist of. The main components include the substance, the structure and the dynamics. Substance factors are basically the skills and the knowledge the industry or field possesses. The infrastructure is then built by structure factors and finally dynamic factors liven up the innovation environment: they focus on the information and communication processes that help to produce value from the substance by the help of the structures.\textsuperscript{75}

The other element affecting the roles of the intermediaries is the level categorization of intermediaries. The organizations can be analyzed on a national, regional and local level. The national macro level focuses on the structure component by building steering mechanisms and creating operational preconditions in general. In Finland, for instance, the National Technology Agency, Tekes, has been an important actor through financing research and development projects between businesses and universities. On a regional level the dynamics component is the key focus and efforts are made to create unified strategies. The city or some other regional actor is the network coordinator. Lately

\textsuperscript{72} Valovirta & Niinikoski 2004, 5
\textsuperscript{73} Ståhle, Smedlund & Köppä 2004, 24
\textsuperscript{74} Valovirta & Niinikoski 2004, 7
\textsuperscript{75} Ståhle, Smedlund & Köppä 2004, 3
cluster thinking has gained ground and this has led to regionally specified strategy building. The micro or local level is where substance matters are approached and the knowledge is developed. The intermediators can produce services for the companies in the area, e.g. finance, risk management and planning services. All these services support intermediators’ role as a coordinating entity, facilitating the production processes of the innovation network.\textsuperscript{76} The roles and different levels are detailed in the following table 1.

Table 1. Roles and weight points of intermediators in innovation environments\textsuperscript{77}

<table>
<thead>
<tr>
<th>Substance components (developing information and knowledge)</th>
<th>Structural components (developing steering mechanisms)</th>
<th>Dynamic component (networks and cooperation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National policy definitions: The steering of knowledge hubs</td>
<td>The infrastructure of the area: traffic connections, networks etc. Building the field.</td>
<td>Supporting joint projects between universities and businesses Offering national forums.</td>
</tr>
<tr>
<td>Regional emphasis in the knowledge field: Building knowledge</td>
<td>The coherency of regional strategies, Developing regional networks and forums. The suitable relation between strong and weak bonds. Searching for partnerships. Building contacts outside the area. The third mission of the universities Building the game.</td>
<td></td>
</tr>
<tr>
<td>Developing substance knowledge in both basic and applied research. Supporting companies, consulting and developing business competence Cooperator.</td>
<td>Developing knowledge intensive service. Offering resources and infrastructures. Facilitating networking. Orchestrating the network.</td>
<td>Forming innovations in the economic success and welfare Exploitation of innovations.</td>
</tr>
</tbody>
</table>

The view of the boundless network can also be found in the innovation environments. Some organizations are generally regarded as intermediators, separate companies and

\textsuperscript{76} Ståhle, Smedlund & Köppä 2004, 27-29

\textsuperscript{77} Ståhle, Smedlund & Köppä 2004, 30
individuals can also perform intermediating tasks. Ståhle et al. state that intermediators ought not to be approached as organizations but as concepts, in which the roles of organizations and actors can be defined in the innovation environment. This approach is based on the assumption that no organization can be seen to be purely focused transmitting information and/or developing the structure and dynamics of the environment.

3.2.3 Different types of intermediators

According to before mentioned processes from Etzkowitz and Leydesdorff, the role of the government sector is changing in business-university cooperation and a new overlay of trilateral organizations between the three sectors has been created. The involvement of the government sector has helped to build new types of actors that help the knowledge-creating interaction. As an example of the intermediating activity in the Business-University-Government context, new linkages between the three sectors can be identified in e.g. in the operation Knowledge Circle in Amsterdam, the New York Academy of Sciences and joint venture program Silicon Valley. These organizations aim to institutionalize and reproduce interface as well as stimulate organizational creativity and regional cohesiveness. This is achieved by intermediating new projects and new ideas which might have not emerged through the normal interaction between the parties.

Intermediaries operate in rather vague and undefined environments and this is often reflected in their characteristics. The organizations are connected to many stakeholder groups and they try to serve the purposes of many different actors. These intermediators that act between businesses and universities are summarized in the following table 2 by Valentin:

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78 Valovirta & Niinikoski 2004, 7
79 Ståhle, Smedlund & Köppä 2004, 24-25
80 Etzkowitz, Webster, Gebhardt & Terra 2000, 315
Table 2. Terms relating to intermediary organizations in university–industry partnerships

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linkage/Liaison unit, Liaison</td>
<td>Acts as an institutional and cultural intermediary between participants. Acts as a formal function of the university in managing the interface between academia and various external institutions, including industry, governmental, and other research organizations.</td>
</tr>
<tr>
<td>office</td>
<td></td>
</tr>
<tr>
<td>Interface agency</td>
<td>Intermediary institution that provides an interface between public-sector research and industry.</td>
</tr>
<tr>
<td>Bridging institution</td>
<td>Acts as an intermediary for the transfer of knowledge, connecting its customers’ technological needs with a wider knowledge base.</td>
</tr>
<tr>
<td>Technology broker</td>
<td>Facilitates the transfer of technology between organizations. Creates direct links between government, university and industry, maintaining short communication channels and a limited number of links to retain the value of information. Facilitates the transfer of discoveries that are incompatible with the firm's current product mix or production process capabilities to other firms that are able to use the technology.</td>
</tr>
<tr>
<td>Transfer office</td>
<td>Aims to promote communication between university scientists and firms in various ways (briefing meetings, etc).</td>
</tr>
<tr>
<td>Gatekeeper</td>
<td>Facilitates the internal dissemination of knowledge acquired in the collaboration. (Both parties should carefully design and implement the interface function in order to avoid information appropriation by key individuals.)</td>
</tr>
<tr>
<td>Transfer agent</td>
<td>Administrates and manages cooperative research programs (provides technical expertise, acts as ‘translator’ for the two cultures, seeks funding, provides process consulting, etc). Builds a research network of contacts.</td>
</tr>
<tr>
<td>Science and technology park</td>
<td>An interface organization between universities, firms and government, which improves interaction and technology transfer, and contributes to industrial diversification. If we consider three nuclei (scientific, techno-industrial and market), the science park is a techno-industrial nucleus and it constitutes an interface between science and the market.</td>
</tr>
</tbody>
</table>

KIBS (Knowledge Intensive Business Services) companies are a good example of intermediaries operating in innovation environments. These organizations produce knowledge intensive services and try to make it successfully, but in addition their aim is to enhance the development and innovation activities in the particular area. These kinds of companies have a structured owner base and they operate in business-like way as a whole. However, the word “interface” is mentioned in several of the organization descriptions. Many intermediaries are structured and owned in various ways as they operate in indefinite interface areas. These interfaces often lie in between businesses,

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81 Valentin 2000, 170
82 Stähle, Smedlund & Köppä 2004, 22
universities and governments and help to strengthen and develop collaborative programs between these actors. Some intermediaries are government owned, such as Tekes, but some have a rather varied ownership base including different public and private partners. In addition, there are intermediaries that are profit-oriented and others that only aim to produce new knowledge or facilitate activities. Also, their level of participation and commitment in the produced services varies thus creating challenges in responsibility and revenue issues.

3.3 Service management system

Service management system is a concrete and comprehensive way to implement business. This extensive approach that the service management system offers led to choosing it as the tool to examine the intermediary activity in the Business-University-Government context. The model covers a wide range of business aspects instead of focusing only on marketing, management or other alternatives. However, Normann’s ideas are supplemented by several different theoretical points from the established disciplines. Especially the theories on professional services are utilized as the case organization produces services that are strongly knowledge-intensive.

The service management system model is based on the “business idea-thought” created by Richard Normann in the 1970’s and later on developed in 1984. Normann’s original business idea is as a system of three different components: 1) the external environment, its needs and what it is valuing 2) the offering of the company and 3) internal factors such as organization structure, resources, knowledge and capabilities, equipment, systems, leadership and values. According to Normann a coherence referred to as “system of dominance” is required between the components. Later on Normann developed a specific evaluation model for services called “Services management system”. After several years of studying service organizations he discovered that only a few of them have structured systems to manage their service production. According to Normann it is essential to identify the key elements of success and to reflect them in the

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83 Valentin 2000, 171
84 Normann 1983, 39-58
management and culture of the organization. This model is based on his business idea and another services system model by Eiglier and Langeard. In his service management model Normann combines the three main components of the business idea with the elements of “image” and “culture and philosophy”. The market segment is the starting point from which the system is made up of the service concept, the delivery system and the image. The components are then integrated by the culture to a consistent system. The service management system is illustrated in the following figure 6.

The business idea and service management system –models are based on the systemic way of thought. The operation of an organization is examined as a combination - a system - consisting of different factors that constantly interact with each other. The systemic thinking differs from the traditional objective-means thinking that focuses on

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85 Normann 1984, 46
86 Normann 1984, 48
87 Karlöf 1995, 325
88 Normann 1984, 46
parallel connections. The challenge of describing business ideas is doing it in an efficient way. On one hand, if a business idea is too general, it usually becomes useless as it bears no meaning. On the other hand the description might become complex if the grounds for success is not clearly defined and every possible component is added to the description just in case.

Normann’s business idea thought rose in the beginning of the 1990’s to the question as Internet gave birth to new kinds of business models. The business idea –concept was an efficient way of analyzing the strategy logics of these new innovative businesses. Normann’s business idea doesn’t, however, take into account the role of the personnel in developing the business idea. Thus the more tailored service management system – model is used to describe the case organization more thoroughly.

3.3.1 The market segment

The market segment includes the certain types of clients to which the whole system was designed. In the service management system the client has a dual role as a consumer in the market segment and as a part of the delivery system. These aspects are interconnected since it is the totality that the client will evaluate. The role of the client as a coproducer is especially important in professional services where the service production requires a strong contribution from both sides.

In his earlier work on the business idea –model Normann gives a more extensive explanation for the market segment describing it as the company’s territory, the environment that the company is connected to. This environment consists of several different actors that all have an effect on the company’s performance. In this thesis the market segment of the service management system is interpreted in its broader sense to attain a comprehensive enough view of the triadic environment the case organization

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89 Virkkunen 1995, 11
90 Jahnukainen, Junnelius & Sonkin 1988, 24-26
91 Virkkunen 1995, 10
92 Normann 1984, 46
93 Normann 1984, 79
94 Normann 1983, 54
operates in. This will also help to analyze the different roles the organization has in its environment.

### 3.3.2 The service concept

The service concept comprises of the added value that is offered to the customer. Even though the explanation may be simple, the service concepts are in fact usually very complex and consist of values that are difficult to analyze.\(^\text{95}\) To avoid the trap of being buried too deeply into the value-adding elements of the service offering the service will be analyzed in a very structured way by looking at the different parts the service consists of. Normann himself values the service parts as important and peripheral. The core service is the main essence of the service while the peripheral ones support and supplement it.\(^\text{96}\) This classification is in line with the more traditional one from Christian Grönroos. According to Grönroos the basic service package is composed of a core service and facilitating services which are mandatory and supporting services that are usually used as a means of competition and are not necessary for the use of the core service.\(^\text{97}\)

### 3.3.3 The service delivery system

The service is produced in a system but very different from the ones in the manufacturing organizations. Most services are actually quite similar in nature but the delivery system is the place where unique and innovative ideas produce competitive advantage. Normann specifies three different subcomponents that are essential to the service delivery: personnel, customer, technology and physical support.\(^\text{98}\)

**Personnel** are the key component of service production as the services, especially professional service, are people-intensive. Many reasons support the position of the personnel as the key resource for the organization. The personnel:

\(^{95}\) Normann 1984, 46  
\(^{96}\) Normann 1984, 46  
\(^{97}\) Grönroos 2000, 166  
\(^{98}\) Normann 1984, 47
• Analyze and interpret what is happening in the marketplace
• Create capacities that are required to design and refine the product offerings and the service delivery system
• Use their discretionary capacities to construct the “fit” between the product offering and the customer needs
• Are the face of the organization at the “moments of truth”99

Especially in professional services the image of the organization is strongly tied to the personnel. In specific areas an individual person might be better known than the organization he/she represents. The reputation is build through the basic operation, making well-known assignments and being in public. The organization can with its own actions e.g. writing articles or participating in discussions, acquire attention and gain credibility. 100 Naturally this requires great attention from the organizations point of view to personnel issues. The main areas to take into account are the development plans for the personnel (training, career planning etc.) and the recruitment of the right and suitable people to start with. 101

As a difference to products, client also plays an important role in the process. They are naturally the receivers and beneficiaries of the service, but in addition they take part in the actual production and delivery process. 102 In professional services especially the committed involvement of the client is important. The relationship starts from the specification of the order, because normally the professional service is needed when solving complex problems that the client has. On occasion, the client cannot even make a specific order if the needs are not clear or he/she is unable to analyze them. The service producing organization has to then familiarize itself with the client and its operation possibly by doing a preliminary study. The service is thus produced in an interactive relationship between the service producer and the client. 103

99 Normann 1984, 59
100 Sipilä 1996, 321-322
101 Normann 1984, 62
102 Normann 1984, 47
103 Lehtinen & Niinimäki 2005, 11
The third key component is the technological and physical support that has a sort of an infrastructural role in the system. Although most services are personality-intensive, they also require a lot of capital and equipment as well. Physical tools are important to the functioning of the social interactions. The role of this support does not differ significantly from its role in the manufacturing companies, but the impact of new technology on services is enormous.  

3.3.4 The culture and philosophy

Culture and philosophy of the service management system relate to the principles by which the social process leading to the delivery of services is controlled, maintained and developed. From a long-term perspective culture and philosophy of the service are the crucial parts which shape and rejuvenate the values and mission on which it thrives. To supplement Normann’s ideas, the corporate mission concept will be examined in more detail as the case organization can be characterized as a mission oriented initiative. De Wit and Meyer see the corporate mission as an element influencing the firm’s strategy by “sending the firm in a particular direction”. To understand its effect on the strategy one must be familiar with the type of fundamental principles that make up a corporate mission. Also the roles that the corporate mission plays in the strategy formation process needs to be understood.

The elements that the corporate mission consists of bind themselves to the fundamental purpose that the organization exists for. In addition to the purpose these elements are the organizational beliefs, which include the driving ideas and assumptions, the business definition, which gives an explanation on where the firm operates in and finally organizational values that describe what is of fundamental importance. A consistent and compelling mission can create an emotional bond between organizational members and energize them to work according to the mission.

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104 Normann 1984, 47
105 Normann 1984, 47-48
106 De Wit & Meyer 2005, 250
107 De Wit & Meyer 2005, 252
The concept of vision is strongly related to the corporate mission as it outlines the desired future where the organization is heading. The mission acts as a strategic guiding tool in this journey. Usually the vision statement is broader and less specific, but it also has a motivating and directing purpose for the whole organization. All in all, it is important to pay attention to developing a corporate mission that is useful for the organizations operation. A corporate mission can provide direction by defining the boundaries, within which strategic choices and actions must take place, legitimization, by conveying that the activities the organization is pursuing are purposeful and motivation, as it inspires and drives individuals to work in a particular way towards a common goal. 108

3.3.5 The image

Normann regards the image as an information tool that the management can use to influence staff, customers and other stakeholders whose action and perceptions of the company are important to market positioning and cost efficiency. He has an interesting perspective of using image as the tool to create new reality in the short run, but naturally in the long run the image depends on what the company actually provides and who the customers are.109

Although Normann only used the term image, this component is extended to implicate the whole brand building process. Image is usually considered as part of the brand, to portray the mental picture the object has. Brand, however, is a larger concept to indicate the promise that the producer gives to the customer. Building a brand is an essential part in the development process of products and services. In the case of a professional service such as the case organization, systematic brand building is the culmination of the productization process. When building the brand, it must be considered whether to build a separate brand for each individual service or to develop a unified organizational brand. Organizational brand building is a centered effort where all brand related work is focused on creating a strong organization brand. The professional service organization

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108 De Wit & Meyer 2005, 252-253
109 Normann 1984, 47
usually offers a wide variety of different services and thus a strong organization brand can make it easier for the client to rely on the quality of an individual service.¹¹⁰

When building a professional service brand, the starting point is the development and management of the service process. The brand is born in the relationship of the organization and its employees and develops and lives in the encounters of the employees and clients. It is essential to manage the service processes in a way that the clients receive positive brand experiences that lead to a durable brand relationship.¹¹¹

### 3.4 Guiding theoretical framework

This three-part theoretical examination can be merged into a framework for the analysis of the case organization. The Business-University-Government context is the outermost ring that describes the field of phenomena to be analyzed. Major development processes are underway in all of the sectors and when put together new possibilities are born for innovative actors. These actors can be called intermediators, actors that bring the three sectors together to create value-adding and knowledge-producing programs, projects and other ways of interacting. In this thesis, the development process of one kind of an intermediary is examined with the help of the service management system. This five-part model is broadened with additional viewpoints from other scholars. The framework is presented in figure 7.

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¹¹⁰ Lehtinen & Niinimäki 2005, 52
¹¹¹ Lehtinen & Niinimäki 2005, 50
Figure 7. Guiding theoretical framework
4. CASE eBRC

The case organization to be analysed in this thesis is eBRC. eBRC is an organization offering project coordinating and research services to its stakeholder groups. It operates as an intermediator, as a matchmaker, between researchers, businesses and financers. This chapter will follow eBRC’s path, but first scientific conditions are outlined.

4.1 Nature of data

In this chapter the scientific conditions and nature of data are analyzed. First the acquiring of the data is described, then the analysis phases and finally the validity and reliability of the research are reviewed.

4.1.1 Acquiring the data

This research is conducted as an action research, more precisely retrospective action research. Gummesson states that although action research (action science) should be conducted in real time, the retrospective view is also an option. The experiences should be triangulated by using additional methods such as document studies and interviews with other actors. In this research the empirical part of this research is mainly built from the practical experience the researcher has gathered during the employment. This information has been acquired through unintentional observation and it will be supported with secondary material consisting of reports, memos minutes, web materials and other written data.

In addition, a small survey was conducted to gain outside information and experience, mainly from the future development of the case organization. The survey was done by email to key stakeholder groups of the case organization. It was sent to five representatives from each of the sectors of business, university and government. The

112 Gummesson 2000, 122
participants were chosen carefully from those who had been involved in eBRC’s operation and knew the organization. Basically they all had taken part in some of the projects. From the 15 interviewees 6 answered and their comments and opinions will be used as expert statements to support the analysis of the case organization. The names of the interviewees will not be published but a letter and a number –code will be used to correspond to the received answers.113

4.1.2 Analysis of the data

The process of developing eBRC’s service management system will be analysed in a chronological order starting from the beginning phases of the organization following through the different changes in its path and finally making a forecast on what will happen in the future. The key components of the service management system, market segment, service concept and organization, are discussed in this case analysis with greater emphasis. Also the culture and philosophy issue will be highlighted as eBRC is very strongly a mission based organization. The image component is evaluated in the light of the other components. This approach is based on Normann’s earlier work on the business idea-model and basically on the view the image component is constructed during the operation and the interaction the organization has. In addition, the approach is more on the external side and how the different stakeholders have influenced on eBRC’s development. However, eBRC has also had several different internal changes that have had an effect on the operation as whole. These changes will be discussed and mirrored against the external environment.

4.1.3 Validity and reliability

The analysis of the validity and reliability of qualitative research is often considered more difficult than in the analysis of quantitative research. These concepts that rise from quantitative research may be interpreted in many ways and can be useless to qualitative research. 114 Gummesson claims that in action research these criteria should not even be

113 B=Business sector representative, U=University sector representative, G=Government sector representative
used, instead, own quality criteria should be developed\textsuperscript{115}. However, while lacking such criteria, the traditional validity and reliability will be evaluated, although bearing in mind Gummesson´s statement.

The validity of the research means the ability of the method to measure what it is meant to measure. In qualitative research, this is expressed in the compatibility of the description and the explanations and interpretations that stem from it. To enhance the validity of the research triangulation, the use of different research methods, can be utilized.\textsuperscript{116} In this research the preunderstanding of the phenomenon is supported by theoretical examination and the created framework then applied to the case organization. The case analysis is based on the researcher´s experiences supplemented by secondary material and a survey.

When the research can be repeated, the research has reliability. In qualitative research this is achieved when reporting exactly how the research is conducted.\textsuperscript{117} The results may not be generalized but the research frame can be transferred and applied to another case\textsuperscript{118}. The theoretical framework of this thesis is applicable to use in analysis of other similar actors in the Business-University-Government context, thus giving the research more reliability. However, in a qualitative case research, especially in action research, the use of the framework should always be tailored to the needs of the research.

Gummesson defines access as the researcher´s number one problem. Access refers to the ability to get close to the object of the research.\textsuperscript{119} In this research the researcher has been involved in the operation of the case organization with full access to every information source. However, the responsibility areas have not included actual research project responsibilities, but the involvement in producing support has given an extensive perspective on the operation. In addition, the researcher has taken full part in strategizing processes and developing projects the organization has had.

\textsuperscript{115} Gummesson 2000, 122
\textsuperscript{116} Hirsjärvi, Remes & Sajavaara 2002, 214
\textsuperscript{117} Hirsjärvi, Remes & Sajavaara 2002, 214
\textsuperscript{118} Eskola & Suoranta 1998, 212
\textsuperscript{119} Gummesson 2000, 25
4.2 Development phases

There are certain events in eBRC’s history that divide its development process in a convenient way: a clear dyadic leadership from both founding universities characterizes the start-up phase, operationally the most active phase was lead by only one project director, but in spite of that the growth was at full throttle and finally strategizing for future and transforming the organization label the last year of eBRC’s operation.

4.2.1 Start-up phase

To start with, a key issue regarding eBRC as a whole must be analyzed. eBRC is a research centre that was founded as a joint venture between the two different universities: TUT and UTA. As a part of the eTampere-program eBRC’s life span is limited to five years starting from 2001 and ending in 2005. Thus eBRC can be regarded as a project with different project stages. In this thesis eBRC will regarded more as an organization which has and controls several projects. This will give a more continuity to the analysis.

This first chapter will examine the beginning of eBRC and the first stages of its operation. It will present the initial ideas for the organization and also the implementation of these plans. In addition, the first concrete activities are presented. Chronologically this chapter will deal with events that happened during 2001.

4.2.1.1 Market segment

eBRC divides its target segments to researchers, businesses and research financers. The researcher segment consists mainly of the researchers and professors in the founding universities, who are the key resource for eBRC’s service production. Thus the researcher segment represents the university sector of the B.U.G.-scheme. Businesses are another segment that needs to be approached differently than the university-sector. Businesses have many prejudices in regards to universities as mentioned earlier and eBRC tries to offer them a simple and efficient way to start cooperating with university actors. The financer segment includes a somewhat varied group of for-profit and non-
profit organizations that offer research financing. This group will be analyzed in detail in the following chapters.

In addition to the three main groups eBRC serves the underlying eTampere program and the city of Tampere as key financer and of course the society at large by providing new knowledge. The following figure 8 describes all the different groups that have an affect on eBRC’s operation. It can be concluded that eBRC’s network is large and diverse and thus examining eBRC as an intermediator can be well justified.

Figure 8. eBRC’s network

eBRC started its operation in June 2001 as the contract between the City of Tampere, University of Tampere (UTA) and Tampere University of Technology (TUT) was signed. The start of this eTampere subprogram was reported both to the national and international media. As a part of the eBRC launch two questionnaire studies were conducted to establish the interests and needs of the researcher and business segments. The first questionnaire was sent to the researchers of the founding universities and the other to companies in the Pirkanmaa area. eBRC also started actively taking contact to individual companies, research centers and universities both in Finland and abroad.
4.2.1.2 Service concept

eBRC plans, coordinates and implements scientific, mostly e-business related research projects, from different disciplines. It offers services to the departments of the University of Tampere and the Tampere University of Technology on research project planning and implementation. At the same time it supports the networking of different actors and helps in finding suitable partners. The service concept is structured as a process starting from the research initiative and ending with the created new knowledge. The process starts in the search for ideas, which can be derived from any of the three segments: researchers, businesses, research financers. After evaluating the idea from different perspectives the feasibility of the project is analyzed. If potential is found, the next stage is to find and match the right partners and create contacts. After the project has begun, eBRC’s role is to facilitate and oversee the process. The results from the project will be published in the eBRC Research Reports series. The following figure 9 clarifies this process.

Figure 9. eBRC’s service process

The core service is the planning and coordinating service eBRC refers to as “matchmaking.” In addition to project services eBRC has support services that are important to its service process. eBRC’s web service is where e-business related information is delivered to anyone who is interested. The product palette also includes a conference event e-Business Research Forum (eBRF) that annually brings together all eBRC’s stakeholder groups together. These services will be discussed in the detail in the
following chapters. The original plans contained also the idea of an own research journal called e-Business Research Journal (eBRJ). This journal wasn’t, however, launched any time during eBRC’s operation but will remain as an idea worth examining in the future.

In June 2001 eBRC began its service delivery: acquiring and preparing research projects. The first international research project that joint the BRC umbrella was E-Forum, a 600,000-euro-project funded by the EU and involving partners from 7 different EU-countries. E-Forum was a partnership project where the main coordinator was Tampere Technology Centre (today Technology Centre Hermia). Locally the first significant project started when a group of Tampere and Pirkanmaa area based actors including e.g. eTampere program, City of Tampere, Employment and Economic Development Centre in Pirkanmaa and Tekes chose eBRC to conduct a research on the electronization of small and medium-sized enterprises in the area.120

During the first year eBRC also organized its e-Business Research Forum (eBRF) – conference, which is aimed to stimulate networking and cooperation between the B.U.G.-sectors. The conference is somewhat different of other academic research conferences as it presents research in its work-in-progress stage rather than completed research. The first event gathered 100 persons and was noted as an important platform for researchers in the two main universities to develop their networks and create international contacts.

4.2.1.3 Service delivery system

eBRC is a joint venture between the two universities in Tampere: University of Tampere and Tampere University of Tampere. The organization started out as two

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120 Project Case: eTila
eTila-project took off in 2002 with a goal to develop a concept to support the introduction of electronic means in SMEs. The project started with conducting a research to understand current e-business state, obstacles in adopting e-business strategies, attitudes towards e-business and opinions on possible e-business support concepts among the SMEs in the Pirkanmaa region. In addition to a publication, this project created a new organization called eYrityspalvelu (eBusiness Service). The goal of this service is to help the Tampere region companies to start using electronic services. The service is carried out in cooperation with Pirkanmaan Yrittäjät, Tampere Chamber of Commerce, Tampere Polytechnic, City of Tampere and Professia Ltd. (www.eliketoininta.com/pirkanmaa)
project units in both universities. The same practice was reflected in the eBRC board, in which the universities were represented by three persons summing up to 6 people altogether. The board supervises and controls the organization with its strategic decisions. The operational responsibility is on the eBRC team, which was originally led by two project directors representing both universities. In addition, there would be a research unit director, who could be one of the directors. The team was to be accompanied by project managers and a secretary. Execution of the research projects is always led by an individual professor of a TUT or UTA institute or school and often joined by representatives of other such entities - outside or inside, business or university, domestic or foreign.

In addition eBRC has a godparent company which is named from the eTampere-level to support eBRC’s operation. The entire operation is funded by project financing which is allocated from the city of Tampere and EU through the institute of business information management at TUT and school of business administration at UTA. However, the goal is to create research projects funded by research financing from both public financers (Academy of Finland, Tekes, Sitra) and participating businesses. Ultimately all research projects ought to be cost-effective and in the long run profitable.

During the first operative six months in fall 2001 eBRC reached its full functionality. In June the eBRC board launched the strategy process led by the two project directors. It was decided that a special eBRC director is not needed but these two co-directors share the operative responsibility. eBRC’s organization grew and in the end of 2001 it consisted of six full time employees, from which each founding university employed three. The responsibility areas were divided according to different stakeholder groups. One project manager/coordinator took care of each main group – business, financer, researcher - and one project manager was in charge of knowledge management, mainly the web service. eBRC also had in its direct employment 2-4 researchers who conducted their own research. The first organization structure is illustrated in figure 10.
4.2.1.4 Culture and philosophy

eBRC is very strongly a mission based organization with an objective to increase e-business knowledge - both theoretical and practical - within academia and industry. This knowledge is utilized in the education and research of the founding universities and in the businesses of the participating companies. eBRC’s goal is to create an established and renowned e-business actor, one of the leading in Europe. This ambitious mission is linked to eBRC’s vision, which states that eventually, e-business will become business as usual. But, before that, business has to become e-business. In order to achieve this goal, university and government sectors must join forces to read and make sense of the “crystal ball” in eBRC’s words and create winning concepts. eBRC’s role is to serve as a catalyst in this process. In quantity, the aim is to produce a project volume worth of 17 million euro during 2001-2005.

The organizational structure also created an interesting base for the development of eBRC organizational culture. The divaricate base is reflected throughout eBRC’s organization, its values and its way to operate. The two universities have somewhat different backgrounds when it comes to business-industry – tradition. UTA is more of a classic university with roots in humanities and social sciences. Such relations are clearly viewed with more scepticism, due to classic emphasis of the objectivity argument. At the TUT, close relations with businesses are a natural element of scientific knowledge.
creation. The TUT tradition stems from its general roots in technology and engineering.

121

4.2.1.5 Image

In the beginning eBRC’s image was tightly connected to the images the founding universities and its parent project eTampere had. As a new professional organization, whose success depends mainly on credibility, the connection to the universities was considered a big benefit. The eTampere-connection was naturally a big plus but eBRC also wanted to create its own image. That is why eBRC put a lot of focus on creating its own brand by e.g. designing its own merchandise.

In the long run eBRC’s image was mainly created through individual face-to-face-contacts but in the background there was an idea that eBRC was in fact an organization which would be available 24 hourd a day through its online presens. The goal was to create a web service where people interested in e-business related issues got together, found relevant information and shared their thoughts on e-business. In addition to eBRC’s project and research information, the web service offers a discussion forum, a register of experts for people to put their information in and a matching point where one could find partners. Registration is required for reading eBRC’s research reports and to reach the extra services. The other “door” to eBRC was considered the eBRF-conference. This annually organized event was when eBRC would come public in a way and welcome everybody who was interested in taking part of creating new knowledge and new cooperation.

All in all, eBRC’s focus is to become a modern, dynamic and online meeting place for researchers, businesses and research financers – a new kind of an actor in the field of research. Cooperation is the key essence in building this picture and in these partnerships eBRC emphasizes three values: reliability to the researchers, confidentiality for businesses and transparency for research financers.

121 Tommila, Järvelin, Seppä 2004, 977
4.2.2 Growth phase

After the beginning stages eBRC reached its full functionality and started growing its research portfolio. This chapter will examine the operation and its development in more detail. Some research cases will also be presented. Chronologically the chapter will cover the years 2002 through 2004.

4.2.2.1 Market segment

During it operation eBRC has had numerous partners from all its stakeholder groups taking part in the project. The researchers have mainly come from the founding universities and in particular from the institute of business information management and institute of industrial management at TUT and from the school of business administration (divided into three separate departments in 2004) and department of computer sciences at UTA. In addition, several researchers from other universities have given input into the projects. From the business sectors, the representation has been very versatile and the partners have naturally been chosen according to the research theme. The companies involved have included SME level firms as well as global multinational enterprises.

From the financer side the most important partners have been, when excluding the involvement of businesses, the national technology agency Tekes and the European Union as a whole. A detailed division is presented in figure 11.
In this respect one of the main services eBRC has given is the support and professional help in drafting project plans to apply for research financing. eBRC has been involved in many research calls in both national and international level and has received many merits to its research portfolio. One of the biggest EU-funded projects is the ongoing Digital Business Ecosystem (DBE) where eBRC has had a significant input.  

4.2.2.2 Service concept

In 2002 eBRC’s network grew locally, nationally as well as internationally. Locally eBRC was involved in projects such as eManufacturing, nationally it took part in a project initiated by the ministry of transport and communication which focused on studying the strategy logics of digital television. In international level an important

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122 Project case: DBE
The aim of the DBE project is to develop and implement new generation software infrastructures and services to form a dynamic and cost efficient eBusiness service platform for SMEs. The project facilitates the utilization of Internet technologies in SMEs and creates new ways to operate for European software industry. It is an Integrated Project presented under the first call of the 6th EU framework programme. (http://www.digital-ecosystem.org/html/)
opening was a cooperation project called “St. Petersburg - Tampere Knowledge Society Partnership” where eBRC had a leading role.

During its first full year eBRC operated in a very wide spectrum of research with a rather varied focus. From the beginning the goal was to first examine the situation and the needs that appear in the market and gradually clarify the separate issues eBRC aims to focus on. This was the done in the beginning of year 2003 when eBRC chose 3 weight points to focus its research objectives: electronization (development) of business, management of information and knowledge and strategizing in the knowledge society. This division was influenced by the development processes and trends eBRC had seen in its operative environment. These three areas became most important as they represented the majority of the project base and also reflected the research areas of the founding universities and especially the departments that were responsible for eBRC. Weight point one “electronization (development) of business” landed smoothly to the school of business administration at the UTA and weight point two “management of information and knowledge” found its home at the institute of business information management at TUT. Weight point three “strategizing in knowledge society” rose from the strengths and backgrounds of the eBRC team and was seen as an growing research area.

All in all eBRC’s initial service process was considered good eventhough it wasn’t applied consistently in every project. When coming to an end of the project the core service was defined and divided into 5 different levels that portray the commitment from eBRC’s part in each of the projects.

1. Projects acquired and implemented by others
Level 1 consists of ongoing projects that joined the eBRC portfolio in exchange of selected eBRC services, such as access to the eBRC contact network, possibility to set up project web pages, option to publish results in eBRC Research Reports and/or participation in international conference activity.

2. Projects acquired by others and partly implemented by eBRC
Level 2 comprises projects established by other parties that joined the eBRC portfolio to gain eBRC's team's(partial) involvement in project implementation.

3. Projects implemented by others the acquisition which supported by eBRC
Level 3 concerns cases where eBRC has granted resources to the preparation of a given project either in the form of preparatory funding or as eBRC’s team's services in order to facilitate the launch of a given project.

4. Projects acquired by eBRC but handed over to others for implementation

Level 4 includes projects where eBRC has been a key actor in putting the project together. Its role has been to find the right partners and get the project established. Levels 3 and 4, it can be safely concluded, represent eBRC’s matchmaker service in its purest form.

5. Projects acquired and implemented by eBRC

Level 5 projects are those where eBRC has the highest level input. eBRC has been both a key actor in putting the project together and in the implementation of the research itself.

Levels 2 and 5, it can be concluded, represent the most traditional or conventional elements of eBRC's activities as a research centre. However, level 4 is the one that corresponds best with eBRC’s initial service process and its objectives. In these projects eBRC has truly been an intermediary, a matchmaker, that has brought the partners together and then let the project take its own course. As an example of an eBRC project that best translates the idea of a matchmaker service is the eInsurance-project, which is conducted as a cooperation between eBRC, UTA, VTT and few insurance companies.123

4.2.2.3 Service delivery system

In the beginning of year 2002 the institute of knowledge management was founded at the University of Technology. This meant that at TUT eBRC was administratively located to this institute. The school of business administration continued as the administrative office for eBRC at UTA. Changes also took place in the eBRC board where the vice president Kari Neilimo moved to serve as the CEO of the S Group and professor Anne-Mari Järvelin took his place as the VP. Simultaneously eBRC

123 Project case: eInsurance
The eInsurance project aims at developing new electronic product and service concepts utilizing Web and mobile technology for the insurance industry. By exploiting the developed outputs, insurance companies will have the possibility to create new value for their customers and gain competitive advantage in the continuously tightening competition of insurance market (http://einsurance.ebrc.info/en/index.html)
transformed from a two leaders, two teams and two offices –model to a single unit one. Dr. Marko Seppä continued as the project director for the entire eBRC and the operational activities were gradually moved to the TUT office. The office infrastructure was, however, maintained at UTA, as many of the projects involved cooperation between parties from both universities.

The choosing of the three weight points in 2003 led to the establishment of eBRC research boards. These groups were build to serve as academic advisors for eBRC’s scientific activities. Every weight point had its own research board, which consisted of professors and other academics from the founding universities and other individuals from different stakeholder groups whose views were seen important. The business boards had no juridical responsibilities but their views and opinions were considered as the guiding essence for each of the weight points. They are important support committees for eBRC’s core operation. Each research board had a leading researcher who acted as the secretary and the operative initiator. In addition a chairman was chosen in each of the boards.

The establishment of the weight points also led to different changes in eBRC’s operational team, where the market segment based division of responsibilities was changed into a weight point based one. Basically eBRC formed from activity based organization into a profit unit based one. Every weight point had its own directing researcher and a project manager. In addition to the three weight points the organization had a non-research weightpoint which held the number 0. This was to clarify and show the role of eBRC’s support services, the web service and the conference, in the organization. The following figure 12 will clarify the organizational structure after the weight point division.
In addition to eBRC’s board and business boards there is also another board that was established in 2003. The business board acts as a business advisory board, which has no juridical status in the decision making process. Nonetheless it is of critical value to eBRC’s operation. The Business Board serves as support group for the research, development and training activities of eBRC’s weight point leaders and research teams. Originally the Business Board started in the beginning of the 1990’s as the e-business work group for the Tampere Chamber of Commerce and Industry and based on a cooperation contract was changed as an eBRC institution on January 30th 2003.

4.2.2.4 Culture and philosophy

eBRC started its operation with a broad idea of e-business. Not only was it the electronic commerce the companies were conducting, but it also included all the inside and outside activities that were affected by the development of electronization. The development of e-business went further and eBRC’s vision started to look more accurate and real as e-business was becoming a part of everyday business. From eBRC’s point of view this development process has in fact taken place and e-business has merged into business as a whole. This lead to choosing the three before mentioned weight points which were considered the strongest areas for eBRC. To reflect these changes in a more practical eBRC also made a decision in principle of using only the acronym form of its name in marketing. This was done to fade out the significance of the “little e” in eBRC’s
operation. e-business was considered as business and the focus was put on understanding business in the knowledge society as a whole.

4.2.2.5 Image

During the beginning phase a lot of emphasis was put on informing and presenting eBRC and its organization as a whole. It became evident that the new service concept and complex organizational structure were difficult to communicate to the target segments. In practice this was seen in the number of different presentations eBRC prepared to different stakeholder groups. In 2003 a quantitative survey was made to analyze the image and familiarity of eBRC among its stakeholders and the results showed that eBRC and the service concept as a whole were not that well-known but the ones that knew eBRC thought of it as positive and dynamic.

In the following year 2004 eBRC’s service was again examined through a student project and this time eBRC was approached as a professional service to which image and brand creation as a whole are very important. Three different point perspectives were discovered when analyzing eBRC’s brand:

1. eBRC is a corporate brand, which tries to distinguish itself from other actors in the market. The brand building has been rather efficient and eBRC is relatively well-known among its stakeholders.
2. eBRC is also a brand that connects the two big universities: Tampere University of Technology and University of Tampere. It tries to act as a supporting organization between these scientific communities.
3. eBRC is a part of the eTampere-brand. Even though eBRC’s goal was to build an own brand from the beginning its role in the eTampere-program has to be taken into account.

The number of registrations in the web service serves also as a good instrument to measure eBRC’s popularity and the user activity of the whole service. The number grew steadily over the years finally reaching 1000 registrations. The web service did not,

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124 Kurkela & Saario 2003, 29
125 Saarikoski, Tommila, Turtiainen 2005, 162
however, reach its ultimate goal of bringing people interested in e-business together. Even though it had many users, the service failed to create a community which would interact and communicate through this service provided by eBRC. The ambitious goal to create this kind of a community still lives in the background and will perhaps be implemented with a different plan in the future.

4.2.3 Transformation phase

This third will have a more analytical approach on the case organization as it examines the final years of eBRC’s operation and makes suggestions on future development possibilities. Chronologically it will begin from the end of 2004, but some cross-sections will also be made.

4.2.3.1 Market segment

During the final stages many development processes positive to eBRC were underway in different market segments. The initial field of e-business was going forward especially in the public sector and the concept of B.U.G. became more familiar. eBRC’s operation and its service were becoming more and more established and the market segments had learned to take advantage of eBRC’s services.

In an international level eBRC has made different contacts all over the world but the main tool for networking is the conference event eBRF. This forum has become well-known as it has been growing its participant numbers throughout the years. In 2004 the event attracted over 200 participants to Tampere and the level of research abstracts rose substantially. The conference is the only part of eBRC’s activities that has already been confirmed to continue at least until 2006, when it is organized together with an Asian e-business conference called ICEB.
For the future eBRC is planning on shifting its focus more to the business side. This is mainly due to the activity of the eBRC business board and the needs and wants that have risen from the businesses. Some extracts from the survey:

“to receive high-quality research co-operation both in basic and in applied research” B1
“to bring new ideas to business development projects” B2

The purpose would be to produce relevant information and knowledge to companies especially to ones located or to be born in the Tampere area. Another relevant segment will be the research financers, foremost the European Union but also different national and regional business related institutions. The researchers will not be seen as customers but as coproducers of knowledge. All three segments are going to play an important role in the operation of eBRC but the needs of businesses are now becoming more valuable in the research sense. The goal is to conduct research that is actually useful in everyday business life.

4.2.3.2 Service concept

eBRC’s service concept had become stronger and more efficient after the division to three different weight points. eBRC’s project base had grown in all levels and as a result eBRC had produced 18 research reports in its publication series. In addition, there are many projects that produced their results elsewhere but still belonged to eBRC’s portfolio. The number of reports is expected to grow towards the end of the project and the whole series will remain as concrete achievement after the operation has ended.

The project portfolio includes several projects in which eBRC’s has taken part with different levels of commitment as explained in the earlier chapter. eBRC has had many important partnership projects, which it had outsourced after the beginning phase. This activity was considered the main task for eBRC but during the two final years eBRC’s operation changed more to a direction where eBRC itself was involved in many of the projects. It not only initiated the projects but also acted as the knowledge producer. One of these projects was a research eBRC conducted to the ministry of finance and trade
analysing the present state of e-business, its future challenges and the need for a national strategy. 126

eBRC had had its own researchers before but gave up on this kind of research activity early on. During the last stages actual research activities have again began and they appear to stay in eBRC’s service production. This is an important issue which has to be analyzed when developing the eBRC of the future. It would move the focus from serving as a match maker to a more traditional research institute. These ideas are not, however, in line with what the stakeholders are looking. They eBRC mainly as an coordinator and an initiator of different projects.

“eBRC is a coordinator of high-quality business research” B1
“eBRC should focus on building research projects, as the universities do not have enough resources to apply for big program such as the ones of European Union” U1
“eBRC should develop into a notable international actor that could coordinate significant projects (such as the IP-projects in the European union)” U2

The challenge is to choose the focus for eBRC’s activities whether it is conducting own research or coordinating the research of others. Perhaps the result will be to create an organization that will have these aspects in balance. eBRC needs to carefully examine the potential to the different levels of operation and start implementing the operation it sees as its main strength. To add to the mix, eBRC also has to decide how to utilize its support-like services, the conference and the web service.

126 Project case: report for the ministry of finance and trade
The project started from an initiative of the Ministry of Trade and Industry to analyze the present state and future challenges of the electronization of business in Finnish companies and to resolve whether or not there is a need for national strategy in the field of electronization of business. eBRC won the competitive bidding and thus obtained and implemented the project. The project report is published in June 2005.
4.2.3.3 Service delivery system

Due to different changes in eBRC’s organizational structure the responsibility areas were again rearranged. The triadic division of the weight points was maintained but the personal responsibility areas were changed to cover different challenges accordingly. The research boards were combined to create new bordercrossing links especially between the founding universities. By time the weight points had become more independent and two of them had strong basis in the established institutions. Weight point two was connected to the institute of business information management and weight point one moved to the School of Economics and Business Administration at University of Tampere after it had begun in 2004. eBRC moved more into a supporter role in regards of these two weight points and continued to support the activities of these institutes.

The third weight point was eBRC’s own in a way as it had no institutional basis and the people involved were employed by eBRC. “Strategizing in knowledge society” is in fact a new discipline of sort as it aims to understand new ways of doing business in the knowledge society as well as to help old business tackle the challenges that knowledge society brings to them. The last weight point, labelled weigh point 0, is entirely eBRC’s own and these two weight points will eventually merge into a single one creating the basis for the future eBRC.

eBRC’s initial way of conducting research as a network organization with a strong online presens was an ambitious goal but the implementation did not turn out as planned. The web service was somewhat of a failure and the network building was not as active as it would have been needed. It was naturally hard to build a network out of almost nothing and as the stakeholder groups did not reach the full drive to become international and networked it was difficult for eBRC to become a truly virtual organization. There were also other issues relating to the whole operation, for instance the researchers found it rather difficult to relate themselves to eBRC’s broad concept of e-business.
4.2.3.4 Culture and philosophy

eBRC started out as a research center which had an aim to create new knowledge on e-business. The concept was seen as rather large including not only e-business but everyday operational business activities and the vision was that e-business would become business as usual. After choosing the three weight points eBRC’s operation became more focused and the research areas found their places in both universities.

During the final year of eBRC’s operation the third weight point became more and more important to eBRC as the other two weight points were strongly connected to their institutional bases. This led to conclusions that this weight point would create the basis for future eBRC’s research activities. “Strategizing in knowledge society” is also a rather large concept as it deals with different issues that the development of knowledge society has brought to strategic management. This includes topics such as innovations, new organizational models, entrepreneurship, venture to capital etc. As a parallel development process the eEurope –program, in which eBRC also belongs to, has focused its shift and is planning on changing the little “e” to an “i” thus taking innovations and innovation environment as its main focus.127 This is well in line with eBRC’s future plans.

The change of focus will also have to be taken account when analyzing the service concept as a whole. If eBRC’s mission will change towards the entrepreneurial issues it will first of mean that eBRC operates on a growing discipline which needs to strengthen its knowledge base and thus own research activities would be essential to eBRC’s success. Another important point comes from within the field. The nature of the field is somewhat difficult as it provides the opportunity to conduct research as well as development project where research results are of secondary value and the aim is on problem-solving. This creates another dualistic problem for eBRC’s future plans.

4.2.3.5 Image

Strategically eBRC’s aim has been to build an own strong brand, with the universities and the eTampere-program in the background. After the eTampere-program ends, eBRC has to figure out how it communicates its history and its part in this program. Another factor is the needs of the businesses in cooperating with universities. The survey showed that many businesses are looking for an easy access to what universities have to offer and in their mind eBRC could serve as this kind of a service:

“eBRC could be an interface between the business and the university world” B1
“eBRC is an interface (a one-door service) for businesses” B2

Also the locality of eBRC’s operation was considered a big benefit:

“eBRC’s another important mission is to act as the connecting force between the two universities in Tampere” U3
“The problem in Tampere is the small cooperation between TUT and UTA’’ G1

In practice eBRC’s marketing procedures changed along the way. In the beginning marketing was mainly carried out through presenting and explaining the idea of the organization but gradually eBRC was becoming more and more familiar at least in the main stakeholder groups. The image issue is important to eBRC because of the complex nature of its service. eBRC also has many stakeholders whose needs are very varied. This creates challenges to eBRC’s future development because a more defined description and a more communicable message about what eBRC actually is, is definitely needed.

4.3. Evolution of eBRC’s Service Management System

eBRC’s service management system has developed during the five-year period from a rather unpolished and idealistic plan to a more defined and accurate strategy. All components of the service management system have been developed during the process
due to unintentional as well as planned changes. It was clear to eBRC from the beginning that the system required refinements and eBRC was active in analyzing its environment to succeed in making the right strategic choices. For instance eBRC’s initial substance area, e-business, was altered along with many technological development processes and eBRC followed these changes and defined more precise focus areas of research in 2003.

The start-up phase marked the beginning of eBRC’s service production and the implementation of the initial plans. eBRC started making contacts with its stakeholder groups and took rather bold steps in making its operation better known especially in the academia. eBRC started with very open “arms” and took into its portfolio basically every project that had some aspects of e-business relevance. This was done to gain a project base to help in acquiring more projects as well as credibility. eBRC’s organizational structure lived quite rapidly as well while eBRC was searching for its right form. All in all, the first phase can be characterized as a testing and trying period for eBRC.

During the growth phase the rough edges of the service management system were defined and the service production reached its full speed. eBRC’s project portfolio became more varied including projects, which received financing from different sources. eBRC continued its active networking and its networks strengthened also internally as along with the founding of the research boards and the attachment of business board to eBRC’s operation. The weight point division helped eBRC to allocate its resource more accurately and also define its substance areas.

The transformation phase is characterized by the thought that the project would come to its end in 2005. The strategizing for eBRC started in an early phase and several different occasions were arranged to plan and forecast the future of the organization. eBRC used all its networks to gain a broad enough view of the needs and possibilities that were emerging in the stakeholder groups. There are many good qualities in eBRC’s service management system that make it unique but the challenge is to choose the right focus areas in every component and transform eBRC into an new era.
5. DISCUSSION AND CONCLUDING PROPOSITION

The purpose of this research was to increase our understanding of intermediating activity in the Business-University-Government context by analyzing the development process of an intermediating organization with the help of the service management system. The research followed a structure where the larger context was first examined, then the intermediating activity was analyzed and finally the model was explained in detail. This led to building a theoretical framework which was then applied to a case organization.

The theoretical and empirical parts will be, to use eBRC’s language, matched together in this chapter and the case organization will be analyzed in every aspect of the theoretical part of this research. First eBRC will be placed in the Business-University-Government context, then its intermediating roles will be analyzed and finally the service management system will be put to the test. To conclude, the theoretical framework will be modified according to the case organization.

5.1 eBRC in the Business-University-Government context

eBRC’s short history surely places the organization into the Business-University-Government context. eBRC started as an government sector initiative by the European Union and as a subprogram for eTampere. Along with the support from the city of Tampere eBRC received funding also from the two universities that operate in Tampere: TUT and UTA. The organization was also located to first both and finally to one of the universities. eBRC’s goal was to serve the local and regional businesses in the pursuit of knowledge on the growing phenomenon of e-business. This knowledge would be created by networking and matching the right partners from different sectors. In conclusion one can say that eBRC is a government initiated, university based, business serving organization.
eBRC’s role in the Business-University-Government context is clearly justified as it serves the needs of researchers, businesses and research financers. eBRC is an intermediary that finds and matches the right partners together. According to Brennan and Tornbull the need for this kind of a linkage manager exists but neither business or university sector is willing to resource such a position and would rather add it to the portfolio of an existing employee. eBRC could easily be regarded as such a manager.

When analyzing all the obstacles that lie in between universities and businesses and their cooperation, eBRC has found an important place in the field of research. eBRC is a sort of a middlepiece, an intermediary, between these two parties as it tries to facilitate research projects that involve different actors. The involvement of the government is also important in financing this kind of activity. The future will tell whether eBRC’s service concept becomes an established way of action in conducting research in the knowledge society.

Eventhough eBRC does not purely see itself as a part of the innovation environment, its operation can easily be placed in it. eBRC is a facilitator of research and aims at turning ideas into new knowledge. What had differed eBRC from the innovation environment has been its own perspective on the interaction between the business, university and government sectors. As eBRC is shifting its substance focus more to the areas of entrepreneurship, venture capital and growth strategies, there is no question whether eBRC is a part of the innovation environment or not.

5.2 eBRC’s intermediating activity

In eBRC’s case the concept of a triadic interaction is immediately modified in to a quadratic one. eBRC operates in between three different parties: business, university and government. With its many different tasks eBRC’s role varies quite much along with the project it is involved in. Nearly all of the roles mentioned can be identified in eBRC’s operation. There does not, however, seem to be a similar intermediary such as eBRC, but it has features from many existing ones.

128 Brennan & Tornbull 2001, 599
5.2.1 eBRC’s roles from the network context perspective

When analyzing from the network context clearly the strongest and most obvious role for eBRC is the mediator role. eBRC mediates between the three sectors for instance by finding the right financers for a researcher’s project or suitable business to a research program. eBRC is the “third party in common”. Havila distinguishes the two different triad models, unitary and serial triad, from which the serial triad case suits best for eBRC. The other parties are not separated from each other, on the contrary, eBRC tries to put them together. In eBRC’s ideal service process would then follow the withdrawal from the project.

The withdrawal issue brings the discussion to the roles that Järvelin and Koskela mentioned: initiator and invisible hand. eBRC is the incubator of the project, the actor that sets the activities going. When the idea for a project has been found, eBRC helps in finding the right partners, applying for the funding as well as in organizing the first meeting. Also the invisible hand role is important to eBRC. The most important support services, web service and conference, both act as invisible hands in bringing the people interested in e-business research together. The tertius gaudens and oppressor roles that Havila mentioned are both very aggressive ones and don’t really suit to eBRC’s organization. eBRC is a non-profit organization which tries to facilitate and support all its stakeholders´ activities.

One role that eBRC could basically be ideal for is the matchmaker role. eBRC’s goal is to match the right partners and facilitate the research projects that stem from the initial ideas. This role describes eBRC’s responsibilities in the research process, but as mentioned before eBRC’s actual operation has been somewhat different from the initial plans. If eBRC is, however, analyzed in its purest form the matchmaking role is a new and a different contribution to the discussion of intermedior roles.
5.2.2 eBRC’s roles from the innovation environment perspective

Suitable roles for eBRC can also be found from the innovation environment context. The roles are linked to the levels and components of the environment and this should be taken into account also in eBRC’s case. Basically eBRC is a local operator with its roots in the Pirkanmaa region and especially in Tampere. This makes eBRC a local substance producer in the classification made by Ståhle et al.\textsuperscript{129} eBRC’s role is to combine different parties and co-produce new knowledge by both basic and applied research.

However, as Ståhle et al. mention, the roles in all the levels (micro, macro and meso) can overlap and the intermediaries are also have tight connections to each others\textsuperscript{130}. eBRC has characteristics from the macro level as it channel research financing to different research projects. The university background makes eBRC a meso level actor as it also in a way carries out the third mission of the universities. Almost every role in this field can attached to eBRC as it for instance offers national, actually international, forums in the eBRF conference and orchestrates networks through its web service. It can be said, that eBRC is truly a multiplayer in the innovation environment. Whether eBRC should focus its attention and resources to its core competencies is a question that needs to be discussed.

5.2.3 eBRC as an intermediary

The idea of an intermediating organization is by no means new, as Valentin showed in the table presenting the different terms relating to intermediaries in university-industry partnerships\textsuperscript{131}. eBRC’s has characteristics of many mentioned in the list, but it does not fall into any particular category. eBRC is a sort of an interface agency as it operates in the Business-University-Government context, but it also has many qualities that the transfer agent has. These include the management of cooperative research programs and

\textsuperscript{129} Ståhle, Smedlund & Köppä 2004, 27-29
\textsuperscript{130} Ståhle, Smedlund & Köppä 2004, 31
\textsuperscript{131} Valentin 2000, 170
building a research network. The gatekeeper and linkage office are terms that could also be linked to eBRC as well as the technology and knowledge transfer terms. The science park is a wider concept in which eBRC could also belong to. All in all, the definition of eBRC as an intermediary is quite difficult and the future will tell whether eBRC will remain as facilitating interface organization or as a more substance oriented research organization.

5.3 eBRC’s service management system

The development of eBRC’s service management system has been a diverse and complex one. The process has always been characterized with a sort of a pioneer-spirit as eBRC has courageously set its foot on a field that hasn’t been explored earlier. This has made eBRC an organization with a strong mission and a clear vision. If analyzed in a profound way, these have been eBRC’s key elements of success. In addition, the Business-University-Government context and the new operational model have made eBRC distinct from other research centers. Normann emphasized the identification of these elements and their reflection in the management and culture of the organization. The service management system-model was Normann’s embodiment of these ideas and the system of eBRC is analyzed in the following chapters.

5.3.1 Market segment

The market segment is the starting point of the service management system. eBRC’s market segment is basically the whole Business-University-Government context which it divides into researchers, businesses and research financers. These three have been the cornerstones of eBRC’s operation and the level of their involvement has made them not only customers but also clients in Normann’s words. He uses the term to clarify the coproducing role of the customer in the service process and this is well in line with eBRC’s idea of its customers. The researchers are an important group as they serve as the actual knowledge producers in the projects and the businesses provide the projects

132 Normann 1984, 46
133 Karlöf 1995, 325
with current ideas and research problems. These two groups could be considered more as partners as customers to eBRC. Naturally in eBRC’s support services, the web service and the conference, they are treated in a more customer-like manner. The research financers also have a rather unique role as eBRC, in a way, serves them by allocating research financing and finding feasible projects. On the other, eBRC is very strongly dependent on their decisions on the research financing. All of these aspects create challenges for eBRC on how to approach its main stakeholders groups.

Normann’s broader view of the market segment consisted of the territory that the company is connected to\textsuperscript{134}. eBRC’s market segment also consists of several different actors that have an impact on eBRC’s operation. There are many organizations and entities that are involved in eBRC’s projects but cannot be tied to any of the three main groups or have elements of maybe two different groups. For example there are different development companies that have for-profit intentions but are also financed by public funding. In this broader market segment respect one must also mention the desire to create new knowledge for people at large.

In the future eBRC should make more definite plans on how it sees its environment and which market segment is the most important one. The thrust to the business side is quite strong and if eBRC chooses strategizing as its specific research area the decision would be appropriate. However, if eBRC wants to produce relevant academic knowledge, it should also focus attention to the researcher side unless it does not start conducting its own research. The research financers remain as an important group as well and they should be also taken into account in eBRC’s strategic planning.

5.3.2 Service concept

eBRC’s describes its service as a process starting from the idea and ending to the created knowledge. This process produces the added value also called for in Normann’s model. Normann also mentioned the complexity of the concepts and the difficulty of analyzing them\textsuperscript{135}. eBRC’s is not an exception to this rule as its service concept is quite

\textsuperscript{134} Normann 1983, 54

\textsuperscript{135} Normann 1984, 46
difficult to understand. Basically the purpose of eBRC is to produce project-facilitating services that help the creation of relevant knowledge created in the Business-University-Government context. This description, however, consists of many different factors as can be seen in the service level classification eBRC made after few years of operation. These levels include several smaller service parts that make the actual service process. The initial service plan consisted of facilitating services that were essential in the beginning phase of the project but as it can be seen, eBRC’s operation developed into a more diverse direction.

This varied spectrum has made it difficult to define eBRC’s core service or the main essence as Normann calls it\textsuperscript{136}. The peripheral, or more fittingly, the support services have always been quite clear in eBRC’s service delivery: the web service and the conference are distinct service unit that support the core service. The question of the core service is not that obvious and it remains to be seen how eBRC solves this problem in the future. There is a clear need for a match maker but if eBRC is to focus on a specific research area, the production of own research can also be justified.

5.3.3 Service delivery system

Normann divides the service delivery system to three different subcomponents: personnel, customer and technology and physical support\textsuperscript{137}. As in Normann’s model, in eBRC the personnel have always played an essential role in the whole operation. The service has been produced through face-to-face contacts and this has naturally personified eBRC to its employees. Sipilä states that an individual person might be better known than the organization he/she represents\textsuperscript{138}. This is characteristic for eBRC too.

The customer participation in eBRC’s service is very important regardless of which market segment is its main segment. eBRC produces intermediating services and the definition alone states that eBRC is in between different actors thus the involvement of

\textsuperscript{136} Normann 1984, 46
\textsuperscript{137} Normann 1984, 47
\textsuperscript{138} Sipilä 1996, 321-322
these actors is a necessity in the operation. eBRC is also a very traditional professional service organization whose customers do not actually know specifically what they are looking for. This is quite an obvious conclusion when thinking that the knowledge produced is always new and cannot be predicted beforehand. As Lehtinen and Niinimäki say it is always important to familiarize oneself with the client and in eBRC’s case this is done while analyzing the feasibility of the study.

In eBRC’s case the technological and physical support are not necessarily important because most of the operation is conducted in the facilities of the client. The stakeholders have their own infrastructural facilities but eBRC tries to offer its helping hand by lending material and other supportive equipment. In a way, one could consider the web service as an important technological support as it offers many ways for receiving eBRC’s services. For its internal use, eBRC has an intranet system, which helps in controlling and managing the research projects and also the contact base. Naturally the eBRC office is also an important support facility. In the future eBRC must consider whether it moves from the university premises into a more neutral operating facility.

5.3.4 Culture and philosophy

As mentioned before eBRC was a mission organization from the beginning. It had a very ambitious goal to create and carry out something new in an old established institution, university. According to Normann, the culture and philosophy relate to the principles by which the social process leading to the delivery of services is controlled, maintained and developed. In the long-term, they are the crucial parts that shape and rejuvenate the values and mission on which the organization thrives.139 eBRC’s mission was increase e-business knowledge within academia and industry and become a renowned contributor in e-business related research. These two guidelines have been “sending eBRC in a particular direction” as De Wit and Meyer put it140.

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139 Normann 1984, 47-48
140 De Wit & Meyer 2005, 250
The three elements that the corporate mission consists of are the fundamental purpose, organizational beliefs, the business definition and organizational values\(^{141}\). In eBRC’s case these elements are outlined in the mission statement, not necessarily in the most definite way, but in a way that separates eBRC from many other research institutes as an ambitious new actor. eBRC’s values are also elaborated by its three stakeholders as eBRC offers reliability for researchers, confidentiality for businesses and transparency for research financers.

As for eBRC’s vision on the future, one can say that the development has been quite similar. e-Business is no longer considered as a separate field but electronization has covered every level of business. It is interesting to see whether eBRC is again correct with its view on strategization and the idea of innovations and entrepreneurship as becoming more important.

### 5.3.5 Image

eBRC had a goal to create an own image that would be separate from the eTampere-program and serve as a subbrand for the founding universities when organizing research projects. This clear objective showed that eBRC was determined and committed in its brand building process. eBRC’s focus was to build a strong organizational brand which is, according to Lehtinen & Niinimäki, better for professional services than several individual brands. A strong organizational brand ties together a variety of different services and helps the client to rely on the quality of an individual service.\(^{142}\)

Brand building is always a long-term process and in eBRC’s case the ending of the project will create a big challenge on whether to start the building of a new brand or strengthen the current one. There has been a lot of development in eBRC’s brand building process: during the first year when the service was not well-known, project managers work included a lot of marketing whereas in the end eBRC’s activities were more familiar and there was no need to give presentations. The branding has now

\(^{141}\) De Wit & Meyer 2005, 252

\(^{142}\) Lehtinen & Niinimäki 2005, 52
reached a stage where eBRC and its service concept are actually becoming more familiar. The question is whether to throw this away or build it further.

5.4. Concluding proposition

In the theoretical part a framework was build to act as a tool for the empirical analysis. Case eBRC has shown that modifications are needed to examine this kind of intermediary activity in the Business-University-Government context. To start with the context issue, eBRC cannot be placed right in the middle of the Business-University-Government context as its ties to different parties are somewhat different. Also the service management system and the ways it stresses the different components quite equally could be somewhat altered in eBRC’s case.

In general, eBRC is a mission organization with an ambitious objective to act as pioneer and create something new in the field of research. This emphasizes the culture and philosophy component as the key of the service management system and it would also be appropriate to change the name to mission component. However, Normann started his model from the market segment and also in this case the Business-University-Government context can be considered as the starting point. In eBRC’s case the market segment is basically the Business-University-Government context, but as a university bound organization it should be placed to the university corner. The following figure 13 describes eBRC’s service management system in the Business-University-Government context.
This description explains the relations between the different components as did Normann’s model, but in addition it describes the creation of the service management system in more detail. The market segment is the starting point, from which the mission is derived from. The organization and service concept components would be shaped after that and finally to combine all the components, the image or brand component would surround the whole activity and thus be created through it.

If eBRC is to continue its operation as an intermediator of academic research, the university would basically serve as an organizational basis. The other two sectors, business and government, would then be the market segment. It remains to be seen whether eBRC’s intermediating activities will continue as university-based or if they will move to other sectors. There are examples of local intermediating organizations that are business based (Life Works Consulting Oy), university based (the current eBRC) and government based (Technology Centre Hermia). If eBRC is to shift its focus to a more research-oriented approach with a clear substance area, it might fall into any sector. Then its intermediating activity would also change.
To evaluate all possible scenarios, eBRC could also be situated into the other two sectors. The following two figures are descriptions of the service management system, if eBRC would be located to the business or government sectors.

Figure 14. eBRC as a business or government based organization

All in all, describing eBRC in the framework is rather difficult when analyzing future events. In addition to being the market segment, the Business-University-Government context has an influence on the organization and market concept components of the
model because the agendas of the sectors vary greatly as explained before. The businesses are forced to take action and create new knowledge in order to succeed, the universities are under pressure to make changes in the traditional ways of conducting research and the government sector wants to support these development processes.

At this point a more general proposition would be appropriate in describing intermediating as an activity and an organization in the Business-University-Government. In the following figure 15 the intermediating activity is placed in the middle of the three sectors, which construct the market segment component. The market segment is again the starting point because as explained above, it has a significant influence on all of the components. The mission component is placed in the middle, as it is an important factor when operating in the interface areas between business, university and government sectors. Again, the image/brand is build from the coherence of the system. This proposition thus describes the service management system of an intermediating organization that operates in the Business-University-Government context. For the case organization this proposition gives a starting point for strategizing and developing its activities further.

![Figure 15. Concluding proposition](image-url)
6. CONCLUSIONS

This chapter will provide conclusive thoughts based on the research that was conducted. In addition, it will give answers to the posed research questions starting from the subquestions and finally answering the main question. Suggestions for both theoretical and empirical further study will also be given.

6.1 Evolution of intermediating activity between business, university and government

The purpose of this research was to increase our understanding of intermediating activity between business, university and government. The idea for this thesis stemmed from the involvement of the researcher in the case phenomenon and thus from an adoption of a strong presunderstanding. The research was conducted as an inductive action research to correspond to this background.

In the theoretical part of the research the gathered preunderstanding was supported by theoretical material. The first chapter defined the Business-University-Government context and analyzed its development process. (1. subquestion) This context was seen to be built from the main sectors of the society, both public and private, and in addition separating the universities from the public sector. This trilateral cooperation has been build from the strong bonds between government-business and government-university. As the development of the knowledge society has gone further the businesses that have been placed under growing pressure have seen the importance of universities as knowledge producing entities. This relationship is naturally essential for the government and thus its involvement. In this chapter the obstacles and benefits of these relationships were examined. The interaction between these three also corresponds to the concept of innovation environment. Even though the case organization eBRC does not purely see itself as part of it, the idea of this activity in the innovation environment follows throughout the text.
The second chapter of the theoretical part takes a look on the concept of intermediating. After defining the concept, the intermediating activities and roles will be analyzed from two different perspectives. (2. subquestion) From the network context the intermediating actor is defined as “the third party in common” and the roles it might possess vary from mediator to oppressor roles. In the innovation environment context on the other hand, the definition is regarded as dynamic and dependent on the context, but in general the substance transmitted is information. The roles are also dependent on the components of the innovation environment: substance, dynamics and structure as well as from on the level of the environment: micro, macro and meso. To broaden the view of intermediating, different types of intermediaries or intermediating organizations were also presented.

The third part of the theoretical section presents the tool that was chosen to be used in this research for analyzing the case organization. The service management system provides a multifaceted look on the intermediating activity conducted in between business, university and government sectors. The following empirical examination gave an all-round look on the service management system of the case organization. (3. subquestion) The intermediating activity is the research facilitation service eBRC offers to its stakeholders, that include businesses, researchers and research financers. The service is produced through a process starting from idea and ending in the created knowledge. The case organization eBRC is a 5-year project organization which ends in 2005 and thus the whole system is under a transformation process.

To conclude with the main question of this research “How is intermediary activity been developed between business, university and government sectors?” it can be stated that operating in an ill-defined area and pursuing ambitious goals offers many challenges to an organization. To enable change and to act as a pioneer in an established institute, resources, both financial and juridical, and time are needed in order to create a coherent service management system. The case organization eBRC has been an important test project to examine whether there is a need and a place for this kind of operation. As the survey results showed, a definite need exists, but as one statement claimed “the cooperation should be developed from a project-based activity into a process-like one” B1. The question is how to utilize and learn from the experience and develop intermediating activity that best suits for the Business-University-Government context.
Gummesson suggested that action research should provide feasible results to a practical problem and examine the course of the research in relation to the existing theory. It must also provide information that will help in developing the theory. In this respect the analysis of the case organization has provided many suggestions to current problems and options on where the operation might be heading.

### 6.2 Contributions and suggestions for further study

This research can be considered as descriptive and understanding but it also has provided through inductive analysis a theoretical framework that could be utilized in similar kind of researches. There are many actors that operate in the interfaces of the sectors of business, university and government. Their strategies and goals as well as operative models vary greatly and this framework could offer assistance in analyzing them. Especially the question of whether the activity is conducted in one of the sectors or as a hybrid between two or maybe all three sectors is an important starting point. The analysis could also be focused on one or more individual parts of the service management system.

The Business-University-Government context is also a rather undefined one and offers many ideas for research. The three sectors have separately many development processes underway which could be analyzed from the marketing perspective. In the business sector, the trends of the economy are constantly under research, but in the university sector more attention should be paid on communicating the results of both basic and applied research. This would enhance the cooperation of different actors in conducting the research as such. Relationships between the three sectors and network dynamics should also be studied more profoundly to gain the maximum benefits from them. The initiatives and programs from the government sector also provide interesting topics for research, mainly from the point of view of their success.

As for the case organization and the intermediating activity it conducts, more research should be done in the different stakeholder groups to gain a wider perspective on how

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143 Gummesson 2000, 119
the activity should be carried out and if it is actually sought for. The service concept is fresh and visionary and it has followed that many stakeholders might have not gotten accustomed to it yet. Basic market research would help eBRC as it plans its future.
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Publications


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Mittilä, Tuula 2000. Relation Trine. An Analysis of Industrial Supplier-Customer Relations. Tampere: University of Tampere, School of Business Administration Acta Universitatis Tamperensis 768


Internet sources


IMP-group <http://www.impgroup.org/history.php>, 26.2.2005


Reports and digital sources


Survey participants

3 Business sector representatives
3 University sector representatives
1 Government sector representative

Material from eBRC

Reporting
Report from examination period -30.6.2001
Report from examination period 1.7.-31.12.2001
Report from examination period 1.7.-31.12.2002
Report from examination period 1.1.-30.6.2003
Report from examination period 1.7.-31.12.2003
Report from examination period 1.1.-30.6.2004
Report from examination period 1.7.-31.12.2004
Status reports to the eBRC board
eBRC meeting minutes

Strategic documents
eBRC plan 2001
Strategy 8/2001
Strategy summary 12/2002
eBRC Research Board Memo 2004
Strategy 2005
eBRC Logframe
eBRC´s merits 2001-2005

Other materials
23.-25.9.2003 Tampere, Finland

Kurkela, M & Saario, A 2003 eBRC:n tunnettuus ja imago sidosryhmään kuuluvien
tutkijoiden keskuudessa. Course practice
Discussions, meetings and other unofficial contacts

Discussions with eBRC’s director Dr. Marko Seppä

Meetings with the eBRC staff including:

- **eBRC’s management:**
  - Marko Seppä, director (sub program director) 2002-, project director for TUT 2001-, project director for UTA 2002-
  - Anne-Mari Järvelin, project director for UTA 2001-2002 (vice president of the board, 2002-)

- **eBRC team:**
  - Hanna Martin, project manager, 2001-
  - Tommi Rissanen, project manager, 2004-
  - Eeva Salminen, head of project activities, project manager, 2001-2004
  - Hannu Jungman, project manager, 2003-
  - Johanna Tommila, project coordinator, 2002-
  - Maria Mäntymäki, project manager, 2001-2003 (leave of absence 2004-)
  - Saija Heikkinen, project coordinator, 2001-2003
  - Olli Kellokumpu, project assistant, 2002-2004
  - Sachin Arora, trainee from India, 2003
  - Luc Houssonloge, trainee from Belgium, 2004

Seminars and strategy sessions with eBRC’s team and stakeholders, e.g. strategy seminar in Hakametsä Ice Rink on March 8th 2005 and strategy seminar in Lapinniemi Spa on April 28th 2005
ATTACHMENT 1: SURVEY QUESTIONS

1. Mitä tarpeita ja odotuksia yrityksellä/teillä tutkijana/organisaatiollanne on yliopisto- ja tutkimusrahoittajayhteistyön/yritys- ja tutkimusrahoittajayhteistyön /yritys- ja yliopistoyhteistyön suhteen?
2. Millaisena olette kokeneet tutkimusyhteistyön yliopisto- ja
3. tutkimusrahoittajatahojen/yritysten ja tutkimusrahoittajatahojen/yritysten ja yliopistojen kanssa yleisesti?
4. Millaisena olette kokeneet yhteistyön erityisesti eBRC:n kanssa?
5. Mikä olisi mielestänne eBRC:n kaltaisen organisaation tärkein tehtävä?
6. Miten kehittäisitte eBRC:n toimintamallia ja palveluita?
7. Mitä haasteita ja mahdollisuuksia näette yritysten, yliopistojen ja rahoittajaorganisaatioiden välisessä yhteistyössä?